

**NOMINATION OF HON. JESSICA ROSENWORCEL
TO BE COMMISSIONER OF THE
FEDERAL COMMUNICATIONS COMMISSION**

HEARING

BEFORE THE

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

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

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OCTOBER 28, 2015
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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

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**NOMINATION OF
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FEDERAL COMMUNICATIONS COMMISSION**

WEDNESDAY, OCTOBER 28, 2015,

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

The Committee met, pursuant to notice, at 10:01 a.m., in room SR-253, Russell Senate Office Building, Hon. John Thune, Chairman of the Committee, presiding.

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

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

The CHAIRMAN. This nomination hearing will come to order.

Today, we welcome Commissioner Jessica Rosenworcel to testify before the Committee as we consider her nomination to serve a second term at the Federal Communications Commission.

Today's appearance by Commissioner Rosenworcel marks the third time she has testified before the Committee this year, and I know the Committee appreciates her willingness to come up to the Hill to answer questions on a variety of issues before the Commission.

Commissioner Rosenworcel has been serving as a Commissioner at the FCC since May 2012, and, before that, she served as a senior staffer on this committee for both Chairman Rockefeller and Chairman Inouye. So she is a well-known individual to many of us on this committee.

Every single American relies in some part on the nation's vast communications system, and this system binds together our 21st century society. Congress has charged the FCC with regulating interstate and international communications by radio, television, wire, satellite, and cable. Moreover, the mandate of the FCC under the Communications Act is to make available to all Americans a rapid, efficient, nationwide, and worldwide wire and radio communications service.

Our communications system is absolutely vital to the nation's economy, so it is critically important that those who lead the FCC do so by exercising regulatory humility, promoting economic

growth, trusting technological innovation, and working within the framework provided by Congress to make world-class communications available to all Americans in both rural and urban areas.

Commissioner Rosenworcel has served during an eventful period at the Commission. Perhaps most significantly, the FCC voted along party lines to burden the Internet with Title II common carrier regulation in February of this year, one of the most polarizing and partisan decisions in the agency's history.

As I said at the time, the tech and telecom industries agree on few regulatory matters, but there was one idea that unified them for two decades, and that was that the Internet is not the telephone network, and one cannot apply the old rules of telecom to the new world of the Internet.

I believe there should be clear rules for the digital road, with clear authority for the FCC to enforce them. And that is why I sought and am still seeking to work with my colleagues on a bipartisan basis to find consensus on a legislative solution to preserve the Open Internet. And I will be asking Commissioner Rosenworcel about this path forward.

Another important issue that I want to bring up today is about an anomaly in the Universal Service Fund rules that Commissioner Rosenworcel and her four colleagues on the Commission made a commitment to me in March to fix by the end of this year. This anomaly requires a rural consumer to buy voice service from a small rural telephone company in order for that carrier to be eligible for USF support.

I led a letter earlier this year, along with Senator Klobuchar and 65 additional senators, calling on the FCC to make this fix. It is now October 28, and I hope that Commissioner Rosenworcel can provide an update on the progress of the FCC in satisfying the commitment that she and her colleagues made back in March.

Having said all this, I would like to thank Commissioner Rosenworcel for her regular engagement with the Committee and her willingness to serve another term at the FCC, and I look forward to her testimony today.

With that, I am going to turn now to our distinguished ranking member today for any remarks that he would make.

Senator Schatz?

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

Senator SCHATZ. Thank you, Mr. Chairman.

I want to thank the Chairman for calling today's confirmation hearing.

We are here today to consider the renomination of an outstanding public servant, FCC Commissioner Jessica Rosenworcel.

Welcome back, Commissioner Rosenworcel. It is good to see you again. I want to congratulate you on your reappointment to the FCC and thank you for your continued commitment to public service.

Since joining the Commission in 2012, you have taken a thoughtful approach to issues, helping the Commission to take a light regulatory approach that encourages innovation, protects consumers, and promotes investment and competition.

You have also been a leading advocate for kids. Your focus on the homework gap has helped us all to think differently about connectivity and the need to ensure that children have access to the tools that they need to succeed at school in the digital age.

And, finally, when you testified a few months ago in front of this committee, you proposed many innovative spectrum policy ideas to address the growing demands for wireless broadband. Your ideas have helped to shape the upcoming incentive auction and will help to frame the FCC's future work to promote 5G wireless service and enable the Internet of Things.

With the pace of technological change and the growth in demand for a variety of new communications tools and services, the FCC must be agile within the policy framework established by the Congress.

Commissioner Rosenworcel, you have demonstrated that agility, and we are grateful for your service on the Commission. Thank you for appearing before us here today, and I look forward to your testimony.

Mr. Chairman, I hope this committee can act quickly to confirm the Commissioner's nomination for another term.

The CHAIRMAN. I appreciate that. Thank you, Senator Schatz.

And I want to turn now to our colleague on the Committee, Senator Blumenthal, who is here to introduce Commissioner Rosenworcel this morning.

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

Senator BLUMENTHAL. Thank you, Mr. Chairman. Thanks for this opportunity to introduce a friend, and I count her as a colleague but, most important, a fellow Connecticut native. Commissioner Rosenworcel hails from Connecticut, and it is a great honor and privilege to welcome her here today.

And I want to thank her particularly for her very diligent and dedicated work on behalf of a wide variety of issues and people who are important to this committee, this Congress, and the American people. Emergency responders, our schools, everyday consumers have been priority.

And I want to thank her for joining me in Connecticut to highlight the importance of avoiding cramming charges, which has been part of her very important work on the Commission, and, just 7 months later, joining me to urge that telephone companies offer consumers new tools to block robocalls.

Those are just two examples of how she has helped consumers and the people of Connecticut and our country, and also serving as a tireless advocate for public safety officials, helping to update the FCC's 911 rules to keep communities safe and protected.

For children, as my colleague Senator Schatz mentioned, you have also been a very steadfast advocate. And you have been, in fact, the leading thinker at the FCC on creative ways to update spectrum policy for both licensed and unlicensed use.

So I join in urging your swift confirmation. I certainly will be working hard on your behalf. And I am honored to introduce you to the Committee today. Thank you.

Thanks, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Blumenthal.
 And we will turn now to Commissioner Rosenworcel.
 Welcome, again, back to the Committee. We look forward to hearing what you have to say today.

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

Ms. ROSENWORCEL. Thank you.

Good morning, Chairman Thune, Senator Schatz, and members of the Committee. Thank you for the opportunity to appear before you today for my renomination as a Commissioner at the Federal Communications Commission.

I joined the Commission a little over 3 years ago, and for 5 years before that I had the honor of serving this committee as Senior Communications Counsel. As Senator Thune noted, I worked for Senator Rockefeller and Senator Inouye and had the privilege of assisting many of you who continue to serve on the Committee today.

As a result, I am well acquainted with this room and the deliberations of this body. But I can assure you that sitting at this table is humbling.

I want to start by introducing my family. Sitting behind me is my husband of 15 years, Mark Bailen. And sitting beside him are our children: Caroline Frances, age 8, and Emmett Joseph, age 5. They are our sweetest accomplishment and greatest joy.

And though they are not here today, I also would like to note my parents, Elliott and Willa Rosenworcel, who are at home in Hartford, Connecticut. Let me also note my brother, Brian Rosenworcel, who is touring the country as the drummer for the band Guster. So my parents have the unique ability to claim they have children who are a rocker and a regulator.

It is a tremendous honor to have been renominated by the President to continue to serve as Commissioner at the FCC. That is because we are in the early days of a communications revolution. Network technologies are reaching further and faster into all aspects of our civic and commercial life. They are transforming the ways we connect, create, employ, educate, entertain, and govern ourselves.

For the Commission, all of this change means humility is required. It also means we must recognize what is time-tested and enduring. That is why I believe the work of the commission must be guided by four essential values that have informed our communications laws for decades.

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

Second, universal access. No matter who you are or where you live in this country, for a fair shot at 21st-century prosperity, you need access to first-rate, modern communications. That means we need policies that foster deployment and adoption in urban areas, rural areas, and everything in between.

Third, competition. Competition increases innovation and lowers prices.

Fourth, consumer protection. Communications services are multiplying, but the marketplace is also bewildering to navigate. So we

should always be on guard for ways to help consumers make good choices.

These values derive from the law, and they have informed my work at the Commission to date. In light of them, I am especially proud of agency efforts to strengthen 911 service, and I am proud of our work to increase access to broadband in schools and enhance opportunities for digital-age education.

I also believe our spectrum policies for licensed and unlicensed airwaves have made our wireless markets competitive, innovative, and strong. Moreover, our spectrum auctions have raised billions for the United States Treasury.

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

If reconfirmed, I look forward to working on these tasks with my talented colleagues and the skilled staff of the agency. If reconfirmed, I will continue to be guided by these fundamental values in the law. And if reconfirmed, I will continue to respect the priorities of this committee. I also pledge to continue to listen to you, those with business before the Commission, and, above all, the American people.

So, in closing, let me thank the members of the Committee today for the opportunity to appear here, and I look forward to answering your questions.

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

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 today for my re-nomination as a Commissioner of the Federal Communications Commission.

I joined the Commission more than three years ago. For five years before that, I had the honor of serving this Committee as Senior Communications Counsel. I worked for Senator Rockefeller and Senator Inouye and had the privilege of assisting many of you who continue to serve on this Committee today. As a result, I am well-acquainted with this room and the deliberations of this body. But I can assure you that sitting at this table is humbling.

I want to begin by introducing my family. Sitting behind me is my terrific husband of fifteen years, Mark Bailen. Sitting beside him are our children, Caroline Frances, age eight, and Emmett Joseph, age five. They are our sweetest accomplishment and greatest joy. Though they are not here today, I also would like to note my parents, Elliott and Willa Rosenworcel. They are at home in Hartford, Connecticut. Let me also note my brother, Brian Rosenworcel, who is touring the country as drummer for the band Guster. My parents have the unique ability to claim they have children who are a rocker and a regulator.

It is a tremendous honor to have been re-nominated by the President to continue to serve as a Commissioner at the Federal Communications Commission.

We are in the early days of a communications revolution. Network technologies are reaching further and faster into all aspects of our commercial and civic life. They are transforming the ways we connect, create, employ, educate, entertain, and govern ourselves.

For the Commission, all of this change means humility is required. It also means we must recognize what is time-tested and enduring. That is why I believe the work of the Commission must be guided by four essential values that have informed our communications laws for decades.

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

Second, universal access. No matter who you are or where you live in this country, for a fair shot at 21st century prosperity you need access to first-rate, modern communications. That means we need policies that foster deployment and adoption in urban areas, rural areas, and everything in between.

Third, competition. Competition increases innovation and lowers prices.

Fourth, consumer protection. Communications services are multiplying. We are getting more value from them than ever before. But the marketplace is also bewildering to navigate. So we should always be on guard for ways to help consumers make good choices.

These values derive from the law. They have informed my work at the Commission. In light of them, I am especially proud of agency efforts to strengthen 911 service which have been informed by my visits with first responders across the country. I am proud of our work to increase access to broadband in our schools and enhance opportunities for digital age education. I believe our spectrum policies—for licensed and unlicensed airwaves—have made our wireless markets competitive, innovative, and strong. Moreover, our spectrum auctions have raised billions for the United States Treasury.

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

If re-confirmed, I look forward to working on these tasks with my talented colleagues and the skilled staff of the agency.

If re-confirmed, I will continue to be guided by the fundamental values in the law.

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

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

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Jessica Rosenworcel.
2. Position to which nominated: Commissioner, Federal Communications Commission.
3. Date of Nomination: May 22, 2015.
4. Address (List current place of residence and office addresses):
Residence: Information not released to the public.
Office: 445 12th Street SW, Washington, DC 20554.
5. Date and Place of Birth: 7/12/71; Boston, Massachusetts.
6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).
Spouse: Mark Bailen, Partner at Baker Hostetler; children: Caroline (8) and Emmett (5).
7. List all college and graduate degrees. Provide year and school attended.
Wesleyan University, BA, 1993
New York University School of Law, JD, 1997
8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Commissioner, Federal Communications Commission

Senior Communications Counsel, U.S. Senate Committee on Commerce, Science, and Transportation

Senior Legal Advisor, Office of Commissioner Michael J. Copps, Federal Communications Commission

Attorney, Drinker Biddle & Reath

9. Attach a copy of your resume. A copy is attached.

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

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

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

Federal Communications Bar Association

Chair, Cable Practice Committee (2007–2008)

Chair, Legislative Practice Committee (2009)

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

Not applicable.

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

\$1000 Donation to Barack Obama Campaign in 2008.

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

White Prize for Excellence in Economics, Wesleyan University (1993)

Special Act Award for Contributions to Common Carrier Bureau, Federal Communications Commission (1999)

Women Who Represent Award, Alliance for Women in Media (2013)

Leadership in Advancing Communications Policy Award, Association of Public Safety Communications Officials International (2013)

Impact Award for Public Service, National Hispanic Media Coalition (2013)

Federal Policymaker Award, State Education Technology Directors Association (2013)

Award for Excellence in Public Service, Consortium for School Networking (2014)

Award for Outstanding Achievement, Family Online Safety Institute (2014)

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

Articles

As Commissioner I authored or co-authored the following:

“Transforming Education Digitally,” co-authored with Rep. Anna Eshoo, *Politico* (June 3, 2013);

“High-Speed Internet Access a Classroom Necessity,” co-authored with former San Antonio Mayor Julian Castro, *San Antonio Express* (June 25, 2013);

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

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

“Bring Wireless 911 Up to Date,” *The Hill* (January 14, 2014);
 “Growing Unlicensed Spectrum, Growing the Economy,” *Re/code* (February 21, 2014);
 “Let’s Upgrade Our Schools for the Digital Age,” co-authored with Rep. Doris Matsui and Sacramento Mayor Kevin Johnson, *Sacramento Bee* (April 25, 2014);
 “Here’s How to Expand Wireless Spectrum,” co-authored with Marty Cooper, *San Jose Mercury News* (September 26, 2014);
 “Sandbox Thinking,” *Democracy Journal* (Fall 2014);
 “The Spectrum Pipeline,” Silicon Valley Leadership Group Gamechangers 2015 (Fall 2014);
 “The Race to 5G is On,” *Re/code* (October 27, 2014);
 “A New Year, a Bolder and Better E-Rate,” *Huffington Post* (December 3, 2014);
 “How to Close the Homework Gap,” *Miami Herald* (December 5, 2014);
 “Let’s Give Our Students a Chance to Compete in the Digital Age,” co-authored with Senator Angus King, *Roll Call* (December 14, 2014);
 “Limited Internet Access a Challenge for Detroit Kids,” *Detroit Free Press* (March 16, 2015);
 “Falling through the Homework Gap,” *Providence Journal* (April 25, 2015); and
 “Filling in the Homework Gap,” *Daily Press* (May 30, 2015).

