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PROTECTING THE INTERNET AND CONSUMERS THROUGH CONGRESSIONAL ACTION

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

JANUARY 21, 2015

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

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PROTECTING THE INTERNET AND CONSUMERS THROUGH CONGRESSIONAL ACTION

WEDNESDAY, JANUARY 21, 2015

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

The Committee met, pursuant to notice, at 2:30 p.m. in room SR–253, Russell Senate Office Building, Hon. John Thune, Chairman of the Committee, presiding.

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

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

The CHAIRMAN. This hearing of the Senate Commerce, Science, and Transportation Committee will come to order, and I appreciate our panelists' indulgence. We were informed a while back that we are going to have a number of votes. We are trying to juggle it, and appreciate all of our Senators and those who are participating in today's hearing, and their willingness to work with us to try and accommodate that schedule.

Today we convene the Committee's first hearing of the 114th Congress to consider an issue that has divided policymakers for more than a decade: how best to protect the open Internet. The Federal Communications Commission believes it already has the answer: impose public utility regulations on the Internet. But there is a well-founded fear that regulating the Internet, like a public utility monopoly will harm its entrepreneurial nature, chill investment, and lead to prolonged litigation.

Instead of using outdated regulations, I believe the most enduring way to protect the Internet and individual Internet users is through legislation that establishes clear rules of the digital road as well as clear limits on the FCC's regulatory authority.

Certainty about how consumers will be protected and certainty about the government's role in the online world is critical to preserve the Internet as an engine for innovation, creativity, economic growth, and free expression. I want us to pass legislation providing certainty that users will have unfettered access to the entire Internet. I want us to pass legislation that provides certainty for creators at the edge of the Internet so that they can continue to reach users across the Internet without interference.

I want us to pass legislation that provides certainty for Internet service providers about precisely what rules they will be required to follow. And I want us to pass legislation that provides certainty for the FCC so that it can enforce legally sound open Internet rules that survive beyond the current Administration. The entire Internet needs this kind of statutory certainty, and only—only—Congress can provide it.

Last week, I put forward a set of 11 principles that I believe can be the framework for a bipartisan consensus. The discussion draft that Chairman Upton and I released is our attempt to put these principles into statutory text. The details matter greatly in this debate, and we felt there could be no progress toward a solution until legislators started discussing those details.

I do not expect our draft to be a final product, but I also believe that it is not a partisan starting point to the conversation. We put forth a good faith proposal to find common ground between the parties. We hope today's hearings will facilitate the serious conversation around a long-term solution.

I am willing to discuss how the 11 principles will be implemented, and I am eager to get to work with my colleagues, many of whom I have already spoken with. But I also want to be clear that I will not compromise these principles, particularly if doing so would leave the FCC's authority unbounded or if it would leave open the possibility for harmful regulatory burdens being leveled on the Internet.

Chairman Upton, Chairman Walden, and I have been working with our colleagues on the Commerce Committees and across the aisle since late last year to find a lasting resolution that protects the open Internet. My colleague, the new Ranking Member of this Committee, Senator Bill Nelson of Florida, has been in serious and substantive discussions with me. I appreciate his efforts, and they underscore that there is a bipartisan interest in finding a legislative solution.

In the absence of clear legislative guidance, the FCC has floundered for more than a decade to forge its own regulatory powers from legal authorities crafted prior to the emergence of the Internet as the most consequential communications platform of our lifetime. We have now reached an unfortunate point where both the President and the Chairman of the FCC feel compelled to move forward using a toolbox built 80 years ago to regulate a literal monopoly. And they do so without any apparent interest in working with Congress to solve the FCC's legal dilemma.

Even if the Executive Branch seems willing to go alone down a politically toxic and legally uncertain path, I sincerely hope that a willingness to collaborate develops within the legislative branch. After a decade of failure and wasted taxpayer resources, we should not continue to leave this issue to a five-member regulatory agency. Congress needs to reassert its responsibility to make policy and let the FCC do what it does best: enforce clear statutory rules.

I want to work together with my colleagues to finally settle the question of the FCC's authority over retail Internet service. If Chairman Wheeler moves ahead as planned, however, the only certainty is that the FCC will again find itself tangled up in court for years to come.

Before I finish my remarks, I want to put forward a challenge to the members of this committee. Let us find common ground and forge a permanent solution. I have offered the President an opportunity to engage. I have spoken with Chairman Wheeler on numerous occasions, and I will engage any senator who wants to find a workable legislative solution. Having the FCC regulate the Internet as a public utility while Congress sits idly on the sideline is an outcome that will prove to be shortsighted. Let us find a consensus solution that none of us have to call a compromise. I look forward to hearing from our diverse panel of experts today and also to working with my colleagues in the coming days and weeks.

With that, I yield to my distinguished Ranking Member, the Senator from Florida, Senator Nelson.

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

Senator NELSON. Mr. Chairman, indeed it has been a pleasure working with you as we have been having discussions on this issue and many others over the past several months, and there will be many areas that we will be able to carry forth this bipartisan tradition. The interest in this particular topic is evident by the lines still waiting outside of the door to get in. I thank you for calling this hearing, and as we said in the organizational meeting yesterday, I look forward continuing the work with you in this committee's proud tradition of working in a bipartisan fashion.

The Internet has become an essential part of our everyday lives. You will be hearing a lot more about national security and the place that the Internet plays in cybersecurity. Many of us are almost constantly connected to the Internet—at school, at work, or at play. Computers, tablets, and smart phones are certainly within arm's reach and in most of our pockets.

Access to broadband research and the broadband Internet service is no longer a luxury item. It is a basic service that provides a vital link to our friends, and our family, and the rest of society. And because it is an integral part of how we live today, there is broad agreement today among consumers in many parts of the industry and in Congress that we have to protect a free and open Internet. That was always the case. For years we heard from some that net neutrality "was a solution in search of a problem." Well, I am glad that we moved beyond that tired talking point and are here today to discuss how we can preserve a free and open Internet.

That is an essential step, and I fully appreciate how far many of our colleagues have come on this issue in a very short time. And one indication of that is over four million Americans have taken the time to weigh in directly with the FCC to express their desire for strong net neutrality protections. They do not want their access to websites and services blocked. They want to know more about their Internet service and the overall performance of the connection, and they are certainly worried about their broadband provider picking winners and losers on the Internet by regulating those content companies who refuse to pay a toll to a slow lane of service.

So as the Chairman and I have been talking about these issues for some time, I want to continue those discussions. But I want to be clear about what is important to this Senator, and I believe it

is to most of the consumers. First, we need to be vigilant in protecting consumers' interest. Theirs is the lens through which we must see any proposal on net neutrality, the consumers' interest. And, second, while I appreciate and respect the desire by businesses for certainty of the investment and the operation, and that is a legitimate concern that we want to help protect, I remain concerned about any proposal that would strip away the FCC's tools to enforce essential consumer protections for broadband service.

The Internet is evolving at a blistering pace. The Internet that we know today likely will be vastly different a decade from now. Take, for example, when we started the space program, when we put up John Glenn, we did not even know if the eyeballs were going to stay in the eye sockets. And now we are at a point that we are seriously discussing, and the President said last night we are sending humans to Mars. That is the goal.

Things evolve. Things change at a blistering pace. And the Internet is one of them, this ever-evolving Internet. This senator believes that we need a regulator who is not frozen in time, and the FCC must have authority that is flexible enough that it can respond to a changing world. If we put a strait jacket on the Commission, we may very well miss the future and leave the Agency powerless and American consumers defenseless to deal with the emerging problems.

For over 80 years, Congress has tasked the FCC with preventing unjust practices, stopping unreasonable discrimination, protecting competition, and promoting the public interest. These are not mere abstract ideals.

And so, without this flexible authority, the FCC could not have successfully extended universal service funding to broadband or to ensure the privacy of sensitive consumer information. These laws and principles have made the U.S. telecommunications market the envy of the world, and they should not be discarded.

And so finally, some maintain that we must have congressional action on net neutrality prior to the FCC action. I do not share that idea. It is more important to get the issue right than it is to get it done right now. The stakes are too high. The consumers' interest are at stake. The future of the Internet is at stake.

The congressional prerogative to act does not cease merely because an agency has moved forward and done its job. And similarly, an agency is not always required to cease its reasoned consideration of an issue merely because Congress may be examining the same concern at the same time of which we have that legitimate authority and responsibility to do. And to that end, this senator welcomes the FCC's efforts to put in place necessary consumer protections for the Internet. I look forward to reviewing the particulars of the Chairman of the FCC's proposal next month.

I want to thank the witness today for appearing, and I look forward to hearing your testimony.

The CHAIRMAN. Thank you, Senator Nelson. We have a very distinguished and impressive group of panelists today to speak to this issue, and I am going to introduce each of them, and then we will start left to right with Ms. Baker. Honorable Meredith Attwell Baker is President and CEO of CTIA, which is the wireless association here in Washington, D.C.; Mr. Gene Kimmelman, President

and CEO of Public Knowledge; the Honorable Robert McDowell, Senior Fellow at the Hudson Institute; Mr. Paul Misener, Vice President of Global Public Policy at Amazon.com; Mr. Tom Simmons, Senior Vice President of Public Policy at Midcontinent Communications from my home state of South Dakota; and Dr. Nicol Turner-Lee, Vice President and Chief Researcher and Policy Officer, Multicultural Media & Telecommunications Council here in Washington, D.C.

Thank you all for being here, and we will start on my left and your right. Ms. Baker?

STATEMENT OF HON. MEREDITH ATTWELL BAKER, PRESIDENT AND CEO, CTIA—THE WIRELESS ASSOCIATION®

Commissioner BAKER. All right. Chairman Thune, Ranking Member Nelson, and members of the Committee, thank you for inviting me to share the wireless industry's perspective on the importance of an open Internet. At the outset I want to be clear: America's wireless industry supports an open Internet. Wireless users demand it in a marketplace where competition has never been more vigorous.

In the past 20 years, the wireless industry has grown from a luxury product to a key driver of economic growth. We all benefit from faster speeds, more services, and lower prices. The U.S. is the global leader in wireless by almost any metric and is at the forefront of mobile innovation in health, automotive, and payment fields.

Central to that growth was Congress's foresight in establishing Section 332 and a mobile-specific regulatory framework outside of Title II. Congress has the opportunity to provide the same stability for broadband. We greatly appreciate this committee's work to develop a regulatory foundation for future innovation with common sense net neutrality provisions.

The draft bill is an excellent start and offers a viable path to preserve an open Internet with enforceable requirement. Properly crafted legislation will guarantee the protections the President has called for while allowing broadband providers to continue to invest billions, create jobs, and develop innovation products. We do not ask that wireless be exempt from any new laws, only that the new requirements reflect our industry, our technology, and our inherent differences.

I want to highlight three key differences. First, mobile services are technically different and depend upon limited spectrum resources. This requires substantial network management millisecond by millisecond to deliver service to consumers. Remarkably, there is more bandwidth in a single strand of fiber than in all of the spectrum allocated for commercial mobile services.

Second, we are competitively different. More than eight out of 10 Americans can choose from four or more broadband providers. This fierce competition is driving new services, offerings, and differentiation that benefits consumers. Third, we are evolutionarily different. 4G networks are less than 5 years old. The future is bright with advancements like LTE broadcast, 5G services, and connected life applications.

It is vital that any legislation is sufficiently flexible to preserve the competition, differentiation, and innovation mobile consumers

enjoy today. While we are optimistic that the process on the Hill will enhance the wireless experience for all Americans, we have significant reservations with the FCC's proposed path of Title II. The application of Title II in any form to wireless broadband would harm consumers and our economy.

Title II was designed for another technology in another era in which competition was largely nonexistent and innovation came slowly, if it all. Given our industry's great success with mobile broadband outside of Title II, we have significant concerns with how Title II and its 682 pages of regulation would apply to the dynamic mobile broadband space.

If the Commission proceeds with Title II as opposed to the Section 706 path the Court contemplated a year ago, the wireless industry will have no choice but to look to the courts. Given the clear language of Section 332, we have every confidence that we would prevail, but it is not our preferred course.

Under Section 332, mobile broadband is legally different, too. In 1993, Congress exempted future non-voice mobile services, like mobile broadband, from common carriage regulation. It did so unambiguously. The Commission and the courts have repeatedly found that wireless broadband is not a common carriage service. The FCC lacks the statutory authority to change course, and litigation would harm consumers with a year or more of uncertainty and delay.

As leaders across the globe are trying to replicate our mobile success and embrace 5G, this is the wrong time to inject uncertainty and delay into our Nation's efforts. We risk falling behind when the stakes have never been higher for our connected life and global competitiveness. The better approach would be for Congress to act and end this debate. Doing so would free us to turn to pressing, bipartisan issues, like spectrum reform and Com Act modernization. By acting, Congress can ensure that the United States remains the most dynamic and innovative mobile ecosystem.

Thank you for the opportunity to appear on today's panel, and I look forward to your questions.

[The prepared statement of Commissioner Baker follows:]

PREPARED STATEMENT OF MEREDITH ATTWELL BAKER, PRESIDENT AND CEO, CTIA—THE WIRELESS ASSOCIATION®

Chairman Thune, Ranking Member Nelson, and members of the Committee, thank you for inviting me to share the wireless industry's perspective on the importance of an open Internet.

At the outset, I want to be clear: America's wireless industry fully supports an open Internet, and the mobile Internet is open today. Wireless users demand it and in a marketplace where competition has never been more vigorous or barriers to switching lower, mobile broadband providers know that providing consumers with a robust, reliable, open Internet experience is a business imperative.

A Strong Foundation. More than twenty years ago, wireless communications was very new and did not fit cleanly in the FCC's traditional Title II telephone rules. Future investment and innovation were in jeopardy because of substantial Federal and state regulatory overhang. Congress acted decisively in 1993, establishing a Federal mobile-specific regulatory approach under Section 332 of the Communications Act with clear rules for mobile voice services and other mobile offerings.

Under this successful regime, the wireless industry has grown from a luxury product to a key driver of economic growth upon which nearly every American relies. For 44 percent of Americans, their only phone is their mobile phone, and the wireless industry is now larger than the agriculture, hospitality, automotive and air-

plane industries.[1] Prices per megabyte have fallen 99 percent from 2005 to 2013,[2] and mobile broadband use has grown 51 times over since 2008.[3]

We all benefit from faster speeds, more services, and lower prices, as well as innovative devices and applications unimagined and unforeseen a decade or even a year ago. The U.S. wireless ecosystem is envied around the world as mobility is now at the forefront of American-driven innovation in the health, automotive, payment, and education fields. Small businesses that incorporate mobility are witnessing revenues growing twice as fast, and work forces are growing eight times faster than their non-mobile peers.[4] Mobility has never been more central to our Nation's global competitiveness and our future.

A Clear Opportunity. Congress has the opportunity to provide the same regulatory stability for broadband as it did for all of mobility in 1993. We face significant regulatory uncertainty and ongoing legal debate over the FCC's authority over broadband and network management. We greatly appreciate this Committee's work and foresight with today's hearing to develop a solid regulatory foundation for future innovation and investment in mobile broadband with common sense net neutrality provisions that provide certainty for all affected stakeholders. The need for clarity is felt by all, from large to small, including regional and small providers serving the most rural and remote parts of our country, east to west from New Hampshire to Alaska, and north and south from the shores of Lake Superior across northern Wisconsin and the upper Peninsula of Michigan to the gulf coast of Mississippi.

The draft bill is an excellent start and offers a reasonable path toward ensuring the preservation of an open Internet with real, enforceable requirements. Properly crafted legislation will guarantee the protections the President has called for and would allow mobile broadband providers to continue to invest billions, create jobs, and bring innovative products to all Americans.