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

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

Speeches

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

August 21, 2012—Speech at Association for Public Safety Communications Officials International 78th Annual Conference, held in Minneapolis, MN;
 November 13, 2012—Speech on The Next Ten Years of Spectrum Policy, Silicon Flatirons Conference sponsored by the University of Colorado, held in Washington, D.C.;
 November 15, 2012—Speech at The Media Institute Awards, held in Washington, D.C.;
 December 13, 2012—Speech at Practising Law Institute, 30th Annual Telecommunications Policy and Regulation Institute, held in Washington, D.C.;
 February 4, 2013—Speech at Rural Telecom Industry Meeting & Expo, held in Orlando, FL;
 April 11, 2013—Speech at Washington Education Technology Policy Summit, held in Washington, D.C.;
 May 14, 2013—Speech at Association for Public Safety Communications Officials International Policy Awards Dinner, held in Washington, D.C.;
 May 22, 2013—Speech at CTIA-The Mobile Marketplace, held in Las Vegas, NV;
 July 1, 2013—Speech at American Telemedicine Association Policy Summit, held in Washington, D.C.;
 September 19, 2013—Speech at It Can Wait Campaign’s Drive 4 Pledges Day to Prevent Texting While Driving, held in Washington, D.C.;
 October 25, 2013—Speech at Women in Science Awards Ceremony, held in New York, NY;
 October 29, 2013—Speech at Future of Music Summit, held in Washington, D.C.;
 November 4, 2013—Speech at State Education Technology Directors Association Federal Policymaker Award Ceremony, held in Washington, D.C.;
 November 14, 2013—Speech at Women Who Represent Awards, held in Washington, D.C.;
 November 21, 2013—Speech at White House Champions of Change Event, held in Washington, D.C.;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

April 29, 2015—Speech at Hispanic Heritage Foundation, held in Washington, D.C.; and

June 1, 2015—Speech at M-Enabling Summit, held in Arlington, VA.

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

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

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

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

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

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

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

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

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

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

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

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

November 30, 2011—Nomination Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;

May 16, 2012—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;

July 10, 2012—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Committee on Energy & Commerce;

December 12, 2012—Hearing on Keeping the New Broadband Spectrum Law on Track, U.S. House of Representatives Committee on Energy and Commerce;

March 12, 2013—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;

August 19, 2013—Field Hearing on the State of Rural Communications, U.S. Senate Committee on Commerce, Science, and Transportation;

December 12, 2013—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Committee on Energy and Commerce;

March 18, 2015—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation; and

March 19, 2015—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Committee on Energy and Commerce.

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

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

I believe I have used this background to make a positive contribution to communications policy in my current position and I look forward to continuing to do so by protecting consumers, promoting access to new services, and fostering investment and innovation.

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

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

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

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

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

Securing access. As technologies evolve, it is imperative that all people in this country, no matter who they are or where they live, have access to the communica-

tions services that are necessary for 21st century opportunity, safety, and economic security.

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

B. POTENTIAL CONFLICTS OF INTEREST

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

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

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

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

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

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

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

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

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

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

Not applicable.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? No.

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

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

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

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

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

D. RELATIONSHIP WITH COMMITTEE

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

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

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

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

RESUMÉ OF JESSICA ROSENWORCEL

Legal and Policy Experience

Federal Communications Commission, Washington, DC

Commissioner 2012–Present

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

United States Senate

Committee on Commerce, Science, and Transportation, Washington, D.C.

Senior Communications Counsel 2009–2012

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

Senior Communications Counsel 2007–2008

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

Federal Communications Commission, Washington, D.C.

Senior Legal Advisor to Commissioner Michael J. Copps 2006–2007

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

Legal Advisor to Commissioner Michael J. Copps 2003–2006

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

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

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

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

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

Drinker Biddle & Reath, Washington, D.C.*Communications Associate* 1997–1999

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

Reboul, Macmurray, Hewitt, Maynard & Kristol, New York, NY*Summer Associate* 1996

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

United States Attorney's Office, Brooklyn, NY*Summer Fellow, Criminal Division* 1995

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

Skadden, Arps, Slate, Meagher & Flom, New York, NY*Legal Assistant* 1993–1994

Managed litigation documents.

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

Honors: *Annual Survey of American Law*, Editor

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

Honors: White Prize for Excellence in Economics

Publications

"Filling in the Homework Gap," *Daily Press*, May 30, 2015.

"Falling through the Homework Gap," *Providence Journal*, April 25, 2015.

"Limited Internet Access a Challenge for Detroit Kids," *Detroit Free Press*, March 16, 2015.

"Let's Give Our Students a Chance to Compete in the Digital Age," co-authored with Senator Angus King, *Roll Call*, December 14, 2014.

"How to Close the Homework Gap," *Miami Herald*, December 5, 2014.

"A New Year, a Bolder and Better E-Rate," *Huffington Post*, December 3, 2014. "The Race to 5G is On," *Re/code*, October 27, 2014.

"The Spectrum Pipeline," *Silicon Valley Leadership Group Gamechangers 2015*, Fall 2014. "Sandbox Thinking," *Democracy Journal*, Fall 2014.

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

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

"Growing Unlicensed Spectrum, Growing the Economy," *Re/code*, February 21, 2014. "Bring Wireless 911 Up to Date," *The Hill*, January 14, 2014.

"Giving Our Kids a Change to Compete in the Global Economy Means High-Speed Broadband Capacity," co-authored with Mooresville, North Carolina Superintendent Dr. Mark Edwards, *Huffington Post*, July 24, 2013.

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

"High-Speed Internet Access a Classroom Necessity," co-authored with San Antonio Mayor Julian Castro, *San Antonio Express*, June 25, 2013.

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

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

The CHAIRMAN. Thank you, Commissioner.

We will go with 5 minute rounds, and I will start by asking a question, as you might expect, about Universal Service Fund rules, which currently require a rural consumer to buy voice service from a small rural telephone company in order for that carrier to be eligible for USF support.

If the same rural consumer decides to buy broadband services only without a telephone subscription, the carrier is no longer eligible to receive USF support for that subscriber's line. This outcome stands in direct contradiction to a broadband-focused Universal Service Fund.

On March 18, you and all of your colleagues on the Commission made a commitment to the Committee to solve this growing threat to rural communications by the end of this year.

Since then, it is my understanding that Chairman Wheeler has chosen to broaden his scope to include updates to legacy USF models and support systems. And while I am not opposed to this action, I do not want a solution to the standalone problem to be subsumed by the weight of a larger effort that may not come together.

And so my question is, do you believe the Commission will be able to keep its commitment to the Committee that it will fix the standalone broadband problem this year? And will you reaffirm your commitment to work toward that goal?

Ms. ROSENWORCEL. Yes, Senator. We need to fix the problem with standalone broadband for some of our Nation's rural carriers. Through a technical and legal quirk today, we will only offer them universal service support if customers order both voice telephony and broadband service. That does not reflect modern communications, and it is absolutely time for us to fix it.

So, if reconfirmed, I will continue to press my colleagues to get this done. Like you, I would like this done by the end of the year.

The CHAIRMAN. I hope that you will make that goal and make that deadline. It is important to a lot of us here on the Committee and to a lot of people across the country that we represent.

You serve as Chair of the Joint Board on Universal Service. Last year, the Commission asked the Joint Board to provide recommendations by April 2015 to modify the way that fees are assessed to fund universal service programs.

We are nearly 7 months now past that deadline, and the Joint Board has yet to act. Why has the Joint Board failed to make a recommendation to the Commission on universal service contribution reform?

Ms. ROSENWORCEL. You are right that I serve, Senator, as Chair of the Joint Board. In the February Open Internet decision, the Commission expressly extended the referral to the Joint Board. As you probably know, under Section 254 of the law, assessment for universal service is on the basis of interstate telecommunications services. And we are charged with making sure that that fund has specific, predictable, and sufficient support.

The Joint Board is tasked with trying to figure out how to update that support mechanism. But the underlying terminology associated with telecommunications service is now the subject of litigation in the court of appeals. So the Commission decided that it would defer decisionmaking on that until the legal environment is more stable.

But—

The CHAIRMAN. Are—go ahead. Well, I was going to ask, are you concerned that the Title II order is not going to withstand litigation fully intact?

Ms. ROSENWORCEL. Well, I have no crystal ball when it comes to the decisions of the D.C. Circuit. I have some confidence in our decision as it was made, but I think, given that we are resource-constrained, it would not be smart or prudent for the agency or our state colleagues to work on this matter until we have greater legal certainty.

The CHAIRMAN. If you are comfortable that the order is lawful, it seems ironic that you would be concerned that it won't be upheld in court. And that is, if the order, then, is lawful, in your opinion, it doesn't seem like the litigation ought to be used as an excuse to delay what are important universal service contribution reforms.

And so I guess I would ask why, if, in your judgment, the Commission acted in a lawful way consistent with the statutes, you wouldn't want to proceed with this process?

Ms. ROSENWORCEL. Well, I think we could continue to have conversations about it, but I would like us to produce a decision that we have confidence will be something that the agency can take up and vote on at some point in the future. And so we want to be certain that the statutory terminology is not evolving but is sufficiently stable to support our decisionmaking.

The CHAIRMAN. Have you, given your views about the Title II order delaying this process, considered asking Congress for guidance or offering recommendations to Congress that might point to a way of resolving potential questions of commission authority regarding universal service contributions?

Ms. ROSENWORCEL. Thank you, Senator. That is a very good point. Obviously, the universal service program we have is in large part a creation of this committee back in the 1996 Telecommunications Act. And I think any guidance that you would like to offer us with respect to both contribution and distribution would be absolutely welcome.

The CHAIRMAN. And we would welcome your looking to us for that direction, as well, and perhaps giving us your thoughts about that.

I want to ask one final question on call completion. It is something that a lot of consumer groups and rural customers continue to report problems in receiving long-distance and wireless calls on their home telephones.

And to address a lot of these problems, as you know, the FCC adopted new rules last year, in November, that were designed to improve the FCC's ability to monitor the delivery of long-distance calls to rural areas and to aid in the prosecution of violations of the Communications Act.

We are sort of well into that now, and I am wondering, with these call-completion rules that have been in place now for some time, what has the FCC discovered in monitoring the delivery of long-distance calls to rural areas?

Ms. ROSENWORCEL. Thank you, Senator, for the question.

Rural call completion has unfortunately been a big problem, and it is distressing to know that people will reach out to friends and family in rural areas or try to make a business connection or, worse, reach out for a public-safety call and find that the call does not go through.

So the agency has issued a declaratory ruling to make clear that failure to complete these calls is a violation of the law. We have also gone after some bad actors. But, as you acknowledge, the most important thing we did was we updated our data collection so that carriers have a responsibility to report to us on these matters. Our hope is, with more data and more reports, we will be able to track failures to complete calls and go after bad actors more aggressively.

The first filings with that new data collection were just made, and we are reviewing them right now. My hope is we can identify some patterns over time, figure out where the problem is, and that we will have the record to bring this to a stop.

The CHAIRMAN. Senator Schatz?

Senator SCHATZ. Thank you.

The emerging budget deal asks NTIA to identify 30 megahertz of Federal spectrum to be made available for commercial use. By some accounts, that is about one-tenth of what the private sector will need.

I think this is a pretty good start, but I am interested in your thoughts about what more the Commission can do, what more the Congress can do to free up more spectrum and possibly generate more revenue for the Treasury.

Ms. ROSENWORCEL. Thank you, Senator.

The wireless economy is growing fast. We all know that intuitively, given just how often we reach for our phones and our mobile devices. We now have so much more activity in our airwaves, and if we want that growth to continue, we are going to have to find more spectrum for it to do so.

I think the 30 megahertz that was in the most recent budget deal is a start, but what we really need is a steady spectrum pipeline that continues to provide us with airwaves for licensed and unlicensed services to make sure the wireless economy continues to grow.

Senator SCHATZ. Thank you.

I want to talk about the homework gap again. I know you are passionate about it. And what I would like for you to do is describe it in as simple terms as you possibly can, on a kind of human level, if you wouldn't mind, and then talk about what the FCC is doing, can be doing, and what the Committee could be doing to address this.

Because I find it, frankly, shocking that we are, in the public and private school systems, assigning homework that depends on the Internet and then not providing Internet access to enable kids to do their homework.

Ms. ROSENWORCEL. Thank you.

So when I was growing up, when I wanted to do my homework, it required paper, a pencil, and my brother leaving me alone. Today, more often than not, it requires the Internet. There are studies that suggest that 7 in 10 teachers assign homework that now requires Internet access.

But data from the FCC suggests that one in three households do not have that access. And the Pew Internet in American Life Survey has found that there are 5 million households with school-age children in this country that do not have Internet access. So just imagine what it is like to be a kid in one of those households. Get-

ting your basic schoolwork done is hard; applying for a scholarship or job is challenging.

This strikes me as the cruelest part of the new digital divide. But it is also within our power to fix it and bridge it. There are programs that we have that support low-income telephony right now in households that we could update. We could clear more of our skies for WiFi services, which is an easy way to get more people online. And then we should support public-and private-sector partnerships that help get broadband access and computing power into students' hands at home.

Senator SCHATZ. So what is happening between the FCC and the U.S. DOE to kind of make sure that these efforts are coordinated?

Ms. ROSENWORCEL. Well, right now, there is a ConnectED and ConnectHome initiative. ConnectED is designed to help support connectivity in schools. ConnectHome is an effort that is designed to support connectivity at home, particularly in low-income housing developments.

So that is a start. It doesn't cover everything, and I don't think there is one, single silver bullet that is going to solve this problem. But it is a new element of the digital divide we should all be on guard for ways to solve and fix.

Senator SCHATZ. We want you to be relentless on this, and we will look forward to working with you on this. Thank you.

The CHAIRMAN. Thank you, Senator Schatz.

Senator Wicker?

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

Senator WICKER. Commissioner, I bet your brother got out of the way when you told him to. And I hope he is doing well also.

Let's talk about the Universal Service Fund, its wireless component, the Mobility Fund, as it relates to rural America; specifically precision agriculture.

We had a representative from John Deere a few days ago who testified before the Committee about precision agriculture technology, and he said, "Deere supports retention and even expansion of the FCC's Mobility Fund."

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

Ms. ROSENWORCEL. Yes.

Senator WICKER. And what needs to be done in response to that risk of this important segment of our economy?

Ms. ROSENWORCEL. Well, to date, the FCC has proceeded with the first element of its Mobility Fund. We have made available roughly \$300 million in that fund to support deployment in rural areas.

But we need to move on to the second phase of the fund. And what I would like that second phase to do is focus with laser-like accuracy on areas of the country, rural areas, that do not have service today. Because we know that areas that have better broadband and wireless service are better equipped to compete. That is true for urban America and rural America alike.

Senator WICKER. And, actually, I think you used that very term, “laser-like focus,” earlier this year when you appeared before this panel to talk about spectrum and wireless broadband.

How is that issue proceeding now among the five members of the Commission? And what concrete steps should the commission take in Mobility Fund II to preserve existing levels of wireless coverage? What concrete steps should the Commission take in areas such as remote patient monitoring, which is a huge concern of mine, precision agriculture, and public safety? And what should Congress do? What can Congress do?

Ms. ROSENWORCEL. Well, the examples you just gave are examples of just how useful wireless is in every aspect of our lives.

Remote patient monitoring, it can help with health care. Particularly for the elderly or individuals who live in rural areas where traveling to a hospital or health clinic takes a long time, monitoring at home is incredibly efficient and cost-effective.

Precision agriculture—

Senator WICKER. Do you know that we can even monitor in ambulances now?

Ms. ROSENWORCEL. Yes.

Senator WICKER. Go ahead.

Ms. ROSENWORCEL. Agriculture, too. Underappreciated just how important wireless technology is to help support our nation’s farms. And then, of course, public safety.

So when you contemplate the breadth of what wireless services can do, we need to make sure that our Mobility Fund, the second phase of it, moves ahead and focuses on the benefits that we could provide in rural America.

I think that we should make sure that we put the remainder of our universal service work on a timeline so that we can commit to you that we will have the second phase of the Mobility Fund in place in short order.

Mr. WICKER. And how is that debate proceeding among the five members of the Commission, in your judgment?

Ms. ROSENWORCEL. In my candid judgment, we have some differences of opinion on that. I would like, however, us to follow through. We committed in 2011 to having a second phase of the Mobility Fund, and I would like to see us put it in place as soon as we can.

Mr. WICKER. I wonder when the Commission might be moving toward a consensus on that question.

Ms. ROSENWORCEL. Well, I can tell you, Senator, if reconfirmed, I will press my colleagues to work to a consensus on that. I think it is important to do so.

Mr. WICKER. Do you have any recommendations as to what Congress can do to encourage more rural broadband build-out?

Ms. ROSENWORCEL. I do. I think there is actually legislation before this committee from Senator Klobuchar and Senator Fischer, the Rural Wireless Accessibility Act.

And, in fact, it recommends that in areas of the country where large carriers might own licenses to deploy but are not deploying, that they make sure that they lease that out to smaller rural carriers so they can deploy in rural communities. And in order to make them more inclined to do that, it gives a license extension.

And I think that kind of incentive-based system is a way to push secondary markets to work well and better serve rural America.

Mr. WICKER. So you are endorsing the Fischer-Klobuchar bill. Is that correct?

Ms. ROSENWORCEL. I think they are going to want me to say yes. I believe the fundamental idea in there is spot-on and could be particularly helpful for rural communities.

Mr. WICKER. Thank you very much.

The CHAIRMAN. Thank you, Senator Wicker.
Senator Markey?

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

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

Big decision earlier this year at the FCC. And I appreciate the fact that your decision on net neutrality, Title II, is in the courts, but I also believe that the construct that we have today under your new regulation is the correct one.

It is a good balance between the broadband companies on the one hand, and, on the other hand, you have all these startups, the software and Internet-specific companies all across the country, all these smart young people who are listening to Guster right now, who really do, you know, make the difference, the change in our society. And right now 65 percent of all venture capital is going to software and Internet-specific new companies. So it is a good balance, and that is really the change in our society.

So I wanted to compliment you on that because I do think that there is a high probability of that decision being upheld. I think it is on very strong legal grounds.

But I would like to turn, if I could, to your decision of just a year ago, which was to increase the contribution that is inside of the E-Rate, the education rate, to make sure that we are wiring schools, that we wire the libraries, that we give the young people in our country the access to the technology which they need in order to compete.

And so, you know, we have WiFi in Starbucks, and people go in there now, and that is kind of a constitutional right people have, to go to a Starbucks and to use their WiFi, but not so much in schools or classrooms. A kid isn't automatically, you know, guaranteed that that is the case. And you talked about the kids that don't have the Internet even at home.

And I guess that is kind of what I would like you to elaborate a little bit more on.

Because when I was a kid, you know, my father was a milkman, but if I took my books home, I could compete with the school superintendent's son. We all knew that, people on this panel. But in the modern era, the school superintendent's son has access to all these incredible technologies. And the poorer you are, the less likely you are going to have it in a way that is going to allow you to compete in a world where businesses and schools are going to be looking toward your familiarity, your ability to be able to use that skill set.

So that is kind of a big divide that continues to be out there. And you really led the charge to increase it up to \$3.4 billion a year, the funding that is going into that, and WiFi is a big part of that.

Could you elaborate a little bit more about how you see that unfolding and what the FCC is doing to monitor that to make sure that it gets implemented properly?

Ms. ROSENWORCEL. Right. Thank you, Senator.

E-Rate is the Nation's largest education technology program, as you know. When I got to the FCC, what I found was it was frozen in the era of dialup. And if you think about that, that just makes no sense. We know that half the jobs today require some level of digital skill, and by the end of the decade it is going to be 77 percent. We need to make sure that every student in every school in every community has the ability to participate in the new economy.

Senator MARKEY. So I thank you.

And you are right. This is a program that was put in place just as the 1996 act was passed, and it was a dialup era. Not one home had broadband when we passed that law in 1996. And Senator Rockefeller in the Senate and I in the House, we created this E-Rate program back then, and it has now spent \$36 billion, \$38 billion making sure the kids have access to it. But the modernization just has to continue.

And if you could just elaborate a little bit more on just how you see WiFi specifically as a technology, you know, unfolding in its role to give the kids the tools that they need.

Ms. ROSENWORCEL. Right. Well, it is so important. It used to be that students would march down the hall once a week to a computer lab, where big, bulky equipment was that came and showed up in shrink-wrapped packages. That is no longer the way it is today. We need to create schools that are capable of one-to-one device learning, so that requires WiFi.

And one of the best things about what we did was we updated what is known as Category Two in the E-Rate program to make sure that WiFi support is available for schools. And many more schools are going to be able to get support from this program to not only get broadband to the front door but to move it around the school into every classroom as a result.

Senator MARKEY. Thank you. Well, in December, we celebrate the first anniversary of that change in the law, and you were a real driving force in doing that. So I want to congratulate you on what you have done for the children of our country. It is a great accomplishment.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Markey.
Senator Blunt?

**STATEMENT OF HON. ROY BLUNT,
U.S. SENATOR FROM MISSOURI**

Senator BLUNT. Thank you, Chairman.

And, Commissioner, it is great to have you here, and thanks for your work.

On the spectrum auction that comes up next year, it now looks like maybe as many as a thousand local broadcast stations will have to move where they are on the spectrum to somewhere new, and that that is going to cost substantially more than originally estimated. I think the cost comes out of the proceeds of the auction. You can correct me if I am wrong on that.

But what kind of preparations are you all making at the FCC for a thousand stations to have to find a new place to be and for that cost to be higher than you initially thought it was going to be?

Ms. ROSENWORCEL. Thank you, Senator.

You are right; we have a very big auction coming up next year. We have the world's first spectrum incentive auctions. And that will put more mobile broadband into commercial carriers' hands. It will make more unlicensed opportunities available. And it will give broadcasters an opportunity to participate by getting out of the business of broadcasting or continue to stay in.

Some segment of those broadcasters will need to relocate their stations. I can't tell you right now if the number you have is correct, because until we are in the middle of the auction I don't think we are actually going to know how many stations need to relocate.

Under the Middle Class Tax Relief and Job Creation Act, Congress set aside \$1.75 billion from the auction proceeds to assist those stations with relocation. I think it is important that we make sure that those funds are ample. Every station that is being relocated should have the ability to access those funds.

At the present time, I think the money that we have before us, that Congress tasked us with setting aside, is adequate, but I think we should stay on guard. Because if we find out that it is not, we will have to come back to Congress and ask for your assistance.

Senator BLUNT. On the thousand number, do you all have an estimate that you are looking at? Surely there is some estimate over there as to how many stations you think will take the relocation as opposed to the go-out-of-business option.

Ms. ROSENWORCEL. I don't think we have a specific estimate. I think that is because we won't have one until closer to the date of the auction.

We are certainly socializing these opportunities with broadcasters all across the country. We are finding some are interested and some are not. But we won't ultimately know until we start the forward auction and when we have signs from each of the broadcasters before that auction begins about whether or not they will participate.

Senator BLUNT. And at some point, if you believe you don't have enough money to make those relocations work, what will you do?

Ms. ROSENWORCEL. I believe, if we determine that we do not have enough funds, the first thing we should do is come to this committee and come to the Congress. Because I think broadcasters should not be unduly charged for having to manage this spectrum relocation.

Senator BLUNT. All right.

On one other topic, you know, I think nobody has ever been on the Commission who understands this committee better than you do, who went to the Commission with better relationship than you do. And then and again today, you promised to work with the Committee, to get back to the Committee promptly.

I know there are at least two occasions where I was part of a group that contacted the Commission, you as a member of the Commission, not just you individually. First, five members of the Committee, including Senator Wicker, here by my side, who was the ranking Republican of the Communications Subcommittee, ex-

pressed strong concerns about the FCC's upcoming vote on retroactively changing their mind on joint sales agreements. Second, Senator Thune and I and others contacted the Commission on our concern that we shouldn't try to apply the monopoly-era Title II regulations to the broadband marketplace.

Neither of those letters ever had an adequate response, not even a response, "We got your letter, and we are not going to respond."

So how does that work? Do these letters go to the Commission and, collectively, you and the Chairman just decide you are not going to answer? How does that work, and how do you think it should work?

Ms. ROSENWORCEL. Well, Senator, I apologize if you did not get an official response to those letters. Most of those letters do, in fact, go to the Chairman's office, but I would be perfectly happy to offer responses myself.

I think it is important we continue to work with this committee. And you are the folks who created the law that created the agency. So I would want to make sure that our relationships are actually improved and we are more responsive.

Senator BLUNT. Well, I think maybe in the future I will see that you for sure are copied in—

Ms. ROSENWORCEL. OK.

Senator BLUNT.—because if the letters go to the Chairman's office, the Chairman is not responding adequately. And I will look forward to talking to Chairman Wheeler about that the next time I see him.

Though I have personally talked to him about both of these letters, and he wasn't particularly responsive even in person on the views that the Committee or the Congress had on these issues.

Thank you.

The CHAIRMAN. Thank you, Senator Blunt.

Senator Ayotte?

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

Senator AYOTTE. Thank you, Chairman.

I want to thank you for being here, Commissioner.

And I wanted to ask about the E-Rate program. For a state like New Hampshire, we have many rural areas, and we have really been left behind on this program.

If you look at the history in New Hampshire, we have been 50th out of 50 for many years, and in 2014 I think we moved up a little bit, but we are still toward the bottom of the list, unfortunately.

And, of course, we are a net donor state, so my constituents are paying into this but not getting back even the full value of their dollar, and quite a diminished value if you look at the overall fund.

We have had this discussion about your vote and others' to increase the cap to \$1.5 billion on E-Rate. But I would like to know, what are we going to do to address adequate distribution of E-Rate? Because in your role at the FCC, we can't leave rural students behind in all of this. I would like to get your impressions on that.

In turn with it, one of the issues that I see with it is prioritizing instructional facilities, like schools and libraries. Right now, admin-

istrative offices are also eligible, but as we look at the priorities, it seems to me that direct student services, while I don't diminish the role of administrators, let's prioritize to get it directly to those student interactions.

So can you give me some impressions on what are we going to do on distribution, and what are we going to do more efficiently with this program?

And I am going to ask my second question because I think it is related to it. One of the big complaints I get from my constituents about why more of them aren't applying for E-Rate dollars is that there are six forms. We don't have an army of people in New Hampshire to be able to put this application in. Maybe other larger school districts can do that, but we need to simplify this application. I think that is significant because this is what I hear when I reach out to schools and libraries, asking "How can we get more of these dollars to you, get more access to our students?"

I want to hear more about distribution, how do we direct it better, and how can we get this down to a very simplified application so that we don't disadvantage smaller states and rural areas based on bureaucracy.

Ms. ROSENWORCEL. Thank you, Senator. Those are good points. You might be surprised I agree with just about all you said. And, also, as a New Englander, I realize there are parts of New Hampshire that are very rural and have not traditionally been the beneficiary of most of our universal service programs.

That is why I actually think the reform of the E-Rate program is so substantial. Because by reforming our Category Two services, we are making WiFi more available in more schools, and New Hampshire is among them. For the first time, New Hampshire as a state has been eligible for that support in several years.

So we are going to find that more funds are actually going to flow to rural communities for WiFi support, which I think is terrific and helpful.

I take your point that schools and libraries and student-centered activities should be the focus. I would be happy to follow up with you on your concern about administrative offices.

And then finally—

Senator AYOTTE. Not that I don't think they should be eligible, but I think that if we prioritize, that should be the lower priority as we look forward—

Ms. ROSENWORCEL. Sure.

Senator AYOTTE.—to serving students.

Ms. ROSENWORCEL. No, that is a fair point. I don't know enough about that today to get back to you on that.

But your point about streamlining the application, I have gone around the country and spoken to lots of schools and student groups and state technology directors, and they all say the same thing.

We streamlined the application in our reforms last year, but I will be the first to tell you it is not enough. It is a continuous process, and we need to have our ear to the ground and listen to the schools that apply for these services and find out what kind of bureaucratic impediments just make it hard for them to do so. So I think we have made improvements, but I think we can do more.

Senator AYOTTE. Good. I am glad to hear you say you will make this a priority, because it is so critical for my state.

I wanted to follow up briefly on the issue of the Open Internet order. One of the things that, in my view, was lacking in it was this idea of an independent cost-benefit analysis, even though the minority members on the decision had called for an independent cost analysis.

Given the Commission's directive to act in the public interest, convenience, and necessity, do you think it is important for the Committee to include an independent cost-benefit analysis of its rules to ensure that it does meet the public's interest, convenience, and necessity, which is your broader purpose?

Ms. ROSENWORCEL. That is right. The President had an Executive Order back in 2011 directing, to the extent feasible, that agencies engage in cost-benefit analysis when they make major decisions, and I fully support that.

In 2010, when we first came up with these policies, we had a fairly extensive cost-benefit analysis. It is, candidly, less extensive in the most recent decision, in part because that was a response to an opinion from the court of appeals. But I take your point that that should be a part of our analysis going forward, and I could commit to doing that for you.

Senator AYOTTE. Thank you.

The CHAIRMAN. Thank you, Senator Ayotte.

Senator Fischer?

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

Senator FISCHER. Thank you, Mr. Chairman.

Welcome, Commissioner.

You have talked about opening up more unlicensed spectrum for WiFi, even highlighting your concerns with the way the CBO has scored the licensed spectrum over the unlicensed. So what are the potential implications of releasing more spectrum for that unlicensed use?

Ms. ROSENWORCEL. Thank you.

Unlicensed spectrum is incredibly important for our economy. Think of it like WiFi. It democratizes Internet access. It is the source of \$140 billion of economic activity every year. And even our licensed carriers rely on it when they offload service onto it. So we need more of that, just like we need more licensed spectrum that is committed to commercial use.

The challenge is, as you know, the Congressional Budget Office takes all of your spectrum policy and grinds it through an analysis that sometimes produces results that are at odds with some of the infrastructure goals of this committee and the Congress.

And one of the challenges is that the Congressional Budget Office prefers licensed spectrum to unlicensed spectrum, and that is because licensed spectrum raises revenue when we auction it off to commercial carriers. But what it misses is that unlicensed spectrum is the source of so much economic activity, as I mentioned, \$140 billion every year.