Importantly, we do not ask that wireless be exempt from any new laws, only that any new requirements reflect our industry, our technology, and our inherent differences. It is vital that any legislation is sufficiently flexible to preserve the competition, differentiation, and innovation mobile consumers' enjoy and reflect the unique, sometimes millisecond by millisecond technical challenges that wireless networks face as they provide service to America's 350 million wireless subscribers.

The FCC's Parallel Path. While we are optimistic that the process on the Hill will enhance the wireless experience for all Americans, we have significant reservations with the path currently contemplated by the FCC. This is at least the third time the FCC has tried to establish jurisdiction over net neutrality. Unfortunately, it appears the Commission may yield to ill-conceived calls for "platform parity" by imposing 1930s-era wired rules on wireless broadband services. CTIA believes the application of Title II, in any form, to wireless broadband would harm consumers and our economy, and is counter to the framework for mobile services Congress established in 1993. We view the Commission's apparent decision to move forward based on Title II as another missed opportunity. The Commission could achieve all of its public policy objectives with mobile-specific rules under Section 706 of the Communications Act: a path the D.C. Circuit clearly signaled could withstand judicial scrutiny if properly structured.

Nonetheless, the Commission appears poised to move forward under Title II even though the reality is that Title II was designed for another technology and another era, an era in which competition was largely non-existent and innovation came slowly, if it came at all. Rules designed for homes with a single black rotary phone and families waiting until after 11 p.m. before they could affordably make long distance calls: No choice, just voice, and highly regulated prices.

Mobile is Different. America's wireless industry is the exact opposite. Much of the credit for that goes to CTIA's members, whose investment, innovation, and relentless competitive drive has made high-quality wireless service available to nearly

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[1] Centers for Disease Control, Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January-June 2014, *http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201412.pdf;* Recon Analytics, The Wireless Industry: The Essential Engine of U.S. Economic Growth, *http://reconanalytics.com/wp-content/uploads/2012/04/Wireless-The-Ubiquitous-Engine-by-Recon-Analytics-1.pdf.*

[2] The Boston Consulting Group, The Mobile Revolution: How Mobile Technologies Drive a Trillion-Dollar Impact (Jan. 15, 2015), *https://www.bcgperspectives.com/content/articles/telecommunications__technology__business__transformation__mobile__revolution/.*

[3] Cisco, VNI Mobile Forecast Highlights, 2013—2018, *http://www.cisco.com/assets/sol/sp/vni/forecast__highlights__mobile/index.html#~Country* (Filter by Country (United States), then select 2013 Year in Review).

[4] The Boston Consulting Group, The Mobile Revolution: How Mobile Technologies Drive a Trillion-Dollar Impact (Jan. 15, 2015), *https://www.bcgperspectives.com/content/articles/telecommunications__technology__business__transformation__mobile__revolution/.*

every American. This amazing evolution in the way we communicate, access the Internet, and conduct business has occurred at a pace dramatically faster than the speed at which traditional wired service or electricity—services regulated under Title II or Title II-like, utility-style regimes with their origins in the Interstate Commerce Act of 1887—became available across the country.

Given our industry's great success with mobile broadband outside of Title II, we have significant concerns with how Title II—and its 1000 rules and 682 pages of regulation—would apply to the dynamic mobile broadband space. Any new rules must be mobile-specific and designed for our networks, not superimposed on them, because mobile broadband is different. Encouragingly, over two thirds of Americans agree that wireless services should not be subject to same exact requirements as wired broadband options.

I want to highlight four key differences that explain why. First, mobile services are technically different, completely dependent upon limited spectrum resources requiring nimble and dynamic network management to deliver service to consumers on the go.[5] There is more bandwidth in a single strand of fiber than in all of the spectrum allocated for commercial mobile services. In recognition of its fundamental technical differences, some have suggested that mobile broadband could be accommodated solely through a reasonable network management exception. While reasonable network management is a necessity for mobile wireless, that approach would not fully reflect the significant additional differences that characterize the mobile broadband industry.

Second, we are competitively different: More than 8 out of 10 Americans can choose from 4 or more mobile broadband providers.[6] This fierce competition is driving new services, offerings, differentiation and options like Music Freedom and Sponsored Data that benefit consumers. No one wants a one-size-fits-all mobile Internet experience. A competitive market also drives sustained investment. Relying on mobile-specific open Internet rules, the wireless industry has invested $121 billion over the last four years alone.[7]

Third, we are evolutionarily different. Wireless is still an early stage technology. 4G networks are less than 5 years old, the modern smartphone only 7, and we are just beginning to see options like VoLTE, LTE Broadcast, LTE Advanced as well as the promise of the next generation of wireless, 5G. The need for a mobile specific approach with respect to new connected life applications is particularly clear as the network management requirements for such services are still in development. For instance, General Motors recently explained that "neither we nor our mobile network operator suppliers can predict all of the techniques that may need to deliver [connected car] services to our customers."[8] The risk of applying wired rules on wireless services "would . . . constrain the innovation [GM is] seeking to provide."

And fourth, and potentially most relevant for today's discussion, mobile broadband is legally different. In 1993, Congress in section 332 exempted non-voice services—private mobile radio services (PMRS) like mobile broadband—from common carriage regulation.[9] It did so unambiguously, saying those services "shall not" be subject to common carriage obligations. Based on this clear articulation of congressional intent, the Commission itself has repeatedly found that wireless broadband service

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[5] Dr. Jeffrey H. Reed and Dr. Nishith D. Tripathi, Net Neutrality and Technical Challenges of Mobile Broadband Networks (Sept. 4, 2014), *http://www.ctia.org/docs/default-source/default-document-library/net-neutrality-and-technical-challenges-of-mobile-broadband-networks-9.pdf.*

[6] Federal Communications Commission, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, Seventeenth Report (Dec. 18, 2014), Chart III.A.2, *https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1862A1.pdf.*

[7] CTIA-The Wireless Association®, Annualized Wireless Industry Survey Results—December 1985 to December 2013, *http://www.ctia.org/docs/default-source/Facts-Stats/ctia_survey_ye_2013_graphics-final.pdf?sfvrsn=2;* AT&T Financial and Operational Results (3Q 2014), *http://www.att.com/Investor/Earnings/3q14/master_3q14.pdf;* Verizon Condensed Consolidated Statements of Income (3Q 2014), *http://www.verizon.com/about/file/3713/download?token=EKXz8Nx9;* T-Mobile 3rd Quarter 2014 Financial Results, *http://investor.t-mobile.com/Cache/1001191498.PDF?Y=&O=PDF&D=&fid=1001191498&T=&iid=4091145;* David Barden, Bank of America U.S. Wireless Matrix (Nov. 18, 2014); NTELOS Holding Corp. Reports Third Quarter 2014 Results (Oct. 31, 2014), *http://ir.ntelos.com/press-releases/detail/1214/;* U.S. Cellular Reports third Quarter 2014 Results (Oct. 31, 2014), *http://investors.uscellular.com/news/news-release-details/2014/US-Cellular-reports-third-quarter-2014-results/default.aspx;* Jennifer Fritsche, Quick And Dirty: Q4 2014 Big 4 Wireless Preview, Wells Fargo Equity Research (Jan. 14, 2015).

[8] General Motors Ex Parte, FCC GN Docket 14–28 (Oct. 9, 2014), *http://apps.fcc.gov/ecfs/document/view?id=60000972470.*

[9] See appended White Paper, "Section 332's Bar Against Common Carrier Treatment of Mobile Broadband: A Legal Analysis" at 9.

may not be classified as a common carriage service. And the U.S. Court of Appeals has twice held that "Mobile-data providers are statutorily immune, perhaps twice over, from treatment as common carriers."[10] This clear line of precedent underscores the riskiness of a Commission attempt to classify broadband as a Title II service now.[11]

The Significant Risk of Title II. Accordingly, if the Commission proceeds down the Title II path, the wireless industry will have no choice but to look to the Court of Appeals for a remedy. Given the clarity of Section 332, and years of FCC and judicial precedent, we have every confidence we would prevail in such an effort,[12] but it is not our preferred course. Litigation inevitably involves more delay and uncertainty, an outcome that is antithetical to investment and the fast-paced technological evolution of the U.S. wireless industry. Consumers would be harmed as we would all lose a year, if not much longer, in regulatory limbo. This harm may be particularly acute for rural consumers, as a collection of regional providers explained that "[a]pplying an outdated and backward-looking Title II common-carriage regime to our services would . . . stifle innovation and investment and would do a disservice to rural America."[13]

As leaders across the globe are trying to replicate our mobile success and embrace 5G, this is the exact wrong time to inject uncertainty into our Nation's efforts. We risk falling behind when the stakes have never been higher for our future connected life and global competitiveness.

After more than a decade of debate, the better approach would be for Congress to act and set the ground rules for a generation of new investment, allowing us to get these questions behind us so that we all can turn to pressing bipartisan issues like spectrum policy and modernization of the Communications Act. These key steps will ensure that the United States remains the most dynamic, innovative, and open mobile ecosystem in the world.

Thank you for the opportunity to appear on today's panel. I look forward to your questions.

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[10] *Cellco P'Ship* v. *FCC,* 700 F.3d 534, 538 (D.C. Cir. 2012); *see also Verizon* v. *FCC,* 740 F.3d 623, 650 (D.C. Cir. 2014).

[11] Suggestions that the regulatory framework for CMRS, or mobile voice services, is an appropriate comparison for the Commission's desired Title II with forbearance approach is misguided and misunderstand Congress's clear direction in 1993. Broadband Internet access and CMRS are fundamentally different services governed by disparate Congressional provisions. The use of the Commission's "forbearance" authority to impose expansive new regulatory mandates, rather than to remove existing regulation, would upend the deregulatory purposes for which Congress enacted the forbearance provisions in Section 332(c). In 1993, Congress directed the Commission to apply some Title II common-carrier mandates on CMRS mobile voice services. In sharp contrast, and at the same time, Congress expressly prohibited the Commission from treating services like mobile broadband as common carrier offerings subject to Title II. There is a vast difference between applying Title II's obligations to voice CMRS offerings, as Congress directed, and applying such mandates to mobile broadband, contrary to Congress's clear directive. Further, the very use of forbearance to establish a new affirmative regulatory mandate for services that have never before been subjected to Title II turns Congress' statutory design on its head. Forbearance was designed as a deregulatory tool: The very term "forbear" means to "restrain an impulse to do something" or "refrain." This, of course, is what the Commission did with respect to CMRS under Section 332(c)—it reduced and eliminated existing regulation. There is no evidence whatsoever that Congress intended the Commission to use forbearance as a key tool in applying Title II to services that never were subject to common carrier regulation. Reclassifying broadband as Title II and then forbearing is a regulatory path that only Congress, not the Commission, could pursue.

[12] While Section 332 provides an absolute bar to imposing common carrier duties on mobile broadband providers, mobile broadband also fits squarely under the definition of "information services" under the Communications Act, which is an additional and equally valid bar on applying Title II to mobile broadband. The Commission has correctly concluded that "[w]ireless broadband Internet access service offers a single, integrated service to end users, Internet access, that inextricably combines the transmission of data with computer processing, information provision, and computer interactivity, for the purpose of enabling end users to run a variety of applications." Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, Declaratory Ruling, 22 FCC Rcd 5901, 5911 ¶ 26 (2007).

[13] Bluegrass Cellular, Inc. et al Ex Parte, FCC GN Docket 14–28 (Nov. 14, 2014), *http://apps.fcc.gov/ecfs/document/view?id=60000983742.*

ATTACHMENT

SECTION 332'S BAR AGAINST COMMON CARRIER TREATMENT OF MOBILE BROADBAND: A LEGAL ANALYSIS

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Introduction

While CTIA—The Wireless Association® ("CTIA") and its members are committed to preserving an open mobile Internet, any new rules in this area must rest on a solid legal foundation—one that is consistent with the Communications Act of 1934, as amended (the "Act") and will withstand judicial scrutiny. And on one point in particular, the Act is clear: Under Section 332, mobile broadband may not, under any circumstances, be subjected to common carrier treatment under Title II. The Commission may move forward to help preserve an Open Internet pursuant to section 706, but may not legally apply Title II mandates to mobile broadband services.

Specifically, Section 332 erects barriers to common carrier regulation of mobile broadband that extend beyond the restrictions that other provisions of the Act establish for broadband offerings generally. Moreover, this bar applies regardless of whether the Commission wrongly reverses 15 years of precedent and declares that the broadband offering sold to end users includes a distinct telecommunications service or if it pursues a "hybrid" approach that, for the first time, identifies a distinct "service" purportedly offered to edge providers and declares that to be a telecommunications service.

Several parties attempt to read the Section 332 prohibition out of the statute, articulating far-fetched theories under which the provision simply does not mean what it says. Their arguments are not properly addressed in this proceeding, as the Commission has not provided any notice to support the legislative rules they seek here. In any event, those arguments cannot be squared with the statutory text or this Commission's decisions. As the Commission held 20 years ago and the D.C. Circuit has confirmed, Congress intended only mobile offerings that mimic traditional telephone service to be subject to common carrier treatment. All other mobile offerings, including mobile broadband, are "private" offerings, for which Section 332 expressly prohibits common carrier treatment. There is thus no lawful basis for subjecting mobile broadband offerings to common carrier obligations.

I. The Act Prohibits the Commission from Subjecting Mobile Broadband to Common Carrier Mandates

Section 332(c) forbids the Commission from subjecting services that are not CMRS or the functional equivalent thereof to common carrier mandates. Section 332(c)(2) provides that the Commission "shall not" treat any private mobile service ("PMRS") provider "as a common carrier for any purpose." 47 U.S.C. § 332(c)(2). Section 332(d)(3), in turn, defines PMRS as "any mobile service. . .that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission." *Id.* § 332(d)(3).

Thus, the Commission may only subject mobile broadband services to Title II if those services are commercial mobile services ("CMRS") or the functional equivalent of CMRS. As detailed below, they are not.

A. Mobile Broadband is Not CMRS

Section 332(d) defines CMRS as an "interconnected service" made available for profit to a substantial portion of the public, *id.* § 332(d)(1), and defines "interconnected service" to mean "service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission)," *id.* § 332(d)(2).

The Commission first interpreted the key terms CMRS and PMRS in 1994's *Second CMRS Order. Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services,* 9 FCC Rcd 1411, 1434 ¶ 54 (1994) ("*Second CMRS Order*"). In defining the "public switched network" component of the CMRS definition, the Commission emphasized that Congress was referring to the traditional *telephone* network:

> [A]ny switched common carrier service that is interconnected with the *traditional local exchange or interexchange switched network* will be defined as part of that network for purposes of our definition of "commercial mobile radio services."
>
> . . . We agree . . . that use of the North American Numbering Plan by carriers providing or obtaining access to the public switched network is a *key element* in defining the network because participation in the North American Numbering Plan provides the participant with ubiquitous access to all other participants in the Plan.