So it is my hope that, going forward, spectrum legislation would follow the pattern that Congress created in the Middle Class Tax

Relief and Job Creation Act when it set aside the guard bands in the 600-megahertz band for unlicensed service—in other words, every time that there is an instruction to auction licensed airwaves, there is a cut for unlicensed or a WiFi dividend. And I think if we get the right mix of licensed and unlicensed services, our wireless economy is really going to grow.

Senator FISCHER. So, legislatively, you would suggest that we be clearer in the proposals that we put forward?

Ms. ROSENWORCEL. Yes.

Senator FISCHER. Thank you.

Also, in March, the Senate passed a bipartisan resolution on the Internet of Things that Senator Ayotte and Booker, Senator Schatz and I put out. And it stressed the importance of developing a national strategy so that we can encourage the Internet of Things.

As the resolution states, innovation is the key to the United States remaining a world leader in technology. However, to move forward with these creative ideas, I think we have to have some clear rules and some clear expectations. So I am concerned that the proposed net neutrality rule moves in less than a market-driven direction.

So what can the FCC do to foster innovation so that the United States continues to be a world leader in technology and also in telecommunications?

Ms. ROSENWORCEL. Thank you.

The Internet of Things is exciting. By the end of the decade, we could have as many as 50 billion devices with wireless sensors, making us more efficient and effective in everything we do. We will have people talking to people, people talking to machines, and machines talking to machines. The possibilities are really big.

I think there are four fundamental policy areas in the Internet of Things, not all of which fall under the FCC's jurisdiction. But I think we have to be concerned about security. We have to be concerned about privacy. We have to be concerned about the adequacy of IP addresses for all of those devices. And we need to be concerned about spectrum. And, again, back to your prior question, making more unlicensed spectrum could actually help the Internet of Things really flourish.

Senator FISCHER. Do you think that would be the main thing, then, that the FCC can do, is to maybe step back, to offer more encouragement in many of those areas?

Ms. ROSENWORCEL. Yes. I don't think we should be overly aggressive at this point. I believe that we should allow experimentation with the Internet of Things. And I think that is how we will see its possibilities grow.

Senator FISCHER. Good. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Fischer.

Senator Daines?

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

Senator DAINES. Thank you, Mr. Chairman.

It is good to see you here today, Commissioner, and good to see your family here, as well. Caroline Frances is one of my favorite

girls' names. We have a little girl named Caroline, as well. She is now a big girl.

And, Emmett Joseph, that is a sharp-looking tie you are wearing there today, as well.

Thanks for coming to Montana last month to participate in the Kalispell telehealth workshop, where I am sure you saw firsthand the opportunities that technology truly can bring to rural America.

In your statement to the Committee, you mentioned that one of your top priorities is securing access to communications services for all people, no matter where they live. And I couldn't agree more. Access to technology is allowing us to remove geography as a constraint and allows Montanans and those who live in rural areas to start and grow world-class companies. But we still have a lot of work to do, a lot of issues to overcome, to connect our unserved communities. And, certainly, the FCC plays a very big role in that.

The Communications Act tasks the FCC with providing services to rural consumers that are reasonably comparable to services in urban areas. Now, some areas of the country are about to get 5G service, and many areas in Montana don't even know what G is right now. We would love to see G-anything. Can we really say that this is comparable service?

Ms. ROSENWORCEL. Thank you, Senator, for the question. And thank you for acknowledging my family.

I think we have work to do. You can travel in rural America and rural Montana and know that connectivity is not yet everywhere. And we are continually adjusting, tweaking, and evolving our universal service policies to make sure that we reach those areas with more precision.

That is not something we can do one time. We have to constantly be working at it, constantly identifying those areas that do not have service, and making sure we direct our funds toward those areas.

Senator DAINES. What is the FCC doing to incentivize build-out and bring rural states up to comparable levels? I think it often comes down to incentives.

Ms. ROSENWORCEL. Senator, I agree with you. I think it is important that we use our license terms as an incentive, that license terms should be longer if you meet intermediate build-out requirements. License terms should consider build-out requirements that are specific to rural areas.

We should also think about how, during our auctions, we auction off licenses in small enough sizes that small carriers can compete.

And, finally, in redoing our designated entities rules recently, we created new bidding credits for providers that serve rural areas.

And I think, with a mix of policies like that with incentives built into them, we have a chance of actually providing better service.

Senator DAINES. You have brought up the issue of spectrum. And, as you know, we have plenty of spectrum in Montana. The problem is deployment. We have companies in Montana who want to build out infrastructure, but the spectrum they need is owned by companies that aren't using it.

So I would like to get your thoughts on what are some ways to encourage companies that have spectrum in rural areas, in rural

states, to build out or at least lease the spectrum to rural providers.

Ms. ROSENWORCEL. Thank you. I guess this is where I am going to give a plug to that bill that I mentioned earlier, which I think thoughtfully suggests that companies, large companies, that have spectrum licenses in rural areas, to the extent they are not deploying there, should be given an incentive to lease it out to small companies that are willing to do so. And that incentive could be an extension of their underlying license.

Senator DAINES. Can you explain how the FCC determines the build-out requirements for spectrum holders? Because in a rural state like Montana, a company could meet its build-out requirements by only serving two or three small communities but still leave 70 percent of the state's population unserved. So what could the FCC do to ensure build-out in rural areas so that everyone is served?

Ms. ROSENWORCEL. You are right. Traditionally, I believe most of our build-out requirements have been on a population basis, which means in a vast state like Montana you could service a handful of towns and succeed in reaching that milestone.

I think the question is, can we come up with a system that is more geographic-based or roadmile-based so that we can make sure service goes more places? Because people, of course, travel through those places to do their business, to move through the state, and to get to work.

Senator DAINES. We just had a situation—in fact, a bow-hunter was attacked by a grizzly bear. I met him last week back home. It is an amazing story of survival. But it was his cell phone that probably saved his life, as he was in a pretty remote area and was able to get a signal and get help. And it probably saved the young man's life.

Last question, universal service. Many companies in Montana rely on universal service funds, but there are issues with the fund, including overbuilding as well as duplication.

You mentioned the importance of universal access for all Americans. What is the FCC doing to make sure that USF funds are used to bring connectivity to unserved communities—kind of back to the same drumbeat here—rather than communities who already have access?

Ms. ROSENWORCEL. You are right, Senator. We have \$4.5 billion that we can make available annually for high-cost areas of this country, rural communities. We would be wasteful if we chose to continue to allow those funds to support areas where the private sector has already supplied broadband and wireless services.

We are making efforts with our new Connect America Fund to make sure that if there is a private-sector supplier we no longer provide funding to those areas. We are going to have to continue to work on that because we cannot afford duplication because our funds are not infinite.

Senator DAINES. I couldn't agree more. Yes. Thanks, Commissioner.

The CHAIRMAN. Thank you, Senator Daines.

And a reminder to check your bars of service before going into bear country, I would think, would be a good—

Senator DAINES. And bring your bear spray.

The CHAIRMAN. And bring your bear spray, OK, and perhaps some other firepower along with you.

Senator McCaskill?

**STATEMENT OF HON. CLAIRE McCASKILL,
U.S. SENATOR FROM MISSOURI**

Senator McCASKILL. Thank you.

Commissioner, back in 2013–2014, there were announcements made about fines being levied against those carriers who had abused the Lifeline program. As you know, this has been an area of great interest for me for many years, trying to get at the waste and abuse and fraud that was inherently embedded in that program because of a lack of planning when it began, I might note, during the Bush administration.

So I thought it was great when more than \$94 million in fines was announced. I thought, OK, we are making progress. I am beyond confused as to why not one dime of that has been collected.

And I look at the list of the people that owe money on these fines. One of them is TracFone. Well, they are getting a big check from us every month. I believe all of these people that owe millions of dollars are still part of the program.

And I think it is really important, and I mean, like, now, that I get some kind of answer from the Commission why not one dime of these—I mean, we might as well have a big flashing sign that says, “Doesn’t matter, do whatever you want in the Lifeline program because we are not even going to bother to collect the money and we are going to keep paying you.”

I mean, do you have any explanation as to why none of these fines have been collected?

Ms. ROSENWORCEL. Senator, I agree with you, that sounds problematic, \$100 million in fines during the last 2 years for bad actors who have played fast and loose with this program. We absolutely have to make sure that they are paying up. And if they are defrauding the program, they should have absolutely no reason to continue to participate.

So I agree with you. But on the specifics of their payment schedule, I would need to get back to you on that.

Senator McCASKILL. Well, there is no payment schedule because there has been no payment. And there haven’t been any—I am not aware of any major fines that have been levied since February 2014.

I would like to know specifically if you all have the tools to cutoff their participation in the program until they pay the fines. I see no reason why they should be allowed to participate until they have paid.

Ms. ROSENWORCEL. We do have a debarment program, and we need to make sure that we apply that. The challenge with applying it, of course, is we don’t want to cutoff the underlying consumer, so we have to figure out a—

Senator McCASKILL. Believe me, there are plenty of people out there to pick them up. They are still out there soliciting for folks on every street corner, I can assure you. It is not hard to get a Life-

line phone. This is not a difficult challenge. And believe me, everybody who has them knows how to get them.

So I am not as worried about that, about them getting cut off, especially if you give them notice or you direct them to a different carrier, which should not be that hard if we are keeping the records we should be keeping around this program.

Ms. ROSENWORCEL. That is exactly what I am talking about, that we just need to give them notice, we need to find a way to get them to a new carrier so they are not cut off from basic service.

Senator MCCASKILL. Well, I am going to be paying really close attention to see if some money comes in on that.

I was confused when I looked at the budget deal. I don't know how this provision got in there. And if anybody knows, I would love to find out. I just think it is a really bad idea that we have put something in this budget deal that is going to allow the Federal Government to participate in robocalls to collect debt.

And the interesting thing is, when I looked at the backup for this, for the changes in direct spending and outlays, CBO doesn't even say we are going to get any money from it.

So I am against that provision. I will probably vote for the deal because I can't see jettisoning this important compromise because of that. But you are going to have the power to issue regulations within 9 months dictating the frequency and duration of such calls.

And, you know, I have a hard time imagining, if someone has debt collectors coming after them, I have a hard time imagining that robocalls are very effective. You know, I don't think robocalls are effective for anything, including politics, but I am pretty sure if you owe money to a bunch of people, including the Federal Government, you are not paying much attention to robocalls.

So I would like to see really aggressive regulations around this, if this actually does become the law, about how frequent these calls could be and the duration of these calls. I just think this is a stupid idea. We should be getting rid of robocalls, not empowering the Federal Government to make them.

So I would appreciate your feedback and the Commission's feedback on the regulations that you would be willing to put in place if we go down this, I think, nutty path of letting the Federal Government—

Ms. ROSENWORCEL. So, like you, I detest robocalls, and I know I am not alone. It is—

Senator MCCASKILL. America detests robocalls.

Ms. ROSENWORCEL. It is the largest single category of complaints that the FCC gets year-in and year-out. Our friends at the FTC get even more.

Senator MCCASKILL. Right.

Ms. ROSENWORCEL. So I am proud of the work the agency has done to try to improve the possibilities of do-not-disturb technology and give consumers the right to revoke consent. And when and if we have to proceed with the legislation you just described, we would be perfectly happy to work with your office to make sure that American consumers get a little more of that privacy they deserve.

Senator MCCASKILL. Yes, I would like to see you do a rule that they can make one robocall a year for 10 seconds.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator McCaskill.

And my understanding is, I think that provision that is in the budget agreement is something that the administration proposed in their budget in previous years, and I think it is something that they put on the table in this current discussion as well.

Senator MCCASKILL. Well, they are wrong.

The CHAIRMAN. I figured you would say that. Thank you, Senator McCaskill.

Next up is Senator Blumenthal.

Senator BLUMENTHAL. I strongly agree, Mr. Chairman, with Senator McCaskill. And Commissioner Rosenworcel is well aware of my views because she and I have discussed hers and mine at length.

And I know that you agree that consumer complaints about this intrusive, invasive practice are very well justified. In fact, the Consumers Union conservatively estimates that \$350 million are lost annually to phone scams, generally, a lot of them, the result of robocalls.

And the good news is advanced technology is available and affordable to stop these very intrusive and invasive machine-driven calls. And telephone companies ought to make blocking options available right away. Even in advance of a rule, the telephone companies have the ability to offer that service.

And so I agree with Senator McCaskill about the inadvisability of the suggestion made in the budget agreement. But, more broadly, I would like to ask what the next steps are that you would view as most likely and most achievable to address this scourge of robocalls that we both have seen across the country.

Ms. ROSENWORCEL. Thank you, Senator.

Like most people, I am not a fan of Rachel from Cardmember Services, and I would like to make sure that more people don't hear her voice.

I know that one of the things that we did this past summer was we made very clear that it is permissible for telecommunications providers to offer do-not-disturb technology—in other words, technology that helps block robocalls. We recognize that the Do Not Call List itself is far from foolproof, so we are looking for technological solutions.

And, to that end, every week now, the FCC will be issuing information about its complaints under the Telephone Consumer Protection Act. And it is our hope that, by putting more data out there, we will get more innovators to create more technologies that could be easily adopted by telecom providers and also ultimately available to them at no cost.

Senator BLUMENTHAL. I want to, since my time is limited, talk a little bit about cramming. As you know, that is the unscrupulous practice by phone companies and wireless carriers to allow third parties to place charges on monthly bills without the authorization, often without the knowledge, of consumers and often without consumers receiving anything in return for those charges.

Our report on this committee found wireline and wireless cramming was a serious issue which caused as much as \$2 billion a year

in fraud. You are well aware of our report, so I am not going to belabor all the details.

The carriers, in my view, must provide clear and conspicuous exposure of any third-party charges and must give consumers the option of blocking all third-party charges and other commitments.

My question to you is, what can we do to guarantee the future fairness of wireless markets for consumers and prevent harm to consumers in the future, not just after the fact?

Ms. ROSENWORCEL. Right. I am familiar with the report you describe. It found that 15 million to 20 million consumers a year find that they get saddled with fees on their wireline bills that amount to about \$2 billion. So the FCC, in the aftermath of that, decided to put in place some rules to help prevent them. But, no surprise, that fraud migrated to wireless bills.

And what we saw during the last year is we saw settlements with the four major wireless providers, settlements between \$300 million and \$400 million in total. And that sent some money back to the states, to the attorneys general that helped us with that. It also sends some money to the Treasury for a penalty. But the bulk of those funds are for refunds for consumers.

And that is a good thing, but if you really think about it, we shouldn't be fixing this problem after the fact; we should be making sure it doesn't occur in the first place. So I think it would be smart to have a rulemaking to take what we know from those settlements and make sure that those kind of scams and fees don't show up on your wireless bill from the very start.

Senator BLUMENTHAL. I agree.

And just one last question. Have all the refunds been completed? And are there additional settlements that you anticipate?

Ms. ROSENWORCEL. I don't know the answer to that right now, Senator, but I would be happy to get back to you.

Senator BLUMENTHAL. Thank you.

Thanks, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Blumenthal.

Senator Heller?

Oh, Senator Heller is not here?