Id. at 1436–37 ¶¶ 59–60 (emphases added). Accordingly, in section 20.3, the Commission defined "public switched network" to mean "[a]ny common carrier switched network . . . including local exchange carriers, interexchange carriers, and mobile service providers, that use the North American Numbering Plan in connection with the provision of switched services." 47 C.F.R. § 20.3.[1]

More recently, in 2007, the Commission explained that Section 332(c) and its implementing rules barred it from classifying mobile broadband as common carriage. It first found that "mobile wireless broadband Internet access service does not fit within the definition of 'commercial mobile service' because it is not an 'interconnected service.'" *Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks,* Declaratory Ruling, 22 FCC Rcd 5901, 5916–17 ¶¶ 41–43 (2007) ("*Wireless Broadband Order*"). The Commission reiterated its 1994 determinations that the CMRS definition requires "interconnect[ion] with the traditional local exchange or interexchange switched network," and that "'use of the North American Numbering Plan by carriers providing or obtaining access to the public switched network is a key element in defining the network.'" *Id.* at 5917 ¶ 44, *quoting Second CMRS Order,* 9 FCC Rcd at 1436–37 ¶¶ 59–60. Because "[m]obile wireless broadband Internet access service in and of itself does not provide this capability to communicate with all users of the public switched network," it "does not meet the definition of 'interconnected service,'" and therefore is not CMRS. *Wireless Broadband Order* at 5917–18 ¶ 45, *citing* 47 C.F.R. § 20.3. The Act calls for common carrier treatment only of CMRS, not of PMRS, and thus precludes such treatment for mobile broadband. *Id.* at 5919–20 ¶¶ 48–51. While the Commission noted that, in the *Second CMRS Order,* it had stated that the public switched network was "'continuously growing and changing because of new technology and increasing demand,'" the Commission held that both "section 332 and [its] implementing rules did not contemplate wireless broadband Internet access service as provided today." *Id.* at 5918¶ 45 n.119.

The Commission reiterated this core point under Chairman Genachowski, stating in a 2012 brief to the D.C. Circuit that "CMRS is defined as a mobile service that is 'provided for profit,' 'interconnected' to the public switched *telephone* network." Brief for Respondents, *Cellco P'ship* v. *FCC,* Case Nos. 11–1135, 11–1136, at 7 (D.C. Cir. Mar. 8, 2012) (emphasis added).

The D.C. Circuit has twice confirmed that Section 332, as long interpreted by this Commission, precludes the Commission from regulating mobile broadband as common carriage. First, in the 2012 *Cellco* decision on data roaming, the court explained that "section 332 specifies that providers of 'commercial mobile services,' such as wireless voice-telephone service, are common carriers, whereas providers of other mobile services are exempt from common carrier status." *Cellco P'Ship* v. *FCC,* 700

[1] This language unequivocally rebuts Vonage's suggestion, Letter from William B. Wilhelm, Counsel for Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14–28, 10–127 at 6 (Dec. 11, 2014) ("Vonage Letter"), that the Commission "explicitly rejected" an interpretation linking the CMRS definition to voice services traversing the traditional telephone network.

F.3d 534, 538 (D.C. Cir. 2012). The court determined that this framework erects a "statutory exclusion of mobile-internet providers from common carrier status." *Id.* at 544. Given the separate bar against common-carrier treatment of information services, the court noted further, mobile broadband providers were "statutorily immune, perhaps twice over," from such treatment. *Id.* at 538. Therefore, "[e]ven though wireless carriers ordinarily provide their customers with voice and data services under a single contract, they must comply with Title II's common carrier requirements only in furnishing voice service." *Id.* at 538.

In 2014, the D.C. Circuit again addressed the issue in its review of the Commission's *Open Internet Order*. In that order, the Commission conceded that Section 332(c)(2) bars the application of common carrier mandates to mobile broadband, but argued that the provision did not constrain its actions because the rules it was adopting did not impose common carriage. *Preserving the Open Internet,* Report and Order, 25 FCC Rcd 17905, 17950 ¶ 79 & n.247 (2010), *aff'd in part, vacated and remanded in part sub nom. Verizon* v. *FCC,* 740 F.3d 623 (D.C. Cir. 2014). The court disagreed with this latter proposition in *Verizon,* overturned the Commission's rules, and emphasized that "treatment of mobile broadband providers as common carriers would violate section 332." *Verizon,* 740 F.3d at 650.

The Commission may not reverse itself and declare that mobile broadband is CMRS. A handful of commenters have argued that the Commission should amend its current rules in section 20.3 to redefine the "public switched network" to include the Internet. *See* Letter from Michael Calabrese, Director of the Wireless Future Project, Open Technology Institute ("OTI"), New America Foundation to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14–28, 10–127 (Nov. 10, 2014) ("OTI Letter"); Vonage Letter; Letter from Gene Kimmelman, President, Public Knowledge ("PK"), to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 10–127, 14–28 (Nov. 7, 2014) ("PK Letter"); Letter from Harold Feld, Sr. Vice President, PK, Michael Calabrese, Director, Wireless Future Project, OTI and Erik Stallman, Director of the Open Internet Project, Center for Democracy & Technology ("CDT"), to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14–28, 10–127 (Dec. 11, 2014) (filed as Public Interest Organizations) ("OTI/PK/CDT Letter"); Letter from Marvin Ammori to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14–28 (Nov. 12, 2014) ("Ammori Letter"). This argument fails—the Commission has no authority to pursue such an interpretation of section 332.

As an initial matter, the Commission has not provided the requisite notice for any such amendment. The Administrative Procedure Act ("APA") requires an agency to provide notice of proposed rule changes. *See* 5 U.S.C. § 553. An "[a]gency notice must describe the range of alternatives being considered with reasonable specificity." *Small Refiner Lead Phase-Down Task Force* v. *EPA,* 705 F.2d 506, 549 (D.C. Cir. 1983). Here, the *Notice* asked only whether mobile broadband Internet access service "fit[s] . . . the definition of 'commercial mobile radio service.'" *Protecting and Promoting the Open Internet,* Notice of Proposed Rulemaking, 29 FCC Rcd 5561, 5614 ¶ 150 (2014). It never asked whether "the definition"—set out in Section 20.3—should be changed, or provided notice that it might be. Indeed, while the *Notice* proposed specific additions and changes to various Commission's rules, it never raised the possibility of amending section 20.3. Comments in the record cannot substitute for the required notice from the Commission. The legally mandated "notice necessarily must come—if at all—from the agency." *Small Refiner,* 705 F.2d at 549. Thus, the Commission could not amend section 20.3 without first providing notice and seeking comment on such a modification. Moreover, any amendment to Section 20.3 would have implications well beyond the Open Internet context and could well affect the interests of parties not participating in this docket, further compounding the notice failure. Moreover, if it were not legally barred from amending Section 20.3 (and it is), the absence of notice creates substantial risk that any such amendment would fail to account for the broad and substantial implications stemming from expansion of the CMRS definition.

In any event, there is no statutory basis for the reinterpretation urged by these commenters. While Section 332 directs the Commission to define "public switched network" by regulation, that definition must be consistent with the statutory text and congressional intent. Here, whatever limited discretion the Commission has as to that definition, it cannot be interpreted broadly enough to cover the broadband Internet.

Indeed, when Congress used the term "public switched network" in 1993, it did so knowing that the Commission and the courts had routinely used that term interchangeably with "public switched *telephone* network."[2] It is axiomatic that, when

[2] *See Ad Hoc Telecommunications Users Committee v. FCC,* 680 F.2d 790, 793 (D.C. Cir. 1982) ("[WATS] calls are switched onto the interstate long distance telephone network, known as the

Congress "borrows" a term of art that has been given meaning by the courts or the relevant agency, it "intended [that term] to have its established meaning." *McDermott Int'l, Inc.* v. *Wilander,* 498 U.S. 337, 342 (1991). In this case, Congress—like the courts and the Commission before it—used "public switched network" to mean "public switched telephone network."

This point is confirmed by the text of the more recently enacted Section 1422(b)(1), which established the FirstNet public safety radio network. In that provision, adopted in 2012, Congress distinguished between the "public switched network," on the one hand, and the "public Internet," on the other, demonstrating that nearly 20 years after 1993, Congress continued to view these as different and separate networks. 47 U.S.C. § 1422(b)(1). This fact belies any suggestion that Congress used the term "public switched network" in a way that could be interpreted to include the broadband Internet.

Moreover, Section 332(d)(2) addresses interconnection with "*the* public switched network." Congress's use of that phrasing demonstrates that it meant for there to be only one such network; the CMRS definition does not contemplate offerings that interconnect with either of two separate networks.

The relevant legislative history further confirms that the Congressional understanding is inconsistent with defining the Internet to be ***the*** "public switched network." The Conference Report accompanying the legislation confirms that, though Congress used the term "public switched network," it viewed that term as synonymous with "the Public switched *telephone* network." H.R. Rep. No. 103–213, at 495 (1993) (Conf. Rep.) (emphasis added) ("OBRA Conference Report"). OTI, PK, and CDT claim that the legislative history supports the opposite reading, but they have misread the Conference Committee's Report. Citing page 495 of the Conference Report, they contend that the House version of the bill used the term "public switched telephone network," and that the Conference Committee chose the Senate version, which dropped the word "telephone." *See* OTI/PK/CDT Letter at 3–4; OTI Letter at 7–8. These groups exclaim in bold, italicized text that Congress "expressly delet[ed] the word 'telephone' from Section 332's references to 'public switched network,'" but this is not true. The House and Senate versions of the bill (attached as Exhibit 1) *both* used the term "public switched network." *See* 139 Cong. Rec. H_2997 (reproducing H.R. 2264, the House's version of the bill, which (in section 5205(d)(1)(B)) required that a service be "interconnected . . . with the public switched network" in order to qualify as CMRS). Therefore, the claim that Congress chose statutory text that used the term "public switched network" over text that used "public switched telephone network" is factually wrong. The Conference Report language to which OTI, PK, and CDT refer (attached as Exhibit 2) does not *quote* the House bill, but rather *describes* it—and characterizes it as requiring interconnection "with the Public switched telephone network," OBRA Conference Report at 495, even though the legislation itself used the term "public switched network." This, of course, *confirms* (rather than refutes) the conclusion that Congress meant the term "public switched network" to mean "public switched telephone network," and that the Commission cannot adopt a contrary definition in section 20.3 of its rules.

Lacking any textual basis for their claims, commenters resort to conclusory assertions regarding Congress's intent. OTI, PK, and CDT state that "it would have been extraordinarily shortsighted if Congress had tied the Commission's hands to such

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public switched network, the same network over which regular long distance calls travel.") (quoted in *American Tel. and Tel. Co.; Revisions to Tariff F.C.C. No. 259, Wide Area Telecommunications Service (WATS),* Memorandum Opinion and Order, 91 FCC2d 338, 344 ¶16 (1982)); *Amendment of Part 22 of the Commission's Rules Relating to License Renewals in the Domestic Public Cellular Radio Telecommunications Service,* Report and Order, 7 FCC Rcd 719, 720 ¶9 (1992) (Commission's cellular service policy is to "encourage the creation of a nationwide, seamless system, *interconnected with the public switched network* so that cellular and landline telephone customers can communicate with each other on a universal basis.") (emphasis added)), *recon. on other grounds,* 8 FCC Rcd 2834 (1993), *further recon. on other grounds,* 9 FCC Rcd 4487 (1994); *Provision of Access for 800 Service,* 6 FCC Rcd 5421, 5421 ¶1 n.3 (1991) ("800 numbers generally must be translated into [plain old telephone service] numbers before 800 calls can be transmitted over the public switched network."), *recon. on other grounds,* 8 FCC Rcd 1038 (1993); *Telecommunications Services for Hearing-Impaired and Speech-Impaired Individuals, and the Americans with Disabilities Act of 1990,* Notice of Proposed Rulemaking, 5 FCC Rcd 7187, 7190 ¶20 (1990) ("subscribers to every telephone common carriers' interstate service, including private line, public switched network services, and other common carrier services"); *MTS and WATS Market Structure,* Order Inviting Further Comments, 1985 FCC LEXIS 2900 at *2 (Fed.-State Jt. Bd. 1985) ("costs involved in the provision of access to the *public switched network*[] are assigned . . . on the same basis as . . . the local loop used by subscribers to access the *switched telephone network.*") (emphasis added)); *Applications of Winter Park Tel. Co.,* Memorandum Opinion and Order, 84 FCC2d 689, 690 ¶2 n.3 (1981) ("the public switched network interconnects all telephones in the country.").

a degree that only wireless services directly interconnected with the telephone system and using the North American Numbering Plan (NANP) could be regulated as a common carrier[s] for any purpose." OTI/PK/CDT Letter at 6–7; OTI Letter at 2. But this argument simply *assumes* the point it purports to prove—that Congress would have wanted the Commission to subject mobile broadband to common carrier requirements. In fact, the evidence shows otherwise: Congress specifically established CMRS and PMRS as distinct categories, specifically limited CMRS to offerings that interconnected to the public switched telephone network, specifically deemed all other offerings to be PMRS, and specifically exempted PMRS from common carrier treatment. These actions show that Congress intended to exempt mobile Internet offerings from common carrier regulation. As noted above, the Commission recognized this very point, explaining that "section 332 . . . did not contemplate wireless broadband Internet access service as provided today." *Wireless Broadband Order,* 22 FCC Rcd at 5918 ¶ 45 n.119.

That point is bolstered, not undercut, by the fact that Congress in 1993 was aware of the emerging Internet. *See* OTI/PK/CDT Letter at 4; OTI Letter at 5. If Congress had intended to encompass Internet access services that are distinct from the PSTN within the definition of CMRS, it could—and *would*—have done so. But it chose instead to draw a sharp distinction between traditional common-carrier offerings and other offerings, and exempted the latter from common carrier regulations. Indeed, this was Congress's principal intention in adopting Section 332(c)—namely, to ensure that common carrier voice services interconnected with the traditional network were treated alike while encouraging investment and innovation in new, advanced networks by leaving them unburdened by those rules.

Likewise, Ammori suggests that the Commission can redefine the statutory terms because "the Internet is so central to American life and business that it has become the Nation's 21st Century public switched network and the current definition should be seen as outdated." Ammori Letter at 2. This, however, is a policy choice for Congress to make, not the Commission. Congress did not tie the CMRS designation to the "centrality" of the network a service uses, but instead limited the term to services that interconnect with the public switched telephone network. In any event, there is more than a little irony in this argument, given that the mobile broadband Internet has become "central to American life" *without* being classified as CMRS or subject to common-carrier duties. There is thus no reason to believe that Congress would have intended the mobile broadband Internet's importance to provide a basis to include it within the definition of the public switched network, or that the courts would ever accept such an interpretation.

The Commission may not determine that mobile broadband is interconnected. OTI and Vonage further argue that mobile broadband already *is* an interconnected service as that term is *currently* defined, because (in OTI's words) "broadband users quite readily can call any telephone number they wish using their broadband connection." OTI Letter at 5. *See also* Vonage Letter at 5 (contending that the statute never uses the term "in and of itself" and suggesting that one service (mobile broadband) can be regulated based on the characteristics of a *different* service).

The Commission has already expressly rejected that argument. In the *Wireless Broadband Order,* it held that, even though VoIP or other applications that ride over mobile broadband Internet service may provide an interconnected service, the underlying mobile broadband service "itself is not an 'interconnected service' as the Commission has defined the term." *Wireless Broadband Order,* 22 FCC Rcd at 5917–18 ¶ 45. In short, services are classified and regulated on the basis of their *own* features. Mobile broadband might well facilitate use of VoIP offerings, but the provision of a VoIP offering is atop the broadband service, and constitutes its own offering. Mobile broadband does not provide dial tone, does not offer the user access to NANP endpoints, and does not "interconnect[]" with the public switched network. Broadband service allows access to video, but it is not a broadcast television or cable service. It offers access to Facebook and Instagram and LinkedIn, but it is not a social network. Broadband is not a newspaper or a financial service, even though users can read headlines or purchase stocks online, nor is broadband a bookstore, a music streaming service, or a search engine. So too, broadband is not VoIP, and cannot be said to offer interconnection with the public switched network simply because its users can access other services that do. Indeed, the suggestion that over-the-top VoIP services interconnect with the PSTN is itself untrue: These providers historically have delivered traffic to a local exchange carrier, and it is that carrier—not the VoIP provider, let alone the mobile broadband provider—that interconnects with the PSTN. *See, e.g.,* Time Warner Cable Request for Declaratory Ruling that Competitive Local Exchange Carriers May Obtain Interconnection Under Section 251 of the Communications Act of 1934, as Amended, to Provide Wholesale Tele-

communications Services to VoIP Providers, Memorandum Opinion and Order, 22 FCC Rcd 3513, 3514 ¶2 (WCB 2007).