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

Senator BOOKER. He has yielded his time to me, so I will—

The CHAIRMAN. Senator Booker. Of course he has.

Senator BOOKER.—take 10 minutes.

[Laughter.]

The CHAIRMAN. It is that New Jersey-Nevada axis.

Senator BOOKER. It is the Pac-12 alliance, actually.

First of all, it is great to see you. It is incredible to see your family. Your kids are—probably this ranks as the most boring experience of their lives—

[Laughter.]

Senator BOOKER.—and they are the most well-behaved two people possible. My parents have a saying, “Behind every successful child is an astonished parent.” But they have already astonished me. So it is incredible to see them.

And I just want to real quick—in January, I introduced the Community Broadband Act, having been a former mayor, seeing some of the things going on in my city now, the innovations and the like. I was happy that the FCC granted petitions to North Carolina and Tennessee.

And I am just wondering, from your opinion, do you agree that the Community Broadband Act is necessary? And how do you see municipal broadband playing into the larger effort to help communities that currently struggle to find affordable, accessible, reliable broadband?

Ms. ROSENWORCEL. Yes, Senator. And thank you for acknowledging my kids like that, but, of course, now that we have, they might start to misbehave. That is the way it goes.

You know, our forbears used to come together in communities and build barns together and bridges. This is how we brought electricity to our Nation's farms. When communities found that the marketplace wasn't delivering for them, they just got together and they did it themselves.

So I think that is fundamentally American. I think our democratically elected communities should have this opportunity. I believe your legislation reflects that. And I don't think it is always easy to deploy, but I think that they should have that opportunity.

Senator BOOKER. Thank you very much.

And then Senator Rubio and I, supported by some others, introduced the WiFi Innovation Act. You know, the demands on spectrum have really increased considerably. And what we did back in the 1990s really has tied up a considerable amount of spectrum. And I just believe that we should be focused on safety first and security, but I do believe that there should be more done.

Now, I was pretty happy to read your blog, which I am sure your children found equally boring, but it was exciting to me. And you were sort of outlining the importance of freeing up spectrum in the 5-gigahertz band.

What can the Commission do to safely and swiftly move, given the demand, that every day we don't meet this demand is days without innovation, days without access, days without opportunity? What can we do to swiftly move this process forward, potentially making this band available for WiFi use? And how can the Congress help?

Ms. ROSENWORCEL. Thank you.

I, too, think the upper portion of the 5-gigahertz band is very exciting. Back in the late 1990s, we set aside some of that spectrum for auto manufacturers to develop safety systems. Of course, the world has changed a lot since then. In the late 1990s, we were not talking about driverless cars or automated vehicles. And so work is continuing on auto safety, and that is good and important, but we have also seen technology evolve. And it is possible now to engage in more sharing in our spectrum bands. So we feel like this is a prime place to consider sharing for unlicensed, with the auto manufacturers.

And, as you know, you, Senator Rubio, and Senator Thune wrote a letter to us recommending a framework for testing with the Department of Transportation and the Department of Commerce on the upper portion of the 5-gigahertz band. And I think that that

is a terrific start. I hope that you check in with us regularly, because I think pressure from the Congress keeps us on guard and keeps us on course.

Senator BOOKER. No, we will.

And in the remaining time, unlicensed spectrum has become really important, and, again, lots has changed since the 1990s. In the 1990s, I had hair.

[Laughter.]

Senator BOOKER. And so, you know, with the bipartisan budget agreement including provisions to help free up additional government-held spectrum for licensed commercial purposes, I agree it is a serious need, but I really want to see more focus on unlicensed spectrum. I am not going to waste the remaining minute that I have on that.

I do know that you agree with me about how important Lifeline is. There are some things that we could do to make the program better, but I have heard you say before that it is an essential program.

And so I would just like to ask my last question just about, is there a need for Congress to reinstate the minority-in-media tax credit?

Ms. ROSENWORCEL. I think the answer is yes. You know, who we see on the screen says a lot about what we are as individuals, as a community, and a nation. And media ownership says a lot about that. We know that the ownership of major media properties is not as diverse as the country as a whole.

But we also know that to fix that requires access to capital. And the most effective tool we had was the minority media tax certificate, which was in place from 1978 to 1995. It helped to increase the number of minority-owned media properties from roughly 40 to over 300. And I believe we should look back to that tool and consider how we can use it in the future.

Senator BOOKER. Thank you very much.

Mr. Chairman, I see that my brother from the Pac-12 is back, so I will yield the remaining time.

The CHAIRMAN. All right.

He yields back, and we will recognize the Senator from Nevada.

**STATEMENT OF HON. DEAN HELLER,
U.S. SENATOR FROM NEVADA**

Senator HELLER. Mr. Chairman, thank you. And I yielded for a purpose. As usual, as friends, my job is to clean up after Stanford grads. So I just wanted to hear what he had to say first.

[Laughter.]

Senator HELLER. But thank you for the hearing. Thank you for the hearing.

And thank you, Commissioner, for coming back and spending some time with us. I certainly do appreciate your family being here also—and, also, the rest of your family that is on tour. I have a son and daughter on tour right now.

I don't know if you have any jurisdiction over tour buses, but I still to this day do not know how 16 people can live in a tour bus for 30 days. No hotels, this tour bus, 16 people, 30 days.

Ms. ROSENWORCEL. I know.

Senator HELLER. So, anyway, if you have any—

Ms. ROSENWORCEL. No, I am with you on that.

Senator HELLER. I think you have to be under the age of 25 to enjoy and appreciate something like that.

But, anyway, thank you for being here, and thanks for taking time.

I want to talk a little bit about FCC reform. And I think you are familiar with this. I am concerned that there has been a lack of transparency and some openness in certain regards, not all regards, but certain regards, with the Commission.

Several years ago, you came before the Committee for your first nomination hearing. I think I laid out at that time some of those concerns, and I think many of them still remain today.

You are probably aware of the FCC Process Reform Act, and it is my push for greater transparency in the Commission. It does five things, and you have actually spoken on some of them: one, the appropriate comment and reply period; two, providing a shot clock for items pending review; three, specific language of rules before voting on them; four is commissioners' ability to collaborate; and one that you did talk about with Senator Ayotte, and that was the cost-benefit analysis.

We have put this together. I think it has passed the House, has not yet passed here in the Senate. And I will urge my chairman to continue to work on this particular piece of legislation.

Is there anything else, any other commonsense measures that can be addressed by this commission and yourself, personally, that you believe would bring greater transparency to the Commission?

Ms. ROSENWORCEL. Thank you, Senator.

Obviously, transparency is important. I am not sure that these things require congressional action. But I think it would be valuable for the public to have a list of the decisions that are presently before the commissioners, along with a brief description, so that it surprises no one when a vote emerges from the agency.

I think it would also be valuable to have a systematic way for those who petition the agency for relief to find out exactly where their petitions stand in the process.

Senator HELLER. Yes, I think there is some concern for that, actually, a priority that you identified, and that was certainty to some of these companies. That is essential to promoting investment, fostering innovation, creating jobs.

Do you believe that it would provide more certainty to these companies if a shot clock was available? Specifically, what are your feelings on that?

Ms. ROSENWORCEL. Yes, well, I mean, this might occasionally be a statement against interests, given where I work, but I think shot clocks and deadlines are really important. They have a way of motivating us toward action. So in any legislation that emerges from this committee or oversight of the FCC, I would certainly encourage you to pressure us to have more deadlines in the work that we do.

Senator HELLER. If I can bring up for a minute another piece of legislation, the FCC Consolidated Report Act. Again, I think it is something that you are familiar with, especially with the time you were working for then-Chairman Rockefeller.

Looking at this piece of legislation, as I see here, this report, I think the chairman did a great job in trying to meet some of the values on both sides of the aisle here. It has passed the House, and we are at a standstill right now, and I think that is kind of unfortunate. I think both sides—and I am not talking Republican/Democrats, I am talking two houses that really need to come together and try to work this out.

Can you speak to the importance of having a single report like this?

Ms. ROSENWORCEL. Sure, Senator. I think the greatest value in that legislation is, candidly, we have some reports that we have to produce annually that are a waste of commission resources.

Senator HELLER. Is this one of them? All these reports, is that a waste of—

Ms. ROSENWORCEL. All the reports are not. And there are also ways in which longitudinal data that is issued every year—

Senator HELLER. Some of us do read them, by the way.

Ms. ROSENWORCEL. What is that?

Senator HELLER. Some of us do read them.

Ms. ROSENWORCEL. Yes. I do.

Senator HELLER. But having a single report, I think, would be very advantageous for all of us here.

Ms. ROSENWORCEL. Sure. Although I think it was a report every other year. And the only point I would make is that the Internet age moves really fast. We want to make sure our decisions are informed by data. And perhaps doing this with a little more frequency or maybe having an intermediate—

Senator HELLER. That is a good point. That is a good point.

Ms. ROSENWORCEL.—effort would give us the kind of data that would support better decisionmaking. So that would be the only pause I would have.

Senator HELLER. Yes.

Ms. ROSENWORCEL. Though I don't think the legislation would preclude us, for instance, from doing those kinds of things.

Senator HELLER. If I could encourage you to work with us, you know, as we move forward and continue to grapple with this particular issue. You do make a good point on how often these reports should be available. But having consolidated reports, I think, for all of us here in trying to do our jobs, would be very, very helpful.

Ms. ROSENWORCEL. OK.

Senator HELLER. Thank you.

Mr. Chairman, thank you.

The CHAIRMAN. Thank you, Senator Heller. And let me just add, your good work on FCC reauthorization has been a good foundation for us to build on.

And I hope that the Commission will work with us on that, and I think it would get at some of the issues that have been raised today. Earlier, you heard Senator Blunt talk about responsiveness. And I just think having a more regular reauthorization process would perhaps bring the Commission up here and get them to be reacting and responding to us on a more regular basis, which might address some of the concerns that were raised earlier as well as creating the kind of transparency for the public that they deserve and expect.

Senator HELLER. Thank you, Mr. Chairman.

The CHAIRMAN. So I hope that we can continue to move forward with that and that the Commission will be a cooperative partner in that.

Senator Moran was going to be up, but Senator Klobuchar has returned. So the Senator from Viking country is recognized.

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

Senator KLOBUCHAR. Very good. Who have a winning record so far, as you know. Thank you very much.

Thank you so much, Commissioner, for being here. And I know that a lot of my major bills and issues have been discussed, and you are certainly knowledgeable about them.

The call-completion bill, I know you have talked about that, and that continues to be a problem. I just did a forum with Collin Peterson about that a few months ago, with the dropped calls. So I will let your answers on that stand.

The spectrum bill that you have mentioned several times, which I appreciate, with Senator Fischer.

The work that Senator Thune and I are doing on trying to get more funding from the Universal Service Fund for broadband, which I think is the number-one thing I have been hearing. It feels like a complete resurgence of interest in this issue.

And I attribute it to a few things. Number one, the economy is better, so people are working; they need broadband. Number two, technology has shifted, and so this is no longer just, "Oh, do we have broadband?" which many of them have. It is, "Do we have high-speed broadband?"

And I cannot tell you the number of businesses and managers that go to the McDonald's parking lot in rural areas to do all of their bookkeeping and their work because they don't have high-speed enough broadband, or the kid on a reservation that goes to one house, and you have 20 kids standing in a backyard, because that is where they have WiFi.

So I think you understand the enormous need here and also the great opportunities.

One thing that I don't think has been focused on as much, Senator Daines and Gardner and I introduced the Streamlining and Investing in Broadband Infrastructure Act to implement the Dig Once policies on Federal highway construction projects and streamline GSA policies.

What else do you think the FCC and Congress can do to promote more efficient permitting procedures at the Federal level to reduce construction costs and speed up deployment?

Ms. ROSEWORCEL. Yes, Senator. Thank you. I think Dig Once policies are terrific. They should be put in place all across the country. Because when crews are repairing or building roads, adding broadband conduit adds less than 1 percent to the price of the project, but we get lots of rewards down the road when we do so. Plus, it minimizes disruption for communities, and they like that.

I think there are other things we can do. I think we have particular problems on Federal lands in this country. About one-third of our lands are Federal, and we should come up with practices

that make deployment on those lands easier. We should have a shot clock for the Federal Government to respond, just like we do for municipalities.

We should have a regular GSA schedule to make sure that everybody knows how to deploy and gets a standard contract. And we should have a list of Federal assets that could be used to help with deployment on Federal lands.

And if we combine those things, I think we would wind up having much greater state of deployment on the ground.

Senator KLOBUCHAR. Very good.

Can you talk a little bit about investing in broadband adoption? There are places that have broadband but people just aren't educated yet on how to use it.

Ms. ROSENWORCEL. Yes. You know, we have historically focused on broadband deployment at the agency. That is an infrastructure challenge. Broadband adoption is just as important if you want people to take full advantage of the civic and commercial opportunities it provides.

I have focused extensively on what I call the homework gap, because we are finding that there are 5 million households in this country that have school-age children that don't have broadband at home. So kids have to go to that McDonald's parking lot or line up where there is a WiFi signal. And that is just an especially cruel part of the digital divide, and I think it is something we should fix.

Senator KLOBUCHAR. OK. Very good.

Smartphone theft, you know I have done work on this, and the carriers have voluntarily agreed to install kill switches. Do you have any updates? I know the FCC has been helpful in this area.

Ms. ROSENWORCEL. Yes. Look, more than one in three thefts in this country now involves the theft of some smartphone device.

Carriers are now working with us to help with remote lock and wipe capabilities, making them opt out. In other words, they are available on new handsets. And we are starting to get that in place.

We also have to improve the data bases for stolen phones not just nationally but internationally so we reduce the possibilities of thieves making money off those devices when they are stolen.

Senator KLOBUCHAR. Speaking of internationally, a different issue but an international one, when it comes to wireless service or broadcast service along our northern border. As you know, I can see Canada from my porch. And we need to make sure that there are no problems with interference.

This is an issue I have discussed with the FCC many times in the past, and I was glad to see the FCC announced a statement of intent with Industry Canada for coordination in the upcoming incentive auction.

Are you committed to continuing to work with Canada throughout the auction process and beyond to ensure that there are no interference problems?

Ms. ROSENWORCEL. Yes, Senator.

Senator KLOBUCHAR. OK. Very good. Thank you.

And, last, unlocking. The Wireless Consumer Choice Act, as you know, asks the FCC to take action. I introduced that. And I know

the FCC took action and is committing wireless carriers to unlock consumer phones and that they have met this commitment.

Do you think there is a further role for the FCC in advancing unlocking, or do you think it has pretty much been done?

Ms. ROSENWORCEL. I think we have made tremendous progress. And, yesterday, the Library of Congress announced its most recent set of exemptions under the Digital Millennium Copyright Act and made clear that both tablets and cell phones are eligible for unlocking. So it is my great hope that this problem has passed.

Senator KLOBUCHAR. Well, thank you.

And, last, I just want to thank you for your extreme amount of preparation for this hearing. Senator McCaskill and I were amused that you just could reel off these statistics without looking at one note. So you should be—we are all impressed by that.