Other claims seeking to conflate VoIP with mobile broadband for classification purposes are similarly misguided. First, the assertion that the need to use a VoIP application is no different from the need to use an end-user device, and thus not determinative of whether mobile broadband service qualifies as CMRS, *see* OTI/PK/CDT Letter at 5–6; Ammori Letter at 1–2, is simply wrong. The VoIP application is distinct from the broadband offering over which it rides and, as Commission precedent establishes, must be evaluated on its own terms. Second, it is irrelevant whether VoIP applications "come bundled with" a device's "operating system." OTI/PK/CDT Letter at 6. Rather, VoIP and mobile broadband are distinct, and each is subject to its own regulatory framework. Finally, while commenters might not like Congress's framework, the need to use a separate application to access a particular service *is* relevant to classification questions. Indeed, the Commission in 2007 held that the "need to rely on another service or application" was not only relevant, but *determinative* as to classification of a service. *Wireless Broadband Order,* 22 FCC Rcd at 5917–18 ¶45.

Ultimately, the approach advocated by Vonage and others would upend the Commission's entire regulatory framework by conflating over-the-top services of all types with the broadband offerings on which they ride. The effects of such a framework would reverberate throughout the Internet ecosystem, eviscerating decades' worth of Commission precedent and creating debilitating uncertainty. The Commission must reject this outcome, particularly where, as here, the absence of APA notice has left it without the benefit of comprehensive and meaningful comment on these issues.

B. Mobile Broadband is Not the "Functional Equivalent" of CMRS

OTI, PK, and CDT contend that that the Commission should deem mobile broadband the "functional equivalent" of CMRS, *see* OTI/PK/CDT Letter at 6–8; OTI Letter at 4–8; PK Letter at 3–5. That argument, however, is not presented here, as the *Notice* does not raise this question (which would require a significant factual record), and, in any case, its proponents cannot overcome the hurdles erected by Congress.

The FCC Has Failed to Provide Notice. The Commission has not provided notice that it might deem mobile broadband the "functional equivalent" of CMRS. As mentioned above, the *Notice* asked only whether mobile broadband might be deemed CMRS. But the term "functional equivalence" does not appear in the definition of CMRS. Rather, it appears in the definition of PMRS, which is defined to include "any mobile service . . . that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission." *Id.* §332(d)(3). Having declined to seek comment on the PMRS definition generally or the "functional equivalent" language in particular, the Commission cannot "specify by regulation" based on the existing record that mobile broadband is the functional equivalent of CMRS.

The Commission cannot rely on Administrative Procedure Act's exception for interpretive rules to excuse its failure to provide notice and an opportunity to comment the "functional equivalence" question. As noted above, Congress specifically directed that any service deemed the functional equivalent of CMRS would be "specified by regulation by the Commission." 47 U.S.C. §332(d)(3). Where a "statute defines a duty in terms of agency regulations, those regulations are considered legislative rules." *USTA* v. *FCC,* 400 F.3d 29, 38 (D.C. Cir. 2005). Even aside from that clear Congressional directive to use legislative rules to identify services that are the functional equivalent of CMRS, a declaration that a service is the functional equivalent of CMRS meets the test for a legislative rule because it would have "'legal effect.'" *American Min. Cong.* v. *Mine Safety & Health Admin.,* 995 F.2d 1106, 1112 (D.C. Cir. 1993). Specifically, in the "absence of the rule there would not be an adequate legislative basis for . . . agency action to . . . ensure the performance of duties"—namely, the common carrier obligations that some urge the Commission to impose on providers of wireless broadband Internet access services. *Id.* As the D.C. Circuit recently reiterated, the "most important factor" in determining whether a rule is legislative or interpretive is "the actual legal effect (or lack thereof) of the agency action in question on regulated entities." *National Min. Ass'n* v. *McCarthy,* 758 F.3d 243, 252 (D.C. Cir. 2014). The effect of any "interpretation" of §332(d)(3) finding that wireless broadband Internet access is the functional equivalent of CMRS—indeed, the very purpose of such an interpretation—is to impose new common-carrier obligations on providers of that service. For all these reasons, the Commission could not adopt a rule finding that wireless broadband Internet access is

the functional equivalent of CMRS without first providing notice and comment—which the Commission has never provided.

Mobile Broadband is Not the Functional Equivalent to CMRS. Nor is there any factual or legal basis for a finding of functional equivalence. "Congress's purpose," the Commission has concluded, was to treat as CMRS only a "'mobile service that gives its customers the capability to communicate to or receive communication from other users of the public switched network.'" *Wireless Broadband Order,* 22 FCC Rcd at 5917 ¶ 44. Congress intended the hallmark of CMRS to be the provision of interconnected service through use of the PSTN. No service lacking this essential attribute could amount to a functional equivalent of CMRS. The functional equivalent language was intended to ensure that "'similar services are accorded similar regulatory treatment.'" *Second CMRS Order,* 9 FCC Rcd at 1418 ¶ 13 (quoting OBRA Conference Report at 494). To that end, the Commission observed that the primary criterion in determining whether a given service is the functional equivalent of CMRS is "whether the service is a close substitute for CMRS," *id.* at 1448 ¶ 80.[3] It further made clear that it was principally concerned with traditional economic criteria for substitutability: "For example, we will evaluate whether changes in price for the service under examination, or for the comparable commercial service, would prompt customers to change from one service to the other." *Id.* There is no evidence in the record that customers are dropping CMRS in favor of mobile broadband—and particularly no evidence that they are doing so in favor of mobile broadband *itself.* In all events, the need to develop a record as to such issues demonstrates why it would be both necessary and appropriate to seek comments on these matters, which the Commission has never done, before addressing these claims.

Contrary to some parties' apparent belief, references to the House Report's discussion of "private carriers" that were "permitted to offer what are essentially common carrier services," OTI/PK/CDT Letter at 7, *quoting* H.R. Rep. 103–111 at 586–87, in fact undercut these parties' functional equivalence argument. That Report explicitly recognized that the functional equivalence prong was limited to services that were "interconnected with the public switched *telephone* network." *See id.* (emphasis added).

OTI contends that "mobile broadband is . . . the functional equivalent of what a commercial mobile service was in 1993," OTI Letter at 4, because its users can access the PSTN "through use of VoIP applications," *id.* at 6. Others similarly contend that the Commission should deem mobile broadband CMRS's functional equivalent because "phones using mobile broadband are capable of replicating the functions of CMRS phones." PK November 7 Letter at 5; Vonage Letter at 9. As noted above, however, these arguments confuse the service offered by a VoIP provider (and its CLEC partner) from the separate broadband Internet access offering.

Public Knowledge's suggestion that mobile broadband is (or is about to become) "indistinguishable from Title II wireline service" is flatly wrong. The two services differ dramatically: VoIP offers only the ability to engage in voice communications, whereas mobile broadband "inextricably combines the transmission of data with computer processing, information provision, and computer interactivity, for the purpose of enabling end users to run a variety of applications," *Wireless Broadband Order,* 22 FCC Rcd at 5911 ¶ 26, including "e-mail, newsgroups, and interaction with or hosting of web pages," *id.* at 5910 ¶ 25, not to mention the huge array of apps that have arisen since the *Wireless Broadband Order*'s release. Indeed, the repeated references to VoIP highlights that mobile broadband is not the functional equivalent of CMRS—the mobile *broadband* service that carries VoIP traffic is not in and of itself the voice service offered by either CMRS or VoIP, and mobile broadband is not a "close substitute" for mobile voice. (Similarly, voice over LTE ("VoLTE") is a distinct offering and cannot render the broadband offering CMRS.) In all events, even if this position were potentially tenable—and it is not—the Commission would need to create a factual record as to the substitutability of these services using traditional economic analysis. The Commission has not even sought to create such a record to date.

Nor is there any merit to the claim that the Commission must deem mobile broadband the functional equivalent of CMRS to resolve a potential contradiction

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[3] Thus, for example, the Commission found that automatic vehicle monitoring systems "do not offer interconnected service" and thus are presumptively classified as PMRS, but explained that, if they "develop interconnected service capability in the future . . . they will be subject to reclassification." *Second CMRS Order,* 9 FCC Rcd at 1453 ¶ 99. Likewise, 220–222 MHz private land mobile services "that are not interconnected . . . will be presumptively classified as PMRS," *id.* at 1452 ¶ 95, and SMR services might be either, depending on whether they are interconnected, *id.* at 1451 ¶¶ 90–91.

between (1) Section 3's requirement that a telecommunications service be subject to common carrier requirements and (2) Section 332(c)(2)'s prohibition against subjecting PMRS to such requirements. *See* OTI Letter at 2; Ammori Letter at 1; OTI/PK/CDT Letter at 8–9. OTI, PK, CDT, and Ammori have things backwards: if there were any conflicting commands in the statute, they should lead the Commission to adhere to its correct conclusion that broadband Internet access is an integrated information service, rather than to ignore the plain language of Section 332, under which mobile broadband is not CMRS or its functional equivalent. In addition, the canon of construction that a "specific provision controls over one of more general application," *e.g., Gozlon-Peretz* v. *United States,* 498 U.S. 395, 407 (1991), resolves any possible conflict. That canon requires that the Commission give effect to the more specific requirements of Section 332, which govern wireless providers, and which were intended to ensure that private mobile services such as mobile broadband remained immune from common carrier mandates. Notably, Congress in that section decided that common carrier status would turn *not* solely on whether a wireless provider's service meets the definition of telecommunications service in Section 153(53), but also on whether that service meets the narrower definition of CMRS in Section 332(d)(1) or is its functional equivalent. Because wireless broadband Internet access is PMRS, the Commission must enforce Congress's specific and unambiguous command that PMRS "*shall not* . . . be treated as a common carrier *for any purpose,*" 47 U.S.C. § 332(c)(2) (emphases added), regardless of the Commission's applications of the definitions of telecommunications service and information service in Section 153.

C. Mobile Broadband is PMRS and Immune From Common Carrier Regulation

PMRS, as noted above, is defined by statute to mean "any mobile service . . . that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission." *Id.* § 332(d)(3).

Vonage is wrong to suggest that this provision is immaterial because sections 301 and 303 give the Commission authority over mobile service that is "independent of Section 332." Vonage Letter at 3–4. The D.C. Circuit firmly rejected this position in both *Cellco* and *Verizon,* explaining that Section 332's limitations trump affirmative grants of power elsewhere in the Act. Thus, in *Cellco,* the court "concluded that Title III authorizes the Commission to promulgate the data roaming rule," but nevertheless had to face "the critical issue"—whether the rule on review "contravene[d] the Communications Act's prohibition against treating mobile-internet providers as common carriers." *Cellco,* 700 F.3d at 544. The *Verizon* court likewise held that, notwithstanding provisions affording the FCC regulatory authority over broadband service, it was "obvious that the Commission would violate the Communications Act were it to regulate broadband providers as common carriers." *Verizon,* 740 F.3d at 650.

For the reasons discussed above, mobile broadband is not, and cannot be, either CMRS or its functional equivalent. It therefore is PMRS, and cannot be subject to common carrier requirements.

II. Mobile Broadband Is An Integrated Information Service With No Separate "Telecommunications Service" Component

As explained above, Section 332 provides an independent and complete barrier to imposing common carrier duties on mobile broadband providers. But there is a separate, and equally sufficient, barrier to imposing those duties: mobile broadband services meet the definition of "information service" and the Commission cannot sub-divide mobile broadband services into distinct "telecommunications service" and "information service" components.

As the Supreme Court explained in *Brand X,* the classification of broadband service rests first and foremost "on the factual particulars of how Internet technology works and how it is provided." *Nat'l Cable & Telecomms. Ass'n* v. *Brand X Internet Servs.,* 545 U.S. 967, 991 (2005) ("*Brand X*"). Ever since the Commission's 1998 *Report to Congress,* which concluded that broadband providers "conjoin the data transport with data processing, information provision, and other computer-mediated offerings, thereby creating an information service," *Federal-State Joint Board on Universal Service,* Report to Congress, 13 FCC Rcd 11501, 11540 ¶ 81 (1998), the Commission consistently has held that broadband Internet access is an integrated information service, *see, e.g.,* Wireless Broadband Order, 22 FCC Rcd 5901. The Supreme Court, of course, has upheld that approach. *See Brand X,* 545 U.S. 967. When the Commission examined mobile broadband in 2007, it held that "[w]ireless broadband Internet access service offers a single, integrated service to end users, Internet access, that inextricably combines the transmission of data with computer processing, information provision, and computer interactivity, for the purpose of enabling end

users to run a variety of applications," and concluded that wireless broadband "meets the statutory definition of an information service under the Act." *Wireless Broadband Order,* 22 FCC Rcd at 5911 ¶26.

If anything, the transmission and processing functions of mobile broadband have become *more* integrated since 2007. As Drs. Jeffrey Reed and Nishith Tripathi explain in a paper that CTIA has entered into the record, as mobile technologies and networks have evolved, "subscribers are increasingly using advanced networks for multiple simultaneous data services," necessitating "[e]xtensive and complex processing in the mobile broadband network. . . ." Dr. Jeffrey H. Reed and Dr. Nishith D. Tripathi, *Net Neutrality and Technical Challenges of Mobile Broadband Networks* at 31, *attached to* Letter from Scott Bergmann, CTIA, to Marlene H. Dortch, FCC, GN Docket Nos. 14–28, 10–127 (filed Sept. 4, 2014). They show that this tight integration between transmission and processing is essential whether the user is browsing a website, engaged in mobile video conferencing, or undertaking any of the myriad other activities made possible by mobile broadband. Indeed, "[t]he nodes of the entire wireless network infrastructure work together to present a single unified view of the network to the subscriber's device and to provide service-specific QoS for a user's services according to the 3GPP LTE framework" *Id.* Thus, the factual premises that previously led the Commission to classify mobile broadband Internet access offerings as integrated information services compel the same result even more so today.

Further, a decision splitting broadband Internet access into discrete "telecommunications service" and "information service" components would be especially vulnerable on appeal in light the Supreme Court's 2009 decision in *FCC* v. *Fox Television Stations, Inc.* 556 U.S. 502 (2009). That decision held that an agency must "provide a more detailed justification" for changing course "than what would suffice for a new policy created on a blank slate" in two circumstances: (1) when "its new policy rests upon factual findings that contradict those which underlay its prior policy" and (2) "when its prior policy has engendered serious reliance interests that must be taken into account." In those cases, "a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy." *Id.* at 515. Any decision to reclassify mobile broadband service would implicate both of these circumstances, because it would (1) reflect new factual findings contradicting previous findings and (2) disrupt established reliance interests.

Indeed, the Commission expressly invited the reliance at issue here: When it classified mobile broadband as an integrated information service more than seven years ago, it explained that "[t]hrough this classification, we provide the regulatory certainty needed to help spur growth and deployment of these services." *Wireless Broadband Order,* 22 FCC Rcd at 5911 ¶27. The result has been clear: America's wireless companies have "invested hundreds of billions of dollars in their networks in reasonable reliance on their Title I status." *See* Comments of TechFreedom, GN Docket Nos. 14–28, et al, at 95 (July 17, 2014). Wireless providers have invested over $113 billion in capital expenditures since 2010 alone, including a record $33 billion in 2013. *See* CTIA Ex Parte, *Protecting and Promoting the Open Internet,* GN Docket No. 14–28 (Oct. 1, 2014), *http://apps.fcc.gov/ecfs/document/view?id=60000870154.*

III. The Act Bars Any "Hybrid" Reclassification Approach to Mobile Broadband

Any effort to pursue a so-called "hybrid" reclassification of mobile broadband service would likewise be unlawful. As CTIA understands the hybrid approach, the Commission would leave intact its prior holdings that broadband Internet access service provided to subscribers is an integrated information service, but would, for the very first time, identify a new "remote host service" that is provided by the broadband provider to the edge (or content) provider, and declare *that* offering to be a telecommunications service. *See* Mozilla, *Petition to Recognize Remote Delivery Services in Terminating Access Networks and Classify Such Services as Telecommunications Services under Title II of the Communications Act,* GN Docket Nos. 14–28, 10–127 & 09–191 at 4–5, 9 (May 5, 2014); Letter from Tim Wu and Tejas Narechania, Columbia Law School, to Marlene H. Dortch, FCC, *Open Internet Remand,* GN Docket No. 14–28 (Apr. 14, 2014). The hybrid approach has multiple legal infirmities that apply in the context of fixed and mobile services alike, as well as separate mobile-specific barriers grounded in Section 332(c)(2). And like "complete" reclassification, hybrid reclassification of mobile broadband is simply incompatible with the facts.