And, also, having a woman in your role is great. I know you have been working on getting more women in technology. And Senator Capito and Scott and I head up the Diversifying Tech Caucus, so we will have you come to speak at one of our meetings.

Ms. ROSENWORCEL. Fantastic. I would like that.

Senator KLOBUCHAR. Thank you very much. Appreciate it.

The CHAIRMAN. There are certain advantages to knowing what members of this committee are going to ask—

[Laughter.]

The CHAIRMAN.—having been up here all those years, right? It is good preparation.

All right. Now, the gentleman who is wearing his Kansas City Royals blue today—

[Laughter.]

Senator MORAN. Thank you for noticing.

The CHAIRMAN.—is up next.

Senator MORAN. I thought if Senator Klobuchar was representing the Vikings, I was pleased to represent the Royals, along with Senator McCaskill.

Senator MCCASKILL. Very good.

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

Senator MORAN. Commissioner, thank you very much.

Chairman and Ranking Member, thank you for this opportunity to have Commissioner Rosenworcel with us again.

And let me express my gratitude to you and other members of the Commission who have been attentive to issues that I have raised on behalf of Kansans and Americans, and I appreciate the relationship that we have and your responsiveness. So thank you very much. It is valued.

Let me ask just a few questions.

First of all, while Senator Klobuchar indicated that you had addressed the issue of call completion, I was not certain of that. I didn't hear what you said, I guess is maybe a better way of saying that. It seems to me that you have taken steps, but I am not sure I have seen the evidence that call-completion rates have improved.

Is my impression wrong?

Ms. ROSENWORCEL. No, you are right, Senator. I, too, am not yet satisfied with the situation we find ourselves in. We know this is

a real problem for rural carriers and residents of rural America. And it is just not acceptable when calls don't go through.

Now, what we have done is we issued a declaratory ruling to make clear that this was a violation under the law, to not transmit and complete those calls.

We have had some enforcement actions, but what we realized during the course of those enforcement actions was we lacked the data to really go after bad actors. So we put in place new reporting obligations for originating long-distance providers.

And those obligations just kicked in. We have our first set of reports from them. We are going to comb through them, not just look for bad actors, but look for patterns so that we can make sure that we get rid of this problem once and for all.

Senator MORAN. So there is a way to develop the evidence necessary to determine where the problem lies?

Ms. ROSENWORCEL. That is exactly right.

Senator MORAN. That is very encouraging.

You indicated you understand it is importance. And I would only reiterate that, you know, one of my focuses as a member of Congress has been trying to keep rural America alive and well. And it is so discouraging to talk to a business owner who knows of failures of call completion, failures of the call, there is no completion, but they don't know how many others they are missing—the lost opportunity.

And my guess is that if you make that call to a rural business, the call is not completed, you are unlikely to try a second or third or fourth time to become a customer, as we try to keep businesses located in rural communities across our state and the Nation.

So please keep your attentive eye to this topic.

Again on a rural issue, one of my rural telephone companies has told me that, although they have been designated as one of the Commission's 100-percent overlap areas, they have been measuring the competition's signal and find it almost nonexistent.

And my question is, what steps does the Commission take to confirm that their determination is accurate and maintained?

Ms. ROSENWORCEL. Yes. We have a defined challenge process for our price-cap carriers at present, which allows carriers who believe that they are deploying and the incumbent should not be supported and also incumbents who believe that we are wrong about our information about private-sector entities that might have deployed.

We also have a process for our rate-of-return—

Senator MORAN. Suggesting that there is a process by which the phone company—

Ms. ROSENWORCEL. Yes.

Senator MORAN.—can make this fact known to the Commission?

Ms. ROSENWORCEL. Absolutely.

It is a challenge process. We are interested in that information. We have taken some in to date on our price-cap carriers. I think we are still doing some work on our rate-of-return carriers. But we do have a defined challenge process where they can voice that concern before us and we will investigate.

Senator MORAN. Is that something that is affordable to a small rural telephone company, that process?

Ms. ROSENWORCEL. The goal of that process is that they can come before us and point it out to us and then we go investigate.

Senator MORAN. OK. So they don't have to develop the case to present to you. They present the allegation, their statement, and then the Commission investigates?

Ms. ROSENWORCEL. That is right. But, obviously, more evidence is usually helpful, because it allows us to get our investigation underway.

Senator MORAN. On a broader issue about spectrum, Senator Udall and I and a number of members of this committee had solicited information from the administration, particularly from OMB, in regard to the Spectrum Relocation Fund. And OMB, to their credit, was very specific with policy recommendations, legislative changes.

That legislation has been introduced. I think, fortunately, it has been included in the budget agreement and so is potentially on the path to becoming law. I would be happy to have any general comments you might want to make about their recommendations.

But I wanted to specifically raise the question with you about unlicensed spectrum. There isn't really any effort that I can see underway to increase the chances that unlicensed spectrum—that as we relocate Federal spectrum to someone else, that it seems to me there is no emphasis on unlicensed spectrum.

And I would welcome your input if there are policy suggestions that you would have of how we enhance the chances that that might occur.

Ms. ROSENWORCEL. OK.

First, I think that this committee's correspondence with the Office of Management and Budget was terrific, and we are already seeing benefits, in that we are rethinking the possibilities of adding incentives to the Spectrum Relocation Fund. I think that is exciting and is going to yield more spectrum for commercial markets down the road.

Your point on unlicensed is well-taken. I think the Congressional Budget Office traditionally values licensed spectrum over unlicensed, by virtue of the fact that by auctioning spectrum that raises funds. But what they miss in that accounting is that unlicensed spectrum is tremendously beneficial for our economy at large. We have over \$140 billion of economic activity every year that relies on unlicensed spectrum.

So it would be my hope that if you did have an opportunity to produce more spectrum legislation down the road, you would consider doing what you have done in the past, which is making sure in every piece of legislation that has commercial auctions there is also a cut for unlicensed or a WiFi dividend.

Senator MORAN. Well, I appreciate your reminding us of that. I assume one of the challenges, just perhaps the congressional nature, administration nature, is when we are looking for an offset, you are looking for something that raises revenue. And that would be a very shortsighted decision to focus solely—it would be a very shortsighted economic decision to focus solely on spectrum that is licensed.

Ms. ROSENWORCEL. I agree with you completely.

Senator MORAN. Thank you very much.

Thank you, Chairman.
 The CHAIRMAN. Thank you, Senator Moran.
 And we will turn now to Senator Peters.

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

Senator PETERS. Thank you, Mr. Chairman.

And to Commissioner Rosenworcel, thank you so much for being here and answering all of our questions.

And, actually, I would just pick up on the comments made by Senator Moran on the unlicensed WiFi use and how we want to make sure that we are expanding that. But I wanted to thank you for your work that you have done related to the 5.9 gigahertz area, which you have been committed and said you are committed to opening up a process to make sure that we are doing the kind of interference testing to know that the auto industry, which has that portion of the spectrum, can continue to operate effectively and safely, particularly given the technological breakthroughs that are occurring right now in that space.

And I know you were at Mcity just recently in my state, in Michigan. And before I talk about that, I just want to mention, you know, I just had the opportunity this last week to see the vehicle-to-vehicle technology in real time, driving on a road in the community.

And we were able to have automatic braking, even if you are blinded by a car that may be in front of you that then swerves out of the way. Because of vehicle-to-vehicle technology, you know the car ahead of you is slowing, you are able to stop.

I mean, that is a major cause of accidents right now, if you are following a car that then swerves out of the way, then suddenly you find a stopped car in front of you or one slowing down. With V-to-V, you are actually able to know that, or your systems know that. You are able to know when cars are around blind spots and stop.

I mean, it is incredible stuff that is happening. I know you saw some of that in Michigan.

And I just wanted to remind everybody that these technologies are expected to eliminate up to 80 percent of all crashes, of unimpaired accidents in this country. In a time when 30,000 people die on our highways, this is a big deal. This is about safety. We are on the verge of seeing these incredible developments now being deployed commercially.

The Mcity that you visited at the University of Michigan is a 32-acre test track that allows us to fully test and put together the systems in order to deploy this on a wide basis. You are also going to see thousands of vehicles throughout southeast Michigan that will be testing these systems, as well, in the short term, in the months ahead and in the years ahead.

I know that FCC Chairman Wheeler was also able to visit Mcity. I think just yesterday he was there.

But before I ask a question, a more broad question, first, tell me about your reflection. What was your takeaway from Mcity and what the auto industry is doing with this 5.9 gigahertz?

Ms. ROSENWORCEL. Yes. Thank you, Senator.

The future of connected cars is big. It is really big. By the end of the decade, I think the statistic is that 97 percent of the cars shipped in this country are going to be Internet-connected. They are going to be, in effect, mobile phones on wheels.

Mcity, which I was privileged to see just before it opened—and you probably cut the yellow ribbon.

Senator PETERS. I did.

Ms. ROSENWORCEL. Yes—is the testing ground for all of that next-generation connected car activity. It is exciting that it is there in the backyard of the auto industry. And I think it is going to be an incredible hub of economic activity. So I would like to actually go back and see, as new developments arise, testing on the Mcity grounds.

As far as 5.9 gigahertz, I think you know that I have spoken about how it is possible for the auto industry to share that spectrum, potentially, with unlicensed services.

But the most important thing that we are doing right now is, at the direction of this committee, we are working with the Department of Transportation and the Department of Commerce to set up testing. And it is vitally important that when we test the use of this band by both services, that we make sure that safety is intact.

Senator PETERS. Well, I appreciate that. And, obviously, these are going to be issues that we are going to be dealing with in the future, kind of the historic tensions between more traditional companies and then all of the innovators that want to be able to take a piece of that.

I mean, how do you see that just generally, not just for the auto industry, but other traditional industries that are innovating at a rapid pace, and yet they are going to be facing new innovators that are introducing disruptive technology as well?

Ms. ROSENWORCEL. Well, I do think that connected technologies are going to be a part of every industry going forward, wireless technology in particular. The car industry is one that embodies that more than any other. And while there are challenges, I think the opportunities are enormous.

Senator PETERS. One last question in my time remaining here. And I have heard you respond to some questions related to the work on the homework gap. And I wanted to thank you for an op-ed that you wrote in one of the Detroit newspapers talking about that homework gap, where it is clear that roughly 7 in 10 teachers assign homework to their students that require Internet access, and yet in Detroit, for example, it is almost a complete opposite, where 7 in 10 students do not have access to the Internet. So it is a significant issue.

I know you have been very supportive of updating the FCC's Lifeline program to allow consumers to choose between applying the program support to broadband service rather than voice service. Could you give us an update on the FCC's efforts on that front? And where do you see that going?

Ms. ROSENWORCEL. Yes, Senator. We have an open proceeding on that, and I think that, moving forward, if we want to modernize Lifeline, we have got to make sure that it is a program that is run without any abuse, and then we have to figure out how to make sure it reflects modern services. That is the goal of our effort.

It is my hope, too, that if we do that correctly, we will have another tool to help support households that do not have Internet access and particularly those households that have kids who simply need to do their homework.

Senator PETERS. Great. Thank you so much.

The CHAIRMAN. Thank you, Senator Peters.

And the Ranking Member, Senator Nelson.

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

Senator NELSON. Senator Peters, I wanted to recall, when I went to your city, Detroit, and because of the allocation of spectrum, I am in a car going to a blind corner that there is another car, and, all of a sudden, this car that can't see this car coming through that intersection stops, stops on its own. That was impressive.

Now, I am not sure that I am ready to get into a car that drives itself—

[Laughter.]

Senator NELSON.—but that application of spectrum was very instructive and, I think, very optimistic of how we might use spectrum in the future.

Mr. Chairman, if I may, since I was engaged earlier in the morning, enter into the record an opening statement?

The CHAIRMAN. Yes, sir.

[The prepared statement of Senator Nelson follows:]

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

Good morning, and thank you to Chairman Thune for holding this hearing to consider this important re-nomination.

Commissioner Rosenworcel, congratulations on your re-nomination. You have served with distinction and not surprisingly, have established yourself as a reasoned, thoughtful, and bipartisan leader on the Commission since your confirmation.

The FCC has the critical responsibility for overseeing and supporting our Nation's dynamic communications networks and marketplace. Given the blistering pace at which these networks are evolving, we must have an expert oversight agency with flexible, forward-looking authority to protect consumers and competition. And as we look to what's ahead, we need regulators who are not afraid to use that authority when necessary, but also know when to exercise authority with humility and a regulatory light touch. Your tenure on the FCC has proven you to be just such a public servant.

The future may be uncertain, but I agree with you that, as the Commission tackles its important work, it must be guided by the fundamental principles that have helped U.S. communications networks thrive and lead the world for so many decades. Consumer protection, public safety, universal access, and competition must continue to be at the forefront of the FCC's actions.

Thank you again, Commissioner Rosenworcel, for your commitment to public service and your willingness to serve. This Committee should advance your nomination expeditiously, and I hope for and expect speedy action on the Senate floor in favor of your nomination.

Senator NELSON. And at the request of Senator Schumer, I want to also enter into the record a letter from the general counsel of the mayor of New York.

And I would like to just quote, speaking of Commissioner Rosenworcel: "Her championship of modernization and reform of the E-Rate and Lifeline programs are two examples of her fierce, determined commitment to expanding public access to high-speed broadband for working families."

And it goes on in another paragraph to say, “Her work as an FCC commissioner is not only helping children and families access the Internet but also helping communities like ours to build stronger schools, improve city services, and unleash more entrepreneurial and creative potential.”

And that is from the City of New York. If we could enter that into the record.

The CHAIRMAN. Without objection.

[The information referred to follows:]

THE CITY OF NEW YORK—OFFICE OF THE MAYOR
New York, NY, October 28, 2015

Hon. JOHN THUNE,
United States Senate
Washington, DC.

Hon. BILL NELSON,
United States Senate
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

I write in support of the Honorable Jessica Rosenworcel’s confirmation for a second five-year term as commissioner at the Federal Communications Commission (FCC). Throughout her tenure, Commissioner Rosenworcel has assumed a key role in shaping America’s digital future and empowering children, families, businesses, and new ideas.

In New York City, home of the second largest tech sector in the country, we have relied on Commissioner Rosenworcel to help protect the open Internet and prevent Internet Service Providers from discriminating against certain content and services online. She has been an ally and a champion for enacting the strongest possible rules against blocking, paid prioritization, and other discriminatory practices limiting our Internet access.

Of particular note, Commissioner Rosenworcel recognizes the primacy of technology, especially Internet access, in children’s education and lives. Her championship of modernization and reform of the E-Rate and Lifeline programs are two examples of her fierce, determined commitment to expanding public access to high-speed broadband for working families. Commissioner Rosenworcel’s focus on the homework-gap has inspired cities like New York City and others to take bold steps to address this issue, and in turn, inform the FCC’s work. The New York City and Brooklyn Libraries’ MIFI pilot is one such initiative to expand Internet access and promote digital literacy throughout underserved communities, by lending portable Wi-Fi hotspots.

Her work as an FCC commissioner is not only helping children and families access the Internet, but also helping communities like ours to build stronger schools, improve city services, and unleash more entrepreneurial and creative potential.

Over the past five years as commissioner, she has shown a steadfast commitment to ensuring that the Internet remains a tool for advancing goals related to equity, education, innovation, economic growth, and smart and responsive government. New York City strongly supports Commissioner Rosenworcel, and I urge Congress to support her speedy confirmation.

Very truly yours,

MAYA WILEY,
Counsel to New York City Mayor Bill de Blasio.

Senator NELSON. And speaking of that, Commissioner, on E-Rate, just talk generally again, to add to what you have already said, about the importance of E-Rate to students, teachers, librarians, and communities.

Ms. ROSENWORCEL. Sure. Thank you, Senator.

Knowledge, jobs, and capital are going to flow to communities that are more connected and communities that are more educated. We can use the E-Rate program to update education in our schools and give more students the skills to participate in the digital-age economy. I think that is really exciting.

I think it also offers other benefits, because when we deploy service to our schools, we make it incrementally less expensive to de-

ploy modern services to the community that surrounds them. So infrastructure improves writ large.

Senator NELSON. May I, on another subject, make a plea on behalf of telephone consumers, that when they sign up for the Do Not Call List, it is not working—

Ms. ROSENWORCEL. I know.

Senator NELSON.—people are still calling?

And I hear this all the time, even to the point at which I have some friends, a former Member of Congress, that they have taken out a hard line. They only use the cell phone, because they were getting so many calls around dinnertime, even though they put it on.

Anything we can do about that?

Ms. ROSENWORCEL. Thank you, Senator. As I was saying earlier, I can't stand robocalls either. I don't think there is anyone in this entire country who likes them very much.

I would point out to you that the Do Not Call List only works so much. We know it is not foolproof. So the FCC, this past summer, made clear that do-not-disturb technologies are lawful in order to help provide a technological solution to reduce the number of calls.

But you also asked if there is anything that Congress can do, and I will just point to this. The Telephone Consumer Protection Act is a law from 1991. It is old, and it treats wireless phones and wired phones differently, just as you described. And given that about 40 percent of our households now are wireless-only, I am not sure that that differential treatment anymore makes sense. And it might be something that it is worthwhile for this committee to address.

Senator NELSON. And, of course, the trend of the future is we are going to have these tablets with us, and that is how we are going to continue to communicate. And I see that among many of our friends. They don't even have a wireline coming into their house for a telephone.

Now, Do Not Call List is one thing, but spoofing is another thing. And for the record, I just want to tell, since the spoofing technology has evolved since the law that we passed in 2010, and now the scammers are getting more sophisticated, and they are calling from abroad, and they are using text messaging services.

CNN reported the story of Albert Poland, an 81-year-old who received nonstop calls from a person claiming to be a part of a Jamaican lottery that he had won the lottery. And this 81-year-old ended up giving away thousands of dollars until he realized he had been had, and that drove him to suicide.

And so a number of us have introduced a phone scam act. It would improve that 2010 law by going after offshore spoofing criminals and those who try to pull off these scams. But it would also encourage the FCC to work with the private sector on new technologies that could protect consumers.

Do you agree with all this?

Ms. ROSENWORCEL. Yes, I do, Senator.

Senator NELSON. And, finally, any further comment on spectrum, of what role Congress can play to support your efforts and to ensure adequate spectrum availability for all the wireless services?

Ms. ROSENWORCEL. Thank you, Senator. I think two things.

First, while I recognize that in the most recent budget deal there is opportunity for more airwaves to be pushed to the FCC for commercial auction, I would just say that we need a steady and strong spectrum pipeline and that you not stop with that legislative effort. So continue your work on the spectrum pipeline.

Second, though most of our focus is on the airwaves, the ground also matters. Coming up with better deployment policies for cell towers, for small cells, making sure that our practices are modern, is also worth your time and effort.

Senator NELSON. I was encouraged when we started talking about cell towers the other day, and I was noticing that the technology is getting very sophisticated, where these towers can be very small. They can go on the arms that come out for stoplights at intersections and so forth.

And yet also reminded that, in many other foreign countries, you can be in the middle of the desert in Somalia, and you can get cell service, which we are continuing to lack in many places in this country. And so we have a way to go. You keep that in mind.

And then, finally, I want to thank the chairman publicly for his willingness and the willingness of his staff to continue the dialogue as we work on the issue of net neutrality. We have come a long way, baby, since the beginning of this Congress, since the end of the last Congress, and we are narrowing the differences.

And so, whether it is Title X or something else, the chairman has certainly been willing to dive in, and I want him to know how much I appreciate that.

The CHAIRMAN. Thank you, Senator Nelson. And if it is Title X or we give it some sort of Florida designation in your honor, as long as we can get to the finish line, that would be great. We will continue to work on that, and I think providing certainty and clarity and some clear rules for an open Internet would be something that would be a worthwhile effort of this Congress. So we appreciate you and your staff's continued discussions and participation with ours in trying to reach a solution.

Commissioner, I just wanted to ask one last question, to bring it back to E-Rate. You have answered several questions on that today, but when the E-Rate program was expanded, it was a significant increase in the cap, when you go from \$2.3 billion to \$3.9 billion a year, which in turn has significantly increased the universal service fees on the American public by more than \$15 billion over the next decade.

So the question I have is, does the new E-Rate program guarantee that those schools which currently lack adequate communications will receive support ahead of schools that already have adequate facilities? I mean, the goal of this ought to be to extend that access to those schools that currently lack it.

Ms. ROSENWORCEL. Yes, Senator. Thank you.

The E-Rate system has prioritization built in for the lowest-income and most rural schools to get the most benefit. So that is in some ways a proxy for what you describe.

But I would say that our reforms generally are designed to make sure that the benefits are available more broadly. We got rid of some old services, some legacy services. We put new incentives in for efficiency. And the goal behind all of that modernization was to

make sure that those benefits touched schools that had historically not been touched by this program, and in particular Category Two services, which in this case involves WiFi.

The CHAIRMAN. OK. Well, I would just say that connectivity for all the schools, particularly those that currently don't have that, ought to be a priority. And those who are paying these fees, I think, would certainly want to see those funds used in a way that extends that connectivity to all the schools across this country.

Well, with that, I think we have reached the end of the line, I am sure as you will be glad to hear. And your 8-year-old daughter, I am sure, when she and her classmates are talking about unlicensed spectrum—

[Laughter.]

The CHAIRMAN.—will be way ahead of the game.

But we thank you again for being here today, and we will look forward to processing your nomination.

We will keep the record open for an additional 2 weeks for members to submit questions, and I would ask that you be as prompt as possible in response to those questions.

Ms. ROSENWORCEL. Of course.

The CHAIRMAN. So thank you.

And this hearing is adjourned.

Ms. ROSENWORCEL. Thank you.

[Whereupon, at 11:49 a.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. TOM UDALL, U.S. SENATOR FROM NEW MEXICO

I want to preface my remarks by stating that I am pleased that the budget agreement announced this week has important spectrum policy reforms.

This agreement mirrors the Spectrum Relocation Fund (SRF) legislation introduced by Senator Moran and me. We have been working closely with Chairman Thune and Ranking Member Nelson on this issue since April. SRF reform will promote innovation and fuel economic growth by making more spectrum available for commercial use.

Commissioner Rosenworcel, let me begin by saying that I strongly support your re-nomination. As FCC Commissioner, you have demonstrated a deep commitment to public service. And you have consistently supported smart policies to promote the public interest. One example is your idea to create an “X Prize” for spectrum efficiency. I plan to introduce legislation soon to make this happen.

I also look forward to continuing to work with you on efforts to expand broadband to rural and tribal communities. Seventy-seven percent of New Mexicans living in rural areas lack access to fast broadband speeds. The Acoma Pueblo library keeps its WiFi running 24/7. Folks drive to the parking lot to get Internet access, even when the library is closed.

So I appreciate your commitment to closing the “homework gap” that drives children to search for public WiFi hotspots. School kids today often need Internet access to complete assignments. But too many cannot get online at home, either due to cost or lack of access.

Too many New Mexicans also know what it is like to be stuck in an Internet “slow lane.” The FCC’s Open Internet order will ensure the Internet remains a platform for free expression, promotes innovation, and helps online entrepreneurs compete on a level playing field with established companies. Thank you again, Commissioner Rosenworcel for your support for net neutrality.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
HON. JESSICA ROSENWORCEL

Question 1. I’d like to ask you about the FCC’s October announcement that it would launch an investigation into four telecom companies over special access tariffs. Despite this announcement, it is my understanding that the Commission has not completed its analysis of the extensive special access data it has already compiled.

Considering the FCC’s limited resources, how is it prudent for the FCC to launch full-scale investigations when it hasn’t even completed its own due diligence on the topic? And what happens now to the unfinished analysis of the previously collected data?

Answer. As you note, on October 16, the Commission’s Wireline Competition Bureau initiated an investigation of the terms and conditions of select incumbent local exchange carrier tariff pricing plans of AT&T, CenturyLink, Frontier and Verizon for business data services. The Bureau’s investigation arises out of allegations from some parties that certain terms and conditions in business data services tariffs are unreasonable and lock up demand for TDM-based business services, which may harm competition and innovation. These allegations are disputed by incumbent LECs. The Bureau’s order initiating the investigation makes clear that “[n]othing has yet been decided on the merits.” Rather, the Bureau is “seek[ing] additional data from the incumbent LECs on which to base an objective evaluation of the reasonableness of the tariff pricing plan terms and conditions that are designated for investigation.” To this end, the tariffs remain lawfully in place during the investigation.

Meanwhile, the Commission has a separate rulemaking related to special access services that is ongoing. That rulemaking focuses on the current state of competition

in the special access market and how best to measure competition in the future. The Commission has undertaken a data collection as part of that rulemaking and, in September, the data was made available for public review subject to the terms of a protective order to safeguard competitively sensitive information. Public comments relating to the rulemaking are presently due on January 6, 2016 and reply comments are due on February 5, 2016.

Although the Commission's investigation into tariff terms and conditions "is based on the record generated" in its rulemaking proceeding, it "is being initiated and will be conducted as a separate proceeding." I believe both the investigation and rulemaking are lawful under the Communications Act. However, I recognize that it is important to harmonize our policies across proceedings, including those involving special access.

Question 2. As you know, authorizing the FCC has been a stated priority for me this Congress. This is an area where I believe Republicans and Democrats of this Committee should come together to ensure the FCC is responsive to the needs of our constituents. As a former Senior Communications Counsel on this committee, you understand our committee's role and jurisdiction as well as anyone.

Setting aside the debate over certain "process reforms," would you welcome legislation to reinstitute regular oversight and authorization of the Federal Communications Commission by the Congress?

Answer. Yes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO
HON. JESSICA ROSENWORCEL

Question 1. Commissioner Rosenworcel, in June 2015 the FCC adopted an order that imposed new requirements on businesses pursuant to the Telephone Consumer Protection Act (TCPA). I have heard from several business owners in Nebraska who are concerned about the burdens that the TCPA will impose on them, including the threat of class action lawsuits. You actually dissented from part of the decision because it permitted certain industries to obtain waivers of the TCPA rules. Please address the following concerns raised by business owners regarding the new TCPA rules:

Question 1a. Businesses need to have to have prior express consent to contact consumers on their cell phones using an autodialer. Some businesses, however, are concerned that the FCC has expanded the definition of "autodialer" to include smartphones. Is this the case? What certainty can you give businesses about this new definition?

Answer. The TCPA 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 contours 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 a 2003 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 that regard, the 2015 Declaratory Ruling and Order noted that the Commission has "interpreted 'capacity' broadly since well before consumers' widespread use of smartphones" and stated that "there is no evidence in the record that individual consumers have been sued based on typical use of smartphone technology" or that there are "scenarios under which unwanted calls are likely to result from consumers' typical use of smartphones." Instead, the Commission committed to "monitor our consumer complaints and other feedback, as well as private litigation, regarding atypical uses of smartphones, and provide additional clarification if necessary."

In any event, the use of an autodialer is only prohibited when a caller is using it to dial wireless numbers without prior express consent from the called party. They can be used to dial 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 TCPA. If Congress chooses to revisit the TCPA, updating the definition of autodialer could help provide greater certainty for consumers and businesses.

Question 1b. I have also heard from companies who are concerned that, under the new rules, they could be subject to litigation if they attempt to contact a consumer whose phone number has been changed. One company, for example, sent text mes-

sages to an employee, who never informed the company that the employee's phone number had changed. The company did not find out about the change until it was brought to court. As an FCC commissioner, what guidance can you give to businesses to ensure they can call and text customers—or even employees—without fear of legal action?

Answer. In the June 2015 Declaratory Ruling and Order, the Commission identified a number of options that, over time, may permit callers to learn of reassigned numbers. First, the Commission recognized that there is at least one database that can help to 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 TCPA 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.” And, fourth, 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 a 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 addition, the Declaratory Ruling and Order established a one-phone call safe-haven for callers placing calls to numbers that have been reassigned without the caller’s knowledge. 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 TCPA] feasible.”

Question 2. Commissioner Rosenworcel, do you believe that the TCPA is in need of modernization? For example, some businesses argue that the growth in wireless phones has made the TCPA out of date. In your opinion, what parts of the existing law should Congress update?

Answer. Yes. Our communications technology is changing quickly. The TCPA was passed when there were less than 10 million cellphone subscriptions in the United States and the smartphone was a concept straight out of science fiction. By contrast, today, Americans are cutting the cord in increasing numbers and there are well over 350 million wireless subscriptions in the United States. As a result, I believe it would be helpful to take a fresh look at the way the TCPA treats wired and wireless calls differently. This distinction may have made sense at the time of passage, but it no longer reflects the ways consumers and businesses use communications technology. In addition, as noted above, Congress could consider updating the Act’s definition of autodialer to account for changes in technology since the TCPA was enacted.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JERRY MORAN TO
HON. JESSICA ROSENWORCEL

Question 1. Regarding the Commission’s designated 100 percent overlap areas: You stated that the commission has a defined challenge process for price cap carriers, and that the commission is working on a similar process for rate-of-return carriers. Please provide more information about the commission’s plans for allowing incumbent rate-of-return carriers to dispute their designation as a 100 percent overlap area.

Answer. In the 2011 Universal Service/Intercarrier Compensation Transformation Order, the Commission adopted a rule to eliminate high-cost universal service support in incumbent local exchange carrier (ILEC) study areas where an unsubsidized competitor or a combination of unsubsidized competitors offers voice and broadband services that meet the Commission’s service obligations throughout the study area. The Commission subsequently codified this rule in April 2014. In December 2014, the Commission directed its Wireline Competition Bureau (Bureau) to “publish its

preliminary determination of those areas subject to 100 percent overlap and then provide an opportunity for comment on those preliminary determinations.”

On July 29, 2015, the Bureau published its preliminary list of fifteen rate-of-return study areas that it tentatively found were subject to 100 percent overlap by an unsubsidized competitor or combination of unsubsidized competitors. The Bureau sought public comment on its findings, in particular inviting feedback from affected parties. Comments were due on August 28, 2015 and reply comments were due on September 28, 2015.