A. Section 332 Prohibits the Commission From Subjecting a Hybrid "Service" to Common Carrier Mandates

Section 332(c)(2) bars the Commission from imposing common carrier regulation on a mobile broadband provider's "service" offered to edge providers. Again, the "service" at issue is the broadband provider's delivery of the edge provider's content to the broadband provider's own subscriber over its last-mile facilities, purportedly on the edge provider's behalf. This "service" clearly is not CMRS or its equivalent, both because it is not "interconnected" with the public switched network (which, as discussed above, means the public switched *telephone* network) and also because it is not offered "for profit."

As a threshold matter, one commenter, Public Knowledge, seeks to evade the Section 332(c) analysis by asserting that "'[s]ender-side' broadband. . .is not mobile or necessarily wireless," given that the edge provider's server "sits at a fixed location." Letter from Harold Feld, Public Knowledge, to Marlene H. Dortch, FCC, GN Docket Nos. 10–127, 14–28 (Oct. 24, 2014). The statute, however, dictates otherwise. Section 332(d) establishes that both PMRS and CMRS are mobile services "*as defined in section 153 of this title,*" (*i.e.,* Section 3 of the Act). 47 U.S.C. § 332(d)(1) & (d)(3) (emphasis added). That provision defines the term "mobile service" to mean "a radio communication service carried on between mobile stations or receivers and land stations, and by mobile stations communicating among themselves," and specifies that the term includes "both one-way and two-way radio communication services." *Id.* § 153(33). Under this statutory definition, mobile broadband providers are indisputably providing a "mobile service" even with respect to the edge provider. In particular, the delivery of content over the wireless last mile is "a radio communication service carried on between mobile stations or receivers and land stations," and it is such even if one conceives of the sender-side service as a "one-way" service.

Thus, the offering at issue is a "mobile service" under Section 3 and is either PMRS or CMRS. For the reasons discussed herein, it is clearly PMRS, and immune from common carrier treatment.

First, like the service that broadband providers offer to their subscribers, any service that might be understood to be provided to edge providers is not "interconnected" as that term is used in Section 332. Specifically, that service does not allow the edge provider to connect to "[a]ny common carrier switched network, whether by wire or radio, . . . that *uses the North American Numbering Plan* in connection with the provision of switched services." 47 C.F.R. § 20.3 (definition of public switched network) (emphasis added). Indeed, when a broadband provider delivers an edge provider's content to the broadband subscriber, that subscriber is the *only* entity to whom the edge provider can send its content. The edge provider cannot choose to send content even to other entities connected to the Internet, much less to recipients on networks using NANP numbering. Congress imbued the term "interconnected" with a specific meaning, tied to the public switched telephone network, and any effort to ignore that intent would unlawfully collapse the framework established by Congress.

Second, under Section 332(d)(1), CMRS is a mobile service "that is provided for profit and makes interconnected service available." *Id.* § 332(d)(1). Thus, whereas Congress only required that a "fee" be charged in order for an offering to be a telecommunications service, it required even more for a service to be CMRS—that is, such a service must be provided "for profit." As discussed above, any "service" offered by broadband providers to edge providers in connection with the delivery of broadband traffic to end users is not offered to such edge providers "for a fee"—and it certainly is not offered "for profit." Indeed, even if there were merit to Mozilla's claim that the fees paid to broadband providers by their subscribers satisfy the Act's "for a fee" requirement with respect to the "service" broadband providers offer to edge providers, that argument still would fail to demonstrate that the service is provided to the edge provider "for profit." In that case, the only service that the broadband provider offers "for profit" is the service to its subscriber—*i.e.,* the entity that pays the broadband provider for the service.

B. Section 3 Precludes the Commission From Pursuing The Hybrid Approach

Moreover, even if broadband providers offer a "service" to edge providers as described above, it is not a "telecommunications service" under Section 3 of the Act. Section 3(53) defines the term "telecommunications service" to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public." 47 U.S.C. § 153(53). Any such hybrid "service" is not offered "to the public," is not made available "for a fee," and, in any event, is not even "telecommunications."

First, if such a "service" exists, broadband providers do not offer it "directly to the public, or to such classes of users as to be effectively available directly to the pub-

lic." In fact, broadband providers do not offer *any* service "directly" to edge providers. They only offer their services directly to their own subscribers. Edge providers, in turn, buy service from other entities—including their own broadband providers, transiting providers, content delivery networks, and so on. They have a direct relationship with *those* entities, not with the subscriber's broadband provider.

Second, even if broadband providers offer a "service" to edge providers, they do not offer that service "for a fee," as the "telecommunications service" definition requires. Broadband providers collect fees from their subscribers, and CTIA is not aware of any circumstances in which a broadband provider collects a fee from an edge provider as compensation for the broadband provider's delivery, to its subscriber, of that edge provider's content.

Mozilla has argued that the Act's "for a fee" requirement is satisfied by the monies that broadband providers collect from their own subscribers. *See* Comments of Mozilla, GN Docket Nos. 14–28, 10–127 at 12 (July 15, 2014). This argument fails, because "the plain meaning of the Communications Act. . .suggests that the entity to which the service is offered must pay the fee, not some other party." Barbara van Schewick and Alec Schierenbeck, Comments on Mozilla's Proposal at 2–3, 7–8, *attached to* Letter from Barbara van Schewick, Stanford Law School, to Marlene H. Dortch, FCC, GN Dockets 14–28, 09–191 (Oct. 30, 2014). The Commission has held as much: Just as Mozilla suggests that a broadband provider can be understood to provide a telecommunications service to an edge provider when the "fee" the broadband provider receives is from a third party (its own subscriber), a competitive LEC argued in 2011 that it could be deemed to be providing a telecommunications service to a party to whom it delivered traffic when the fee that it received was from a third party (in that case, an interexchange carrier that paid it access charges in connection with the traffic). *See Qwest Communications Co., LLC* v. *Northern Valley Communications, LLC,* Memorandum Opinion and Order, 26 FCC Rcd 8332, 8337–38 ¶ 10 (2011) (quoting Northern Valley's Answer and Legal Analysis at 18–22). The Commission disagreed: "'[I]n order [for the service provider's offering] to be a telecommunications service, the service provider must assess a *fee for its service'"—i.e.,* the service that is being deemed a "telecommunications service"—rather than for a different service it provides to a different entity. *Id.* (quoting *Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service,* Memorandum Opinion and Order, 19 FCC Rcd 3307, 3312–13, ¶ 10 (2004)) (emphasis added). That logic applies with equal force here: For the "service" offered by broadband providers to edge providers to be a telecommunications service, the broadband providers must charge the edge providers a fee *for that service.* They do not, and the hybrid approach is therefore unlawful.

Conclusion

For the reasons discussed herein, the Act bars the Commission from reclassifying broadband Internet services as including a distinct telecommunications service component, and from pursuing the "hybrid" approach. Instead, it should adopt a regulatory framework grounded in its Section 706 powers. This remains the best legal path to preserving an open Internet.

Respectfully submitted,

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December 22, 2014

EXHIBIT 1

IB

Union Calendar No. 57

103D CONGRESS
1ST SESSION

H. R. 2264

[Report No. 103–111]

To provide for reconciliation pursuant to section 7 of the concurrent resolution on the budget for fiscal year 1994.

IN THE HOUSE OF REPRESENTATIVES

MAY 25, 1993

Mr. SABO, from the Committee on the Budget, reported the following bill; which was committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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A BILL

To provide for reconciliation pursuant to section 7 of the concurrent resolution on the budget for fiscal year 1994.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Omnibus Budget Reconciliation Act of 1993".

SEC. 2. TABLE OF CONTENTS.

The table of contents is as follows:

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"(4) REGULATORY TREATMENT OF COMMUNICATIONS SATELLITE CORPORATION.—Nothing in this subsection shall be construed to alter or affect the regulatory treatment required by title IV of the Communications Satellite of 1962 of the corporation authorized by title III of such Act.

"(d) DEFINITIONS.—For purposes of this section—

"(1) the term 'commercial mobile service' means all mobile services (as defined in section 3(n)) that—

"(A) are provided for profit (i) to the public, (ii) on an indiscriminate basis, or (iii) to such broad classes of eligible users as to be effectively available to a substantial portion of the public; and

"(B) are interconnected (or have requested interconnection pursuant to paragraph (1)(B)) with the public switched network (as such terms are defined by regulation by the Commission); and

"(2) the term 'private mobile service' means any mobile service (as defined in section 3(n)) that is not a commercial mobile service.".

(b) CONFORMING AMENDMENTS.—

No. 91—Part II

Congressional Record

United States of America

PROCEEDINGS AND DEBATES OF THE 103d CONGRESS, FIRST SESSION

Vol. 139 WASHINGTON, THURSDAY, JUNE 24, 1993 No. 91—Part II

Senate

(Legislative day of Tuesday, June 22, 1993)

OMNIBUS BUDGET RECONCILIATION ACT

(Continued)

UNANIMOUS-CONSENT AGREEMENT

Mr. SASSER. Mr. President, I ask unanimous consent that the following be the sequence of first-degree amendments to be debated immediately under the following time limitations. They are a DeConcini deficit reduction trust fund, 3 minutes; a Brown highway trust, 3 minutes; a Bumpers immunization, 3 minutes; a McCain hospital insurance trust fund, 3 minutes; a budget enforcement amendment by myself, 3 minutes; an amendment by Senator GRAMM, dealing with Gramm-Rudman-Hollings, 3 minutes; that the amendments be debated and laid aside until all have been debated and that after the votes stacked under the previous order the Senate begin voting back to back on, or in relation to, each amendment in order in which they were offered and that no other amendments be in order prior to their disposition.

Mr. DOMENICI. Reserving to right to object.

Mr. BUMPERS. Mr. President, reserving the right to object, I have two immunization amendments. They were originally just one that had to be severed because of a parliamentary problem. In the 3-minute debate that the Senator is offering me, I will describe both amendments. I have still a third amendment, which I think will be accepted.

Mr. SASSER. I thank the Senator.

Mr. DOMENICI. Did the unanimous-consent request include a prohibition against second-degree amendments on these?

Mr. SASSER. It did.

Mr. DOMENICI. I have no objection.

Mr. BUMPERS. Mr. President, further reserving the right to object, I want it fully understood now I am offering three amendments. I am accepting 3 minutes total debate time, but I am offering three amendments.

Mr. SASSER. The Senator may offer three amendments, but, as I understand it, under our unanimous consent, only one amendment will be voted on. The Senator says a second amendment might be accepted, and we will certainly try to accommodate the Senator on that. But with regard to the third amendment, it is not on our unanimous consent list.

Mr. BUMPERS. Mr. President, I say to the distinguished Senator from Tennessee that I have offered to debate two amendments, which I had to sever. I am offering to debate 3 minutes, which I had to sever. I am offering to debate 3 minutes and describe both amendments and call the second one up without debate and the third one up without debate.

Mr. SASSER. The Senator is certainly entitled to call them all up without debate. But they would not come in sequence with these amendments here.

Mr. BUMPERS. When the Senator said no other amendments would be in order, I wanted to make sure the unanimous consent understood that.

Mr. SASSER. After these amendments are disposed of, then amendments will be in order until they are exhausted.

Under the rules there may be no debate on some of them.

Mr. BUMPERS. That is fine.

The PRESIDING OFFICER. If we can have the attention of the Senators to my left, please? There is enough confusion in the Chamber without conversation going on on the side. If Senators will take their seats, it will facilitate the debates here.

The Senator from Tennessee has a request. Does the Senator from Tennessee want to repeat that unanimous-consent request? Or is the comment by the Senator from Arkansas sufficient to be included in the unanimous-consent request so the Chair may rule on it?

Mr. SASSER. I do not think there is really any need to include it in the unanimous-consent request. I think we have an understanding outside the unanimous-consent request, as I understand it.

Mr. DOMENICI. I understand it.

The PRESIDING OFFICER. Is the time to be equally divided on each of these amendments?

Mr. DOMENICI. It is.

Mr. SASSER. It is.

The PRESIDING OFFICER. If so, is there objection? Hearing none, the unanimous-consent request is agreed to.

Mr. SASSER. Mr. President, I ask unanimous consent that Senator BROWN be allowed to go out of order and that he be followed then by Senator DECONCINI, and then we pick up the regular sequence. Senator DECONCINI is not in the Chamber at the moment. That might expedite matters.

So the understanding is Senator BROWN will go first—I want to be sure my friend from New Mexico understands this—then we come to DECONCINI and then we go back to the regular sequence. That would pick up with BUMPERS and then alternate down from there.

Mr. DOMENICI. We have no objection to that.

The PRESIDING OFFICER. Without objection, the unanimous-consent request is agreed to. The Senator from Colorado is recognized. If the Senator will suspend until we have order so the Senator can be heard.

The Senator from Colorado is recognized.

"(F) extend to any other service, class of services, or assignments that the Commission determines, after conducting public notice and comment proceedings, should be exempt from competitive bidding because of public interest factors warranting an exemption to the extent the Commission determines the use of competitive bidding would jeopardize appropriate treatment of those factors.

"(5) No provision of this subsection or of the Emerging Telecommunications Technologies Act of 1993 shall be construed, in any way, to—

"(A) alter spectrum allocation criteria and procedures established by the other provisions of this Act;

"(B) allow the Commission to consider potential revenues from competitive bidding when making decisions concerning spectrum allocation;

"(C) diminish the authority of the Commission under the other provisions of this Act to regulate or reclaim spectrum licenses;

"(D) grant any right to a spectrum licensee different from the rights awarded to licensees who obtained their license through assignment methods other than competitive bidding; or

"(E) prevent the Commission from awarding licenses to those persons who make significant contributions to the development of a new telecommunications service or technology.

"(6) Moneys received from competitive bidding pursuant to this subsection shall be deposited in the general fund of the Treasury."

(c) STATE AND LOCAL TAX TREATMENT OF LICENSES AND PERMITS.—Title VII of the Act (47 U.S.C. 601 et seq.) is amended by adding at the end the following new section:

"SEC. 714. STATE AND LOCAL TAX TREATMENT OF LICENSES AND PERMITS.

"A license or permit issued by the Commission under this Act shall not be treated as the property of the licensee for property tax purposes, or other similar tax purposes, by any State or local government entity.".

SEC. 4008. REGULATORY PARITY.

(a) AMENDMENT.—Section 332 of the Act (47 U.S.C. 332) is amended—

(1) by striking "PRIVATE LAND" from the heading of the section; and

(2) by amending subsection (c) to read as follows:

"(c)(1)(A) A person engaged in the provision of commercial mobile services shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this Act, except that the Commission may waive the requirements of sections 203, 204, 205, and 214, and the 30-day notice provision of section 309(a), for commercial mobile services and such other provisions of title II as the Commission may, consistent with the public interest, specify by rule. In prescribing any such rule, the Commission may not waive for commercial mobile services the requirements of section 201, 202, 206, 208, 209, 215(c), 216, 217, 220 (d) or (e), 223, 225, 226 (a), (b), (c), (d), (e), (f), (g), or (i), 227, or 228, or any other provision that is necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with commercial mobile services are just and reasonable and are not unjustly or unreasonably discriminatory or that is otherwise in the public interest.

"(B) Upon reasonable request of any person providing commercial mobile service, the Commission shall order a common carrier to establish physical connections with such service pursuant to section 201. Except to the extent that the Commission is required to respond to such a request, this subparagraph shall not be construed as a limitation or expansion of the Commission's authority to order interconnection under this Act.

"(2) A person engaged in private land mobile service shall not, insofar as such person is so engaged, be treated as a common carrier for any purpose under this Act. A common carrier shall not provide any dispatch service on any frequency allocated for common carrier service, except to the extent that such dispatch service is provided on stations licensed by the Commission in the Specialized Mobile Radio Service prior to May 24, 1993, or is provided on stations licensed in the domestic public land mobile radio service before January 1, 1982. The Commission may by regulation terminate, in whole or in part, the prohibition contained in the preceding sentence if the commission determines that such termination will service the public interest.

"(3)(A) Notwithstanding sections 2(b) and 221(b), no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private land mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services. Nothing in this subparagraph shall exempt providers of commercial mobile services (where such services are a substitute for land line telephone exchange service for a substantial portion of the communications within such State) from requirements imposed by a State commission on all providers of telecommunications services necessary to ensure the continued availability of telephone exchange service at affordable rates.

"(B) Notwithstanding subparagraph (A), a State may petition the Commission for authority to regulate the rates for any commercial mobile service if such State demonstrates that (i) such service is a substitute for land line telephone exchange service for a substantial portion of the communications within such State, or (ii) market conditions with respect to such services fail to protect subscribers adequately from unfair and unreasonable rates or rates that are unjustly or unreasonably discriminatory. The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition. If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such periods of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unfairly or unreasonably discriminatory.

"(C) If a State has in effect on June 1, 1993, any regulation concerning the rates for any commercial mobile service, such State may, no later than 1 year after the date of enactment of the Emerging Telecommunications Technologies Act of 1993, petition the Commission requesting that the State be authorized to continue exercising authority over such rates. The State's existing regulation shall, notwithstanding subparagraph (A), remain in effect until the Commission issues a final order granting or denying such petition. The Commission shall review such petition in accordance with the procedures and schedule established in subparagraph (B), and shall grant such petition if the State satisfies the showing required under subparagraph (B)(i) or (B)(ii). If the Commission grants such petition, the Commission shall authorize the State to exercise under the State law such authority over rates, for such period of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unfairly or unreasonably discriminatory.

"(D) After a reasonable period of time, as determined by the Commission, has elapsed from the issuance of an order under subparagraph (B) or (C), any interested party may petition the Commission for an order that the exercise of authority by a State pursuant to such subparagraph is no longer necessary to ensure that the rates for commercial mobile services are just and reasonable and not unfairly or unreasonably discriminatory. The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition in whole or in part.

"(4) Nothing in this subsection shall be construed to alter or affect the regulatory treatment required by title IV of the Communications Satellite Act of 1962 of the corporation authorized by title III of such Act.

"(5) The Commission shall continue to determine whether the provision of space segment capacity by satellite systems to providers of commercial mobile services shall be treated as common carriage.

"(6) The provisions of section 310(b) shall not apply to any lawful foreign ownership in a provider of commercial mobile services prior to May 24, 1993, if that provider was not regulated as a common carrier prior to the date of enactment of the Emerging Telecommunications Technologies Act of 1993 and is deemed to be a common carrier under this Act.

"(7) As part of any proceeding under this subsection the Commission (i) shall consider in such proceeding the ability of new entrants to compete in the services to which such proceeding relates, and (ii) shall have the flexibility to amend, modify, or forbear from any regulation of new entrants under this subsection, or, consistent with the public interest, take other appropriate action, to provide a full opportunity for new entrants to compete in such services.

"(8) For purposes of this section—

"(A) the term 'commercial mobile service' means any mobile service (as defined in section 3(n)) that, as specified by regulation by the Commission, is provided for profit and makes interconnected service available (i) to the public or (ii) to such broad classes of eligible users as to be effectively available to a substantial portion of the public;

"(B) the term 'interconnected service' means service that is interconnected with the public switched network (as such term is defined by regulation by the Commission) or service for which interconnection pursuant to paragraph (1)(B) is pending; and

"(C) the term 'private land mobile service' means any mobile service (as defined in section 3(n)) that is not a commercial mobile service under subparagraph (A).".

(b) CONFORMING AMENDMENTS.—

(1) DEFINITION OF MOBILE SERVICE.—Section 3 of the Act (47 U.S.C. 153) is amended—

(A) in subsection (n)—

(i) by inserting "(1)" immediately after "and includes"; and

(ii) by inserting immediately before the period at the end the following: ", (2) a mobile service which provides a regularly interacting group of base, mobile, portable, and associated control and relay stations (whether licensed on an individual, cooperative, or multiple basis) for private one-way or two-way land mobile radio communications by eligible users over designated areas of operation, and (3) any service for which a license is required in a personal communications service established pursuant to the proceeding entitled 'Amendment to the Commission's Rules to Establish New Personal Communications Services' (GEN Docket No. 90-314; ET Docket No. 92-100), or any successor proceeding; but such term does not include any rural radio service as defined by the Commission and does not include the provision, by a local exchange carrier, of telephone exchange service by radio instead of by wire"; and

(B) by striking subsection (gg).

(2) REGULATION OF INTRASTATE COMMUNICATIONS.—Section 2(b) of the Act (47 U.S.C. 152(b)) is amended by inserting "and section 332" immediately after "inclusive,".

(c) RULEMAKING SCHEDULE; EFFECTIVE DATE.—

(1) RULEMAKING REQUIRED.—Within 1 year after the date of enactment of this Act, the Commission shall—

(A) issue such modifications or terminations of its regulations as are necessary to implement the amendments made by subsection (a);

(B) make such other modifications of such regulations as may be necessary to promote par-

EXHIBIT 2

103D CONGRESS *1st Session* | HOUSE OF REPRESENTATIVES | REPORT 103–213

OMNIBUS BUDGET RECONCILIATION ACT OF 1993

CONFERENCE REPORT

OF THE

COMMITTEE ON THE BUDGET HOUSE OF REPRESENTATIVES

TO ACCOMPANY

H.R. 2264

A BILL TO PROVIDE FOR RECONCILIATION PURSUANT TO SECTION 7 OF THE CONCURRENT RESOLUTION ON THE BUDGET FOR FISCAL YEAR 1994

AUGUST 4, 1993.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

70–859 WASHINGTON : 1993

Conference agreement

The Conference Agreement adopts a modified version of the Senate provision. The purpose of this provision is to "grandfather" any foreign ownership in a provider of private land mobile services that existed prior to May 24, 1993 if that provider becomes a common carrier under this Act. Section 310(b) of the Communications Act limits the amount of private foreign ownership in a common carrier service but does not impose any such limits on the foreign ownership in private radio service. Currently, some foreign-owned companies provide private radio services. Some of these companies will become common carriers as a result of section 332(c)(1)(A). Without this "grandfathering" provision, these companies would be forced to divest themselves of any foreign ownership when this Act becomes effective.

In order to avoid this result, the Conference Agreement accepts the Senate provision with modifications to limit its application. First, Section 332(c)(6) as added by the Conference Report requires a person that may be affected by this provision to file a waiver request with the Commission within 6 months of enactment. The FCC may grant the waiver only on the following conditions:

(1) The extent of foreign ownership interest shall not be increased above the extent which existed on May 24, 1993.

(2) Such waiver shall not permit the subsequent transfer of ownership to any other person in violation of section 310(b). In effect, this condition "grandfathers" only the particular person who holds the foreign ownership on May 24, 1993; the "grandfathering" does not transfer to any future foreign owners.

Section 310(b) addresses the permissible extent of foreign investment in certain radio licenses, including common carriers. One effect of the denomination of commercial mobile services as common carrier services is to broaden the range of services subject to limitations on foreign investment. In securing regulatory parity for commercial mobile services, the Conference Agreement does not restrict the FCC's discretion, pursuant to section 310(b)(4), to permit foreign investors to acquire interests in U.S.-licensed enterprises. These amendments in no way affect the Commission's authority under section 310(b).

SECTION 322(d)

House bill

Section 322(d) of the House bill defines the terms "commercial mobile service" and "private mobile service". "Commercial mobile service" is defined as a mobile service, as defined in section 3(n), that is interconnected with the Public switched telephone network offered for profit and held out to the public, or offered on an indiscriminate basis to classes of eligible users, or to such a broad class so as to equal the public. "Private mobile service" is defined as anything that does not fall under commercial mobile service. The provisions also direct the Commission to define "interconnected" and "public switched telephone network".

Senate amendment

Section 322(c)(8) as added by the Senate Amendment contains similar definitions of the terms "commercial mobile service" and "private land mobile service". The differences in the Senate definition of "commercial mobile service" are: (1) that "offered on an indiscriminate basis" is not one of the tests for determining a "commercial mobile service" in the Senate Amendment; (2) the Senate definition expressly recognizes the Commission's authority to define the terms used in defining "commercial mobile service"; and (3) the Senate definition requires that "interconnected service" must be made available to the public, as opposed to the House definition which simply requires the service offered to the public to be "interconnected". In other words, under the House definition, only one aspect of the service needs to be interconnected, whereas under the Senate language, the interconnected service must be broadly available. The Senate Amendment defines "interconnected service" as a service that is interconnected with the public switched network or service for which an interconnection request is pending. The definition of "private land mobile service" in the Senate amendment is virtually identical to the definition of "private mobile service" in the House bill.

Conference report

The Conference Report adopts the Senate definitions with minor changes. The Conference Report deletes the word "broad" before "classes of users" in order to ensure that the definition of "commercial mobile services" encompasses all providers who offer their services to broad or narrow classes of users so as to be effectively available to a substantial portion of the public.

Further, the definition of "private mobile service" is amended to make clear that the term includes neither a commercial mobile service nor the functional equivalent of a commercial mobile service, as specified by regulation by the Commission.

The Commission may determine, for instances, that a mobile service offered to the public and interconnected with the public switched network is not the functional equivalent of a commercial mobile service if it is provided over a system that, either individually or as part of a network of systems or licensees, does not employ frequency or channel reuse or its equivalent (or any other techniques for augmenting the number of channels of communication made available for such mobile service) and does not make service available throughout a standard metropolitan statistical area or other similar wide geographic area.

SECTION (B)

House bill

Subsection (B) of the House bill adds a conforming amendment to the definition in Section 3(n) of the Communications Act of "mobile service" to clarify that the term includes all items previously defined as "private land mobile service" and includes the licenses to be issued by the Commission pursuant to the proceedings for personal communications services.

GENE KIMMELMAN, PRESIDENT, PUBLIC KNOWLEDGE

Mr. KIMMELMAN. Thank you, Mr. Chairman. On behalf of Public Knowledge, a non-profit that promotes creativity, freedom of expression, and an affordable and open Internet and communications platform, I really appreciate the opportunity to testify today.

Mr. Chairman, I would like to start by congratulating you on ascending to the throne of this committee. Your staff has been wonderful in reaching out, and debating issues, and engaging with us, and we really look forward to working with you in the coming years. And of course I can always say the same, Senator Nelson, for you and your wonderful staff. It is a pleasure working with you.

It is really quite a pleasure to see bipartisan statements on this committee about the importance of many of the critical principles that are necessary for an open Internet. It is really an important bipartisan step that I applaud you for. But I must also say that we are extremely pleased to see the FCC moving forward with strong net neutrality rules to preserve an open Internet, and to address what millions of consumers, small businesses, innovators, civil rights organizations have been asking for, and that is preserving freedom on the Internet and ensuring adequate tools for policing that to promote freedom of expression on that important platform of communications.

We really appreciate your desire in Congress to review all the important policies that govern communications, and look forward to working with you on that. However, I must urge caution in this area in more than three decades of work with the Congress and communications regulators, the expert agency. It is very important that whatever you do not interfere with rules that the agency appropriately can promulgate or legislate in a manner that could cause more harm than good.

Now, what do I mean by that? My experience is that Congress is great, really wonderful, and has accomplished a lot when it is establishing principles and goals for communications and many other policy areas. That is what you do best. That is what has worked in the past. And then delegating authority to an expert agency to work out all the details and manage the rules of the road. And in this space what that has done is enable us to go from landline services to wireless services, from broadcast to cable, from traditional telecom to broadband services.

But given the tremendous dynamism in this area as well, the technology changing so fast, it is also important to make sure that we are preparing for what is the next generation of offerings for consumers, that we are looking forward and not just backward.

It is extremely dangerous, I believe, for the Congress to step in and try to micromanage what is best left to an expert agency. Now, what I mean here? In this draft legislation, you address a number of important areas—blocking, pay prioritization. But general nondiscrimination that is harmful to competition and freedom of expression, what about that? What might the next generation of that be? Caps on services, usage caps? Some kind of new fast lanes that are based on quality, not speed? Some kind of preferential arrangement for Comcast, an AT&T, a Verizon for its own affiliated services? I do not know what those might be, but it is absolutely critical that we do not need to come back to Congress every time we worry

about discrimination, but that an expert agency has the authority to deal with that.

In legislating, you need to not just worry about this dynamism. Keep in mind that these are companies, wonderful companies, that have been found by the courts following agency action to have an incentive and an opportunity to discriminate. Why? Not because they are bad, but that it is profit maximization for these companies. And it is with that incentive that we need a policeman, in this case the FCC, to monitor what they do. So we need the FCC to be able to exercise all of its authority, use all of its tools that are necessary to address these dangers. And we believe that requires Title II, which it does not appear the draft legislation contemplates.

And if you are serious about legislating, we also urge you to look at the tried and true tools that have protected consumers in so many ways, whether it is their privacy, or the rights of the disabled, or extending services to rural America, or providing subsidies for low income people who could not afford essential services, we need to make sure those tools are available as well in the broadband area for these services. Unfortunately, again, it does not appear the draft legislation provides those tools for the FCC.

So in conclusion, I urge you as you consider evaluating what the FCC does, to let them go. Do what you do best, monitor them. Step in if they have done it inappropriately, and consider all the forward-looking needs that we have for consumers in the broadband era. Thank you so much.

[The prepared statement of Mr. Kimmelman follows:]

PREPARED STATEMENT OF GENE KIMMELMAN, PRESIDENT, PUBLIC KNOWLEDGE

Public Knowledge,[1] along with millions of consumers, civil and media rights groups,[2] small businesses, and innovative start-up companies, believes that application of Title II authority under the Communications Act is critical to preserve and promote an open Internet that is affordable to all and fully supportive of freedom of expression.[3] We therefore support the FCC's current efforts to adopt Title II rules in response to the most recent DC Circuit court ruling. Public Knowledge also believes it is entirely appropriate for Congress to consider updating the Act to address inadequacies in law and to guide the FCC's understanding of Congressional intent. However, the draft legislation proposed by Chairman Thune on January 16, 2015, raises a number of serious concerns about how and when such Congressional intervention is warranted, and raises many questions about the specific tools Congress must empower the FCC to use in order to effectively preserve and promote an open, affordable, nondiscriminatory Internet.

Public Knowledge cares about keeping the Internet open because the Internet has become—as Congress has repeatedly recognized in past legislation[4]—the essential communications service of the 21st Century. As communication, commerce, and civic engagement increasingly depend on broadband Internet access, it becomes even more critical to ensure that the Internet remains open for all Americans to partici-

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[1] I would like to thank Kristine DeBry, Harold Feld, Kate Forscey, Jodie Griffin, Chris Lewis, Sherwin Siy, and Michael Weinberg for their substantial contributions to this testimony.