To derive the preliminary list of areas subject to 100 percent competitive overlap, the Bureau utilized FCC Form 477 data. Form 477 filers must truthfully certify that they offer service in a particular census block, however, filers may not offer service to all locations in the census block. As a result, the Bureau concluded that it “cannot finalize the [100 percent overlap] list . . . without knowing whether the unsubsidized competitor is offering fixed broadband and voice service in accordance with the Commission’s service obligations for universal to *all* locations within the blocks reported on Form 477 and which overlap the study area.” (emphasis in original)

Thus, similar to the challenge process it had used in the past, the Bureau invited competitors to address in their comments whether they currently offer, to all locations within the blocks reported on Form 477 and which overlap the incumbent’s study area, service that meets the Commission’s service obligations for universal service (*e.g.*, rates, speeds, latency, usage capacity). Significantly, the Bureau also invited rate-of-return carriers that were identified on the preliminary list of 100 percent overlapped study areas “to submit evidence that an unsubsidized competitor does not offer service to all locations in the [relevant] census block . . . and/or that the competitor is not offering service to all locations within those blocks.” The Bureau noted that “the type of evidence that we found persuasive in the . . . [price cap] challenge process to establish that service was not being offered in an area was evidence that a provider’s online service availability tool showed ‘no service available’ for particular addresses in the relevant area.” The Bureau stated that “such information would be relevant to our final determination.” I believe that this process provides a fair opportunity for rate-of-return carriers to challenge the determination that they are in fact subject to 100 percent competitive overlap, but the agency should always remain open to ideas to improve its procedures.

Question 2. Regarding the Commission’s designated 100 percent overlap areas: Should a mere claim of service capability by an interested competitive provider be regarded as more or less persuasive than physical measurements showing signal strength at specific household locations?

Answer. More information, including concrete and verifiable evidence, is always preferable to assist the Commission in assessing whether service is being provided to a given location.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO
HON. JESSICA ROSENWORCEL

Question 1. Commissioner Rosenworcel, I know you previously worked with Senator Inouye, who was a friend to Senator Ted Stevens and often advocated for Alaskans as if he was the State’s third Senator. You also come highly recommended by our Alaskan carriers. You have been to our state, including some remote communities, a number of times. You have come not only in the summer, but also in the winter, which tells us a lot about your character and commitment. As you saw firsthand, Alaska still has communities without mobile or broadband service, and in many places trails the Lower 48 in deployment of modern telecommunications infrastructure. At the direction of the previous Chairman, the Commission adopted a plan that destabilized funding to Alaska, hindering our carriers’ ability to close this gap. Our rate-of-return and wireless carriers have worked together to put forward a plan that would stabilize funding for our rate-of-return carriers, providing them the certainty they need to invest in their networks. Will you continue to work with my office and our delegation to put this plan to work as soon as possible, and no later than Commission action addressing the national rate-of-return carrier program? I understand you, along with the Chairman and your fellow Commissioners, are committed to addressing the national program by the end of the year.

Answer. I have been to many communities in Alaska, including Anchorage, Homer, Dillingham, Manokotak, Aniak, Kotzebue, Kiana, and Nome. As a result, I know firsthand the difficulties carriers face serving our 49th state. That is why, as the Commission contemplates high-cost universal service reform for rate-of-return carriers, I believe that it is important for us to account for Alaska’s unique traits

and consider the merits of the plan put forward by the majority of Alaska carriers. I commit to working with your office as we do so.

Question 2. In your testimony, you highlight universal access as one of the four essential values that has informed our communications laws. If re-confirmed, will you continue to support the Universal Service Fund Program and its principals as envisioned by this Committee in the 1996 Act?

Answer. Yes.

Question 3. In your testimony, you said that, if re-confirmed, you will “continue to be guided by the fundamental values in the law” and that you will “continue to respect the priorities of this Committee.” Do you agree that if this Committee produces a legislative solution regarding the Open Internet Order, it is your responsibility as Commissioner to execute this solution as directed by Congress?

Answer. Yes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO
HON. JESSICA ROSENWORCEL

Question 1. Commissioner Rosenworcel, you and I share a strong commitment to ensuring that traditionally under-represented voices have the chance to be heard through sound telecommunications policies. While we discussed this issue during your nomination hearing, I would like to understand your views in greater detail.

The broadcast industry is in need of significant improvement in this regard. Less than 3 percent of broadcast television stations are owned by people of color and less than 7 percent are owned by women. These numbers are particularly troubling given the rise in media mergers and consolidation taking place across the country. Congress and the FCC have a responsibility to help ensure that the American people have a vibrant media marketplace.

You’ve previously lauded the minority media tax credits that were in place until the mid-1990s as having been “radically successful.” You pointed out that, in the past, these tax credits were the single most important tool for increasing access to capital in this industry.

Is there a need for Congress to reinstate the minority media tax credit? Can you describe the social and economic benefits of a vibrant and diverse media landscape, and how the wave of media mergers and acquisitions can pose challenges to independent and minority-owned networks?

Answer. Yes. Media ownership matters. It plays a role informing what we see on the screen—and that, in turn, helps inform who we are as individuals, as a community, and as a nation.

If we want a future where media ownership better reflects the full diversity of our population, we need to consider a tool from the past—the minority media tax credit.

The minority media tax credit began in 1978. The program encouraged the sale of broadcast and cable properties to minority-owned buyers by deferring the capital gains taxes of sellers. It dramatically increased broadcast ownership diversity before its repeal by Congress seventeen years later in 1995. In fact, when the program began, minorities owned roughly 40 broadcast stations. By the end of the program, there were 333, including 290 radio stations and 43 television stations. The transactions that took place during its tenure amounted to over \$1 billion in economic activity.

Today, media markets have changed. But access to capital remains an impediment for many small-and socially-disadvantaged businesses interested in media properties. That is why I believe it is time to take a fresh look at the minority media tax credit. While we may need to make adjustments to this program to update it and prevent waste and abuse, I believe it could again be an effective tool to encourage more diverse ownership of media properties.

Question 2. As you know, there are relatively few broadcast stations located in New Jersey. In fact, our state is one of just two in the country that doesn’t have its own in-state television market. This can have serious implications when it comes to civic participation and accessing local news content. I continue to have concerns about whether my constituents have the access to the robust local programming merited by New Jersey’s high population density and incredible diversity.

The FCC recently finalized its rules on market modifications, and due to an initiative that Senator Fischer and I championed, a study is being conducted by the FCC that will look at, among other things, states that lack media markets of their own.

What other efforts can be undertaken by the FCC or Congress to ensure that consumers in New Jersey and around the country have access to relevant, important local television programming?

Answer. New Jersey is the eleventh largest state by population, yet it lacks its own media market. This makes it difficult for residents to receive local information, including up-to-date weather and traffic reports. It makes it hard to secure news coverage. It also robs communities of their full identity, because so many stations are focused on the media markets in adjacent states—namely New York and Philadelphia. Historically, there was a statutory effort to address this shortcoming in Section 331 of the Communications Act, which alludes to the reallocation of a very high frequency commercial television broadcast station to New Jersey. However, going forward it is apparent that we will need new tools. A good place to start is the study you championed with Senator Fischer featured in section 109 of the Satellite Television Extension and Localism Act Reauthorization Act. Under the law, the Commission is required to release this study next year. I expect this study will include an extensive discussion of policies that would increase localism in states served by out-of-state media markets.

Question 3. The transition from traditional wire-based telephone networks to fiber-based networks (sometimes referred to as the “IP transition”) is an exciting new frontier that will modernize our communications infrastructure and provide many benefits to users. However, I’ve heard concerns from my constituents about the transition and what it means for consumers.

One area of particular concern is how the new networks will perform in the event of a natural disaster like Superstorm Sandy. Unlike traditional copper networks, fiber networks require backup battery power—and this comes at a cost. Lower income families may not be able to make the upfront investment in backup batteries if it means choosing between emergency preparations and putting food on the table.

What recommendations do you have for Congress on how to make the IP transition work to the benefit of people across the economic spectrum?

Answer. This is a time of extraordinary change for communications networks. The number of traditional telephone lines is declining, the use of wireless is growing, and services dependent on Internet Protocol are remaking our communications across the board. The one thing that does not change, however, is that we want our networks to work—especially when the unthinkable occurs.

I spent time in coastal New Jersey following Superstorm Sandy. I will never forget what I saw—a storm surge that had propelled rocks, wreckage, and sand blocks beyond beachfront neighborhoods, with cruel disregard for the cars and houses in the way. Many residents had their communications knocked out for days. It was a striking reminder that we need to be prepared in new ways because our new networks provide service using commercial power. When the power goes out—so does so much of our basic communications. That means consumers need to be aware of the limitations of new services—and they need to prepare.

In August, the Commission adopted rules that require providers of line-powered replacement telephone services to offer new subscribers the option of purchasing a backup power solution that provides at least 8 hours of standby power in the event of a commercial power outage so that consumers can reach 911 when it counts. In addition, within 3 years, providers must offer at least one option that provides a minimum of 24 hours of backup power service. This, however, should only be the start. Going forward, we need to ensure that consumers have clear expectations about the capabilities of their services during the IP transition. We also can do more to push the marketplace to provide robust backup power as a basic part of consumer service packages.

Question 4. Do you believe there should be a voucher system for emergency backup power similar to the system used during the transition to digital television in 2009?

Answer. The coupon system developed for the digital television transition was a long and complex undertaking. However, the transition itself occurred on a nationwide basis over a very short period of time. Here, the transition to IP networks is also long and multi-faceted. But in contrast, the IP transition is happening in different communities at different times—and not necessarily in every household at the same time. In light of this difference, I think it would be smart to have the Government Accountability Office study the feasibility of a voucher system for backup power before pursuing this course.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
HON. JESSICA ROSENWORCEL

Question 1. Commissioner Rosenworcel, I was very disappointed when Windstream declined almost \$28 million in Connect America funding for rural broadband in New Mexico. Windstream and other companies will be able to bid in a “reverse auction” process to bring broadband service to these customers. But I am very concerned that the most costly areas to deploy service will still be left behind. It seems to me that if Facebook and Google can bring Internet service to developing countries, it should be within our means to make sure all New Mexicans have access to broadband. Could you share your thoughts on how the FCC could use pilot projects or encourage new technologies to bring broadband service to remote rural areas?

Answer. I share your concerns and agree that we need to think creatively about how to foster broadband access in hard-to-reach areas of the country, New Mexico included.

Last year, the Commission began to use pilot projects to experiment with new ways to deploy broadband in our rural communities. The Commission established a \$100 million budget for its rural broadband experiments, which attracted nearly 600 project bids from over 180 applicants. These projects are just getting started, but they have already yielded instructive lessons for the agency as it considers how to update and modernize its high-cost universal service support programs.

It is my hope that we will take what we have learned from these pilot projects and use it to inform the reverse auction that will take place for areas of the country, like New Mexico, where incumbent providers declined our initial offer of Connect America support.

I also believe we need to explore new technologies and new ways of delivering service in rural communities. I think the best way to do this is to develop a more robust framework for the Remote Areas Fund, which was designed for bringing modern communications to the hardest-to-reach and highest-cost areas of the country. Following completion of the reverse auction, I believe the Commission should turn back to this effort and creatively work to reach even more remote and rural areas.

Question 2. Commissioner Rosenworcel, I want to thank you for your steadfast support for ending the digital divide impacting Tribal communities. This is a communications crisis that affects all of Indian Country. In my home state of New Mexico, about ninety percent of those living on Tribal lands lack access to high speed broadband. May I have your commitment to continue to support the FCC Office of Native Affairs and Policy and other FCC efforts to tackle the digital divide facing Indian Country?

Answer. Yes, absolutely.

Question 3. Commissioner Rosenworcel, you have been a champion for the E-Rate initiative. Last year, about \$26 million in E-Rate funding helped bring broadband to New Mexico schools and libraries. Can you describe where you see recent E-Rate reforms building on the success of the E-Rate program? What digital learning and other broadband opportunities are you most excited about for schools and libraries?

Answer. The E-Rate program is designed to connect all of our schools and libraries to the Internet. But until recently, this program was stuck in the age of dial-up. Speeds were slow, bureaucracy was significant, and funding was too hard for too many schools to secure.

Last year, however, the Commission rebooted E-Rate and created E-Rate 2.0. We set goals for capacity of 100 megabits in the near term and 1 Gigabit in the long term to all our schools and libraries. As a result, we are on course to have high-capacity broadband and Wi-Fi in all schools over the next five years. We also streamlined the application process. This is important—because a digital age program should not be weighed down by a mountain of analog-era paperwork. Finally, we updated the budget to reflect the importance of broadband connections in modern schools and libraries.

These steps are exciting. But as you suggest, what will follow in their wake is even more exciting. Having better broadband in more of our schools will help students everywhere develop the digital skills they need to compete in the information economy. It also will lead to new nationwide markets for educational content, devices, and innovative teaching tools. In time, it could mean that school districts could customize more content and move beyond textbooks and the slow and costly process of selecting them every seven to ten years. In addition, as a result of our changes, more libraries will be able to accommodate more digital age activity and become modern hubs for research, homework, job-seeking, and community education.

Of course, for all of these good things to occur, we need to be vigilant. We need to work out any kinks in our new service categories. We also need to continually assess the complexity of the application process and look for new ways to streamline our systems. Finally, we must always be on guard for waste and abuse to ensure that this program can continue to provide the connectivity modern schools and libraries need.

Question 4. Commissioner Rosenworcel, I am working in a very bipartisan manner with Senator Moran on Federal I.T. reforms. Last year, we were successful in passing the Federal Information Technology Acquisition Reform Act or "FITARA." The Government Accountability Office (GAO) issued a report recently stating that these I.T. reforms such as Federal data center consolidation are already saving \$3.6 billion in annual spending. The FCC has a very active Chief Information Officer who I know is working hard to improve IT at the Commission. The newly revamped FCC Consumer Complaints Database is one example of this. I would like to see more of this type of smart I.T. acquisition and management. Could you share with me your perspective on what IT reforms might help the FCC better meet its mission?

Answer. Every year the Federal Government invests more than \$80 billion annually in IT. With the passage of Federal Information Technology Reform Act, the Commission and other Federal agencies are now making smarter, lower risk investments and continuously looking for opportunities to increase efficiency and reduce waste. As you mentioned, the Commission's CIO David Bray has taken many steps to modernize the Commission and reduce IT costs along the way.

One example of this is the updated FCC Consumer Help Center, where consumers can file complaints with the Commission online. Traditionally, the FCC would hire one contractor to build this new website from scratch. That would have taken 18 months and cost the Commission \$3.2 million. However, at the direction of the CIO, the Commission opted to hire a web developer to build the new Consumer Help Center with "on-the-shelf" technology. It was completed in 6 months and cost the Commission \$450,000. Not only did this project save the Commission money, but it has also enhanced the way American consumers engage with us. It allows consumers to easily navigate FCC forms and check the status of any complaints they have filed. It provides granular, real-time data to support analysis by the agency as well as outside groups. And because of its flexible platform, the Commission can continue to modify and upgrade the Center as consumer needs dictate.

As the FCC continues to update its website, I look forward to seeing what other cost-saving opportunities our CIO identifies and putting more information in the hands of American consumers.



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