[2] *See* Open Letter to Latino Community Urging Support for Real Network Neutrality, signed by the National Hispanic Media Coalition, Center for Media Justice and other groups (July 14, 2014). Available at *http://centerformediajustice.org/2014/07/open-letter-to-latino-community-urging-support-for-real-network-neutrality/*

[3] *See* Letter from Voices for Internet Freedom to Tom Wheeler, Chairman, FCC, GN Docket No. 14–28 (Nov. 3, 2014), *http://apps.fcc.gov/ecfs/document/view?id=60000978248;* Letter from Comptel, Engine, the Computer & Communications Industry Ass'n, and Internet Freedom Business Alliance to Tom Wheeler, Chairman, FCC, GN Docket No. 14–28 (Dec. 30, 2104), *http://apps.fcc.gov/ecfs/document/view?id=60001011438;* Jonathan Weisman, *Shifting Politics of Net Neutrality Debate Ahead of FCC Vote,* N.Y. Times (Jan. 19, 2015) ("The F.C.C. has received four million comments on net neutrality—overwhelmingly in favor—ahead of its Feb. 26 decision day.").

[4] Broadband Data Improvement Act, Pub. L. No. 110–385, § 102 (2008).

pate online to the best of their abilities. Fortunately, in Title II, Congress has already given the FCC the flexibility to do just that.

The Speed of Broadband Evolution Lends Itself to Agency Oversight

Since the first publicly reported case of online blocking occurred in 2005, when a rural telephone company called Madison River blocked competing VoIP calls, our dependence on reliable access to an open Internet—and the costs of unreasonable blocking—has continued to grow exponentially. The broadband environment has become increasingly more complex, and the Congress has already given the FCC a wide variety of tools to address it. In 2005, at the time of the *Madison River* case, no one seriously considered that children in rural areas could not do their homework unless the FCC reformed the Universal Service Fund to promote affordable access. Few people were even aware of bandwidth caps, let alone considering how bandwidth caps might have profound impact on our economy or the future of innovation. Congress in 2005 could not have anticipated that broadband providers might track our every move with "Super Cookies," or considered the impact of broadband services on our ability to complete phone calls to rural exchanges, the impact of broadband on our 9–1–1 system, or how broadband policy and an open Internet would become a concern in retransmission consent negotiations. But all of these policy considerations, and more, now crowd the FCC's docket.

Insisting that protections for the open Internet must *include* a ban on paid prioritization, and that net neutrality rules equally to wireless, is not at all the same as saying that these two things are the *only* elements of wise communications policy. To the contrary, as affirmed just last year by a 5–0 vote of the Federal Communications Commission, our communications policy has always embodied the broader fundamental traditional values of service to all Americans, competition, consumer protection, and public safety.[5] Further, as discussed below, even the Commission's decisions to reclassify broadband as a Title I service occurred against a backdrop of expectation that it retained the authority to address both potential future conduct that would threaten the open Internet.[6]

As then-Chairman Michael Powell explained in his concurring statement to the *Cable Modem Order:* "The Commission's willingness to ask searching questions about competitive access, universal service and other important policy issues demonstrates its commitment to explore, evaluate and make responsible judgments about the regulatory framework."[7] The draft legislation would, for the first time, remove the ability of the FCC to "make responsible judgments about the regulatory framework."

Congress Best Succeeds When it Legislates Around Broad Principles and Allows Flexibility for Technological Innovation and Economic Change

The Communications Act of 1934 has survived so long for the same reason that legislation based on fundamental principles—such as the Federal Trade Commission Act of 1914 and the Sherman Antitrust Act of 1894—have survived for so long. It relies on broad principles enacted by Congress and flexible administration by an expert agency capable of handling rapid technological and economic change. This focus on fundamental values such as service to all Americans and consumer protection—rather than focusing on "clarity" and "certainty" around the issues of the moment—made the United States the undisputed leader in telecommunications policy and technology. We are the Nation that put a phone on every farm. We are the Nation that invented the modern wireless industry. We are the Nation that invented the Internet.

In all these cases, Title II played a vital part in ensuring our global leadership. The *Carterfone* proceeding and the *Computer Inquiries* of the 1970s and 1980s made the modern Internet possible. They also demonstrate the value of rulemaking flexibility. Both proceedings responded to changes in technology Congress could not have predicted in 1934 when it created Title II. Although *Carterfone* was initially a sin-

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[5] *Technology Transitions, et al.,* GN Docket No. 13–5, *et al.,* Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, 29 FCC Rcd 1433 (2014) (*Technology Transitions Order*).

[6] *Broadband Industry Practices,* Notice of Inquiry, WC Docket No. 07–52 (2007). *See also id.,* Statement of Chairman Kevin J. Martin; *see also, Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities,* GN Docket No. 00–185; *Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities,* CS Docket No. 02–52, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd. 4798 (2002) (Cable Modem Order), *aff'd, Nat'l Cable & Telecomm. Ass'n* v. *Brand X Internet Servs.*, 545 U.S. 967 (2005), at ¶¶ 108–112.

[7] See Cable Modem Declaratory Ruling, Separate Statement of Chairman Michael K. Powell (2002).

gle adjudication, the Commission quickly found this constant case-by-case approach inherently unworkable and detrimental to the evolution of an independent customer equipment market. The Commission therefore shifted to its Title II Rulemaking authority to create network attachment rules, a development widely praised as paving the way for such innovations as the answering machine (the predecessor to modern voice-mail service), the fax machine, and ultimately the dial up modem—the necessary precursor to today's Internet.[8]

Similarly, the FCC's initial *Computer* proceedings that created the distinction between "enhanced services" (now "information services") and telecommunications services took place against a background of changing technology. Again, the Commission first tried to distinguish between "enhanced services" and "telecommunications services" through adjudication.[9], and again this proved unworkable. Rather than providing the certainty necessary for businesses to innovate and technology to develop, reliance on case-by-case adjudication proved costly, time consuming, and confusing. As a consequence, the Commission adopted a set of bright line rules in its *Computer II* proceeding[10] that allowed a wide range of services, including the dial-up Internet, to flourish. As technology and the marketplace continued to evolve rapidly, the Commission responded in the *Computer III* proceeding[11] by relaxing its rules to reflect the breakup of the Bell monopoly and their relevant changes.

When Congress has legislated to exercise appropriate oversight, it has generally recognized the need to preserve regulatory flexibility by enhancing rulemaking authority. Congress' actions in 1993[12], which lay the foundation for the modern wireless industry, illustrate how Congress has exercised its responsibility for oversight and used its legislative authority to direct the Commission. For more than a decade, the FCC struggled to find the appropriate regulatory framework for mobile wireless voice services. The Commission relied on case-by-case adjudication to determine which services were subject to Title II and thus eligible for interconnection rights and access to phone numbers, and which services were not Title II and therefore not eligible for interconnection. (It is important to stress that the nascent wireless industry *wanted* to be classified as a Title II service to gain the pro-competitive benefits of Title II classification.)

The 1993 Act included numerous innovations.[13] Most importantly, Congress replaced the FCC's case-by-case adjudication with a regulatory classification for "commercial mobile radio service" (CMRS). While specifying the general principle for common definition, it explicitly required that the FCC define the statutory terms via regulation. Congress also explicitly classified CMRS as Title II, but gave the FCC the flexibility to forbear from any provisions that it found unnecessary.

Finally, in 1996, Congress enacted the most sweeping reform of the Communications Act since its inception. In doing so, it benefitted tremendously from more than two decades of FCC rulemaking efforts to introduce competition into the voice and video marketplace. The 1996 Act did not abolish Title II or seek to eliminate FCC rulemaking authority. To the contrary, Congress depended on the FCC to use the combination of Title II rulemaking and forbearance both to shift the industry to a more competitive footing and to ensure that the fundamental values of consumer protection, universal service, competition, and public safety remained central to our critical communications infrastructure.

As these examples show, and as Congress has repeatedly recognized in its periodic updates of the Communications Act, rulemaking authority provides critical flexibility for the Commission to adapt existing rules to rapidly evolving technology and the ever-shifting marketplace. A statute captures a single moment in time. It works best, therefore, when focused on broad and timeless principles—fundamental values such as consumer protection, competition, universal service, and public safety—rather than trying to account for every single detail.

The one exception to this pattern was when Congress passed the Cable Act of 1984. In an effort to provide "certainty" and "clarity," Congress stripped both the

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[8] FCC Office of Plans and Policy Working Paper #31, "The FCC and the Unregulation of the Internet, July 1999.

[9] *Reg. and Policy Problems Presented by the Interdependence of Computer and Communications Services,* Final Decision, 28 FCC 2d 267 (1971) (Computer I).

[10] *In the Matter of* Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 FCC 2d 384 (1980) (Computer II Final Decision).

[11] *In the Matter of Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry),* Phase II Report and Order, 104 F.C.C.2d 958 (1986) (Computer III Phase II Order).

[12] Omnibus Reconciliation Act of 1993, Pub. L. No. 103–66, enacted August 10, 1993.

[13] For example, the 1993 Act gave the FCC the authority to conduct spectrum auctions, which it left to the FCC to define by rule subject to guidance from Congress on general principles. *See Id.*at § 309(j).

FCC and local franchising authorities of the bulk of consumer protection authority. Congress instead included specific provisions to address the handful of specific issues that had emerged in the 15 years the FCC had regulated cable pursuant to its ancillary authority. Congress assumed that by legislating in detail, and addressing the problems immediately before it, the 1984 Cable Act would promote both competition and innovation to the benefit of consumers.

Instead of promoting competition and innovation to the benefit of consumers, the 1984 Cable Act created a concentrated industry marked by escalating prices and poor customer service. Cable operators, free from regulatory oversight, worked quickly to crush incipient competition and leverage their control over programmers. The situation deteriorated so rapidly and thoroughly that, after only eight years, Congress enacted an almost complete and sweeping reversal of its 1984 legislation. The Cable Consumer Protection and Competition Act of 1992, unlike its 1984 predecessor, empowered the FCC to address anticompetitive practices and promote competition in broad terms.

Measuring The Draft legislation Against This Legislative Background

Both Houses of Congress have already expressed interest in conducting a thorough reexamination of the Communications Act similar to the bipartisan effort that culminated in the passage of the Telecommunications Act of 1996. Today's draft legislation, unfortunately, resembles the catastrophically unsuccessful Cable Act of 1984. Like the Cable Act of 1984, it has elevated "certainty" over flexibility and focused on today's headlines rather than on timeless fundamental principles.

Prioritization Was Never The Only Concern For An Open Internet

When the FCC reclassified cable modem service as an information service in 2002, it recognized that it needed to address critical "social policies" such as privacy and universal service.[14] The FCC also relied on its broader authority to address new issues, such as the first case of VoIP blocking.[15] When the FCC issued its Wireline Reclassification Order[16] and accompanying Open Internet Principles, it simultaneously issued a further notice of proposed rulemaking to address concerns around consumer protection, reliability, national security, disability access, and universal service.[17] Critically, the Open Internet Principles were *never* considered on their own as an adequate replacement for Title II. Rather, in reclassifying broadband as an information service, the Commission assumed it would have sufficient authority—via ancillary authority or through other statutory provisions—to address consumer protection, disability access, and universal service through future rulemakings.

In 2006, Congress considered legislation similar to the draft legislation here as part of the Communications Opportunity, Promotion, and Enhancement Act of 2006 (COPE Act).[18] Then, as now, the bill proposed to strip the FCC of its regulatory authority and limit the FCC to case-by-case adjudication. Even in 2006, this limitation was considered too drastic and the entire effort to reform the Communications Act crashed on the unwillingness of drafters to allow sufficient flexibility for the FCC.

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[14] *See, e.g.,* Cable Modem Order at ¶¶ 72, 110–112.

[15] *Madison River Communications, LLC and Affiliated Companies,* File No. EB–05–IH–0110, Consent Decree (2005).

[16] *Appropriate Framework for Broadband Access To The Internet Over Wireline Facilities,* CC Docket No. 02–33; *Universal Service Obligations of Broadband Providers, Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services,* CC Docket No. 01–337; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, 1998 Biennial Review—Review of Computer III ONA Safeguards and Requirements,* CC Docket Nos. 95–20, 98–10; *Conditional Petition of Verizon Telephone Companies for Forbearance under 47 U.S.C. § 160(c) With Regard to Broadband Services Provided By Fiber to the Premises; Petition of Verizon Telephone Companies for Declaratory Ruling Or, Alternatively, For Interim Waiver With Regard To Broadband Services Provided Via Fiber to the Premises,* WC Docket No. 04–242; *Consumer Protection In The Broadband Era,* WC Docket No. 05–271, Report & Order and Notice of Proposed Rulemaking, Policy Statement, 20 FCC Rcd 14853 (2005) ("*Wireline Framework Order*").

[17] *See* Wireline Framework Order at ¶¶ 146–159; *See also Statement of Chairman Kevin Martin* ("government will continue to have a role in this dynamic, new broadband marketplace. Together with our state colleagues, the Commission must vigilantly ensure that law enforcement and consumer protection needs continue to be met"); *Statement of Commissioner Kathleen Q. Abernathy* ("The Commission has already made clear its intention to ensure access to emergency services as Americans transition to packet-switched communications technologies, irrespective of how those services are classified under the Communications Act. As we make clear in today's Notice, we will now turn our attention to other "social policy" requirements, such as those involving disability access, slamming, and consumer privacy.")

[18] 109th Congress, H.R. 5252 & S. 2686.

The approach taken in the COPE legislation has grown less suitable with the passage of time.

When the D.C. Circuit made it clear in the *Comcast* case that it intended to dramatically scale back the applicability of ancillary jurisdiction, Public Knowledge was the first organization to urge the FCC to reclassify broadband as a Title II service precisely *because* only Title II could provide adequate authority to protect our traditional fundamental values of consumer protection, service to all Americans, reliability, and competition.[19] Public Knowledge has continued to press for Title II not only as the most straightforward way to prevent blocking or paid prioritization, but also as the only way to continue to protect the fundamental values that have made our communications infrastructure the envy of the world.

Congress should therefore follow the successful approach that it took in 1993 when Congress used Title II to lay the groundwork for the current wireless industry,[20] and in the approach Congress took in 1996 when it used Title II to create the modern telecommunications market.

The FCC Needs Rulemaking Flexibility

In 2006, both Democrats and Republicans rejected the COPE Act proposal to limit FCC authority over broadband to adjudication of non-discrimination principles. Lawmakers found it inadequate to protect the open Internet and preserve our fundamental values. This approach remains inadequate today. Without rulemaking authority, the FCC cannot address new circumstances that have *already* become part of the public debate. Nor can it address pressing consumer protection issues, as envisioned when the FCC initially classified broadband as an information service.

The lack of rulemaking authority of the Federal Trade Commission is frequently cited as one of the weaknesses of the agency, and specifically one of the reasons why it cannot adequately address concerns about network neutrality. As discussed at length above, while adjudication is a useful tool in specific circumstances, it does not replace the ability of rulemaking to respond to changes in a dynamic marketplace. The process of rulemaking allows all stakeholders to come together in a well-defined and deliberative process subject to judicial review. It allows the FCC to keep itself informed of technological and marketplace developments, and to make necessary adjustments or correct mistakes.

Rulemaking also provides certainty. It ensures consumers can expect the same level of protection for a service regardless of the specific provider or the specific facts of any given case. It simplifies the process of consumer protection for both consumers and the agency. Development of a body of case law takes time, and litigating the first cases can create enormous expense. Rather than creating clarity and certainty, the draft legislation would appear to open the door to endless litigation as the only means to clarify the statutory language. Rather than permitting consumer protections to evolve in concert with the changing broadband marketplace and adjust to changes in technology, the shift to adjudication will create ossification and leave consumers dangerously exposed as a body of relevant case law slowly develops.

As noted above, eliminating the FCC's rulemaking authority would ***not*** be a return to the status quo, but a dramatic shift. The FCC has always assumed it has rulemaking authority since it first reclassified. When the D.C. Circuit rejected the FCC's theory of ancillary authority in 2010, the FCC switched to a theory of regulatory authority using Section 706 of the 1996 Act.[21] The FCC has relied on Section 706 authority—which the draft legislation would eliminate—to sustain its ongoing efforts to reform Universal Service and ensure ubiquitous, affordable access to all Americans in accordance with Section 254,[22] the Broadband Data Improvement Act of 2008,[23] and the relevant sections of the American Recovery Act of 2009.[24]

Even while the FCC considered other sources of rulemaking authority, the FCC explicitly left Title II as an option should it ever become necessary. If Congress intends to remove this option, it needs to provide the FCC with an equally flexible tool to replace Title II.

Congress Cuts Short FCC Authority To Address Vital Public Policies

It is important, therefore, to review the list of consumer protections and pro-competitive policies found in Title II which this draft legislation would foreclose by pro-

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[19] *Ex parte* Submission of Public Knowledge, GN Docket 09–191 (filed Jan. 28, 2010).
[20] Omnibus Reconciliation Act of 1993, Pub. L. No. 103–66, § 6002(b)(2)(A)(iii).
[21] Now codified at 47 U.S.C. § 1302.
[22] 47 U.S.C. § 254
[23] Broadband Data Improvement Act of 2008, Pub. L. No. 110–385 (Oct 10, 2008)
[24] American Recovery and Investment Act of 2009, Pub. L. No. 111–115 (Feb. 17, 2009).

hibiting the Commission from classifying broadband as Title II and by eliminating Section 706 as a separate source of authority.

- Consumer privacy (Section 222)
- Truth in billing regulations (derived from Section 201)
- Authority to resolve complaints with regard to overcharges or unreasonable billing practices, deceptive practices, failure to provide adequate facilities to support promised services, or otherwise address consumer protection issues (derived from Section 201)
- Authority to address service to all Americans, carrier of last resort, or refusal to serve based on race, religion, or national origin (Section 202)
- Authority over 9–1–1 (Section 251)
- Authority over interconnection (Section 251)
- Ability to compel broadband providers to report outages, or provide other necessary information to compile relevant information so that the Commission may assess deployment, affordability, ability to support critical services such as 9–1–1 or national defense, impact on small businesses, or otherwise ascertain any pertinent information relevant to wireline broadband deployment. (Sections 214, 215, 218, 256, 257 and 1302 (Section 706))
- Universal Service Fund reform (Sections 254, 1302)
- Disability access (Section 255)
- Access to pole attachments for broadband providers not offering bundled video or Title II telecommunications (Section 224)
- Liability for acts and omissions of agents, so that companies cannot use contractors or subsidiaries to avoid responsibility for anti-consumer conduct (Section 217)
- Preemption of state regulation (Sections 253, 1302)

As noted above, elimination of Section 706 as a source of regulatory authority would appear to make it effectively impossible for the Commission to collect information necessary to determine whether advanced telecommunications services are being adequately deployed to all Americans in a timely manner, or to otherwise ascertain essential information as to our national broadband infrastructure.[25]

It is also noteworthy that in 2006, when Congress considered similar legislation as part of COPE, Congress includes a provision expressly preempting state prohibitions on municipal broadband, a provision that enjoyed bipartisan support.[26] Here, the legislation proposes to eliminate the primary source of authority for Federal preemption of these restrictions without providing any replacement. Given that deployment of competing high-speed broadband systems is generally recognized today as even more critical than it was in 2006, repeal of Section 706 authority without providing any replacement to address this issue would be a step backward from where Republicans and Democrats were on this issue ten years ago.

Problems With Alternative Sources Of Authority

Proponents of the draft legislation note that the Commission may have other sources of authority to achieve these goals—notably Title III for wireless services and Title VI for cable services. Additionally, proponents of the draft legislation argue that by classifying broadband as an "information service," that the Commission's ancillary authority remains intact.

As an initial problem, it is hard to reconcile this defense of the language with the stated goal of providing certainty. Instead of the well-known and established contours of Title II, the legislation would require the Commission to hunt among its possible sources of authority. Even where authority arguably exists, it may apply only to one technology (*e.g.,* wireless, or cable operators) but not others.

Additionally, the judicial expansion of the "common carrier prohibition," and the judicial hostility to exercise of the FCC's ancillary authority create further uncertainty. In *Echostar Satellite LLC* v. *FCC,*[27] the D.C. Circuit held that because ancillary authority is not "delegated by Congress," the court will not defer to any Commission use of ancillary authority under Chevron.[28] The loss of *Chevron* deference

[25] *Comcast Corp.* v. *FCC,* 600 F.3d 642, 659 (D.C. Cir. 2009) (interpreting clause stating that Section 256 does not "expand any existing authority" as negating ancillary authority).

[26] H.R. 5252, § 4.

[27] 704 F.3d 992 (D.C. Cir. 2013).

[28] *Id.* at 998 n.3. Additionally, the case takes a generally narrow view of the FCC's ability to enforce device attachment rules through 629. The case is generally instructive of the narrow

for FCC actions using ancillary authority significantly undermines its usefulness as a source of authority and invites judges to substitute their own judgment for that of the agency—hardly a recipe for clarity and certainty.

The same is true of the common carrier prohibition. The D.C. Circuit has issued two opinions that shed light on what constitutes a "core common carrier obligation" that the FCC may not impose on an information service.[29] It has limited the usefulness of this guidance by saying that any too rigid or inflexible application of a rule could transform it into a "common carrier obligation" and leave enforcement open to an "as applied" challenge.[30] Again, this seems a recipe for confusion and chaos rather than clarity and certainty.

Finally, we cannot ignore the enormous preclusive effect Congress has when it acts. This legislation explicitly proposes to severely curtail and limit the scope of FCC authority over broadband Internet access service, and shield broadband providers from the consumer protections in Title II. Any attempt by the FCC to protect consumers using other sources of authority would need to overcome the argument that Congress deliberately intended to foreclose Commission action and limit it to the language of this specific provision.

Example: How The Draft Legislation Effectively Curtails FCC Jurisdiction Over Interconnection

Although the language does not explicitly eliminate any FCC authority over interconnection, it eliminates any application of Section 251[31] to broadband or any other "advanced telecommunication service" by prohibiting Title II classification. It is hard to see how the FCC could find authority for any jurisdiction over broadband interconnection under this statute. Even if it did find jurisdiction under a theory of ancillary authority or from some other source, interconnection is a quintessential common carrier obligation. Finally, even if the FCC found jurisdiction, and promulgated an interconnection rule sufficiently vague to avoid the common carrier prohibition, the FCC would face the argument that this is precisely the sort of regulation Congress intended to prohibit when it passed the draft legislation.

The Draft Legislative Language Does Not Appear To Address Existing Forms of Discrimination, Let Alone Provide Adequate Authority For Future Forms Of Discrimination Or Other Threats To The Open Internet

Additionally, the language proposed to address threats to the open Internet does not address conduct that would have been reachable under the Commission's 2010 rules. In this regard, the draft legislation is clearly a step backward, rather than a step forward, and does not appear to comport with the traditional understanding of network neutrality.

By changing the broader principle of 'no discrimination' into the very narrow and limited case of 'no paid prioritization or throttling,' the draft legislation falls short of even the inadequate rules of 2010, let alone the more robust protections offered by Title II. For example, these rules would not have prevented AT&T from limiting FaceTime to particular tiers of service—as it tried to do in 2012. It would not address discriminatory use of data caps, such as Comcast has used to favor its own streaming content over that of rivals. It would not address potential issues arising at Internet interconnection, the gateway to the last mile. Even worse, by eliminating any flexibility on rulemaking or enforcement, the bill would prevent the FCC from addressing any new forms of discrimination and threats to openness that arise.

If the proposed rule cannot even stop forms of discrimination we've already seen, how can it possibly protect the open Internet going forward?

Furthermore, the exemption for specialized services combined with the lack of rulemaking authority creates a potential loophole to sell prioritized service to specific applications or content simply by calling these fast lanes "specialized services." It is true that the FCC's 2010 rule had a similar loophole, but the FCC announced it would continue to address this with future rulemakings. This draft legislation creates the same loophole, but strips the FCC of the power to plug it. While the draft legislation prohibits specialized services that are ***clearly*** a sham, it gives the FCC no power to define this and leaves open specialized services that effectively create fast lanes but with some fig leaf alternative explanation.

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way the D.C. Circuit has read the Commission's Title VI authority, suggesting why it would be unduly optimistic to rely on anything in Title VI as a source of authority for broadband.

[29] Cellco v. FCC, 700 F.3d 534 (D.C. Cir. 2013); Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014).

[30] *Cellco* v. *FCC* at 548–549.

[31] 47 USC § 251.

The Draft Legislation Creates An Enormous Loophole For Censorship and Surveillance

The language of the draft legislation also creates a significant loophole that could allow censorship, surveillance, or other actions that thwart the Internet's openness under the guise of preventing copyright infringement or any other "unlawful activity." A bill that would permit ISPs to inspect and discriminate among Internet traffic so long as they can argue they are simply engaging in "reasonable efforts" to prevent infringement or illegal activity could do irreparable damage to any Congressional or agency efforts to protect an open Internet.

Although the FCC has in the past included limited exceptions to its open Internet rules for copyright measures,[32] this is significantly less worrisome than the draft legislation. An agency creating a rule with an exception for copyright infringement is worlds apart from a law that prevents the expert agency from using *any* authority to act against discriminatory behavior if the ISP can argue its efforts were designed to prevent infringement or any other illegal activity.

This is not just an academic distinction. After all, the litigation that sparked multiple rounds of agency rulemakings on net neutrality was centered around Comcast limiting access to peer-to-peer applications like BitTorrent, regardless of the legality of the actual content being transmitted.[33] It is not so difficult to imagine actions that explicitly or implicitly favor established content distributors at the expense of technologies or platforms that could potentially be used to infringe copyright, with carriers using the copyright infringement loophole of the draft legislation to circumvent open Internet enforcement.

Additionally, by elevating this exception in statutory language, Congress would invite others to use this provision well beyond its intended purpose. For Congress to affirmatively create such an exception, despite already stating that open Internet rules are subordinate to existing laws governing law enforcement access, the statute appears to create permission for unlawful surveillance. Because broadband Internet access is the basis for provision of voice-over-IP services protected by Section 222, and other electronic communication protected by ECPA,[34] this apparent invitation for broadband access providers to 'voluntarily' spy on their customers risks undermining Congress' ongoing efforts to balance civil liberties with law enforcement and national security concerns.

Similarly, by uniquely elevating intellectual property within the context of the Communications Act, the draft legislation may be argued to expand the requirement for broadband operators to take measures to read and intercept arguably infringing traffic well beyond the existing safe harbor requirements under the Digital Millennium Copyright Act[35] and the Communications Decency Act.[36] Unlike regulatory language, which is often merely explanatory and clearly limited, it is a canon of statutory interpretation that every word of legislation is to be given substantive meaning. Congress should not create new ambiguities and uncertainties in an already contentious area of law.

Precluding the Use of Title II Through Legislation Raises Serious Concerns

Those seeking to limit FCC authority like to recite the mantra "first do no harm." While we appreciate Congress' role in updating the Communications Act periodically, we remain concerned that the draft legislation is likely to cause more harm than benefit. We urge the FCC to move forward on Title II rules and urge Congress to evaluate those in light of broader policy goals and the concerns we raise about the draft.

The history of the development of our modern communications landscape demonstrates that Title II preserves critical values, promotes competition and investment, and is flexible enough to accommodate changes in technology and the marketplace. The concerns that Title II is insufficiently flexible for broadband can—and

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[32] *See Preserving the Open Internet,* GN Docket No. 09–191, *Broadband Industry Practices,* WC Docket No. 07–52, Report and Order, ¶ 111, Appendix A § 8.9 (Dec. 23, 2010) ("Nothing in this part prohibits reasonable efforts by a provider of broadband Internet access service to address copyright infringement or other unlawful activity.").

[33] Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications (Nov. 1, 2007), *https://www.publicknowledge.org/pdf/fp_pk_comcast_complaint.pdf.*

[34] 18 U.S.C. § 2701 *et seq.*

[35] 17 U.S.C. § 512.

[36] 47 U.S.C. § 230(c)(1). The breadth of the bill's exception for efforts targeted at any "other unlawful activity" not only encompasses alleged copyright infringement, but a wide range of allegations, including defamation, misappropriation, discrimination, breaches of contracts, and a host of others.

should—be thoroughly examined in this fuller context. In doing so, Congress can continue to protect the fundamental values of our communications system.

STATEMENT OF HON. ROBERT M. MCDOWELL, PARTNER, WILEY REIN LLP AND SENIOR FELLOW, HUDSON INSTITUTE

Commissioner MCDOWELL. Thank you, Mr. Chairman, and Ranking Member Nelson, and all the distinguished members of the Committee. It is really an honor to be back here before you again. I am a partner at Wiley Rein and as a Senior Fellow of the Hudson Institute's Center for Economics of the Internet. Nonetheless, I am not testifying today on behalf of any client of Wiley Rein or on behalf of the Hudson Institute. Any opinions I express today are purely my own.

From my perspective, by the way, I think it is quite appropriate for your first hearing of the new Congress to be focused on the future of the Internet. I have always supported the goals of an open Internet that maximizes freedom, and that is precisely what the private sector built as the Internet migrated further away from government control.

We are here today, however, because the FCC is on the brink of applying an antiquated, but powerful, 80-year-old law to the dynamic and ever-evolving Internet. Title II of the Communications Act of 1934 was designed in an era when people held their phones with two hands. While I was a Commissioner, I kept my grandmother's 1950s black rotary dial phone from San Angelo, Texas on my desk to remind me of the lack of innovation and investment produced by Title II. On her birthday—you all may remember this—we kids would stay up past 11 p.m. to call her because the heavy-handed regulatory capture of Title II produced artificially high long distance rates, which came down just a little, late at night.

The FCC's Chairman, a friend of mine, maintains that the so-called just and reasonable standard of Sections 201 and 202 will be good policy for America's world-leading Internet economy. He and I are both students of history, so let us allow history to be our guide to test that premise.

Since President Franklin D. Roosevelt signed Title II into law, the principles underpinning Sections 201 and 202 have been litigated in Federal appellate courts nearly 400 times, with the last decision being rendered as recently as 2012. That equates to an average of five court cases per year since Title II became law. And those are only cases that involve the just and reasonable standard and not other aspects of Title II, which my friend, Gene Kimmelman, has suggested also be included in new FCC rules.

Similarly, within the FCC itself, the just and reasonable standard has been litigated in administrative proceedings 1,069 times. That equates to more than 13 cases per year since inception of Title II. In short, "just and reasonable" is perhaps the most litigated term telecommunications jurisprudence. Applying it to the Internet would create a billable hours bonanza for telecom lawyers, so really I should be all for this. But is this what we want America's 21st century tech policy to look like? To put a finer point on it, do we want the robust Internet economy to be shaped by engineers, consumers, and entrepreneurs, or lawyers?

Today, policymakers have a choice in front of them, a sharp choice. Do they want to protect an open Internet, or do they want broader government engineering of the Internet ecosphere? The draft bill, although imperfect, attains the ostensible policy goals net neutrality proponents have advocated for years by essentially restating existing law, but allowing the FCC to enforce it. For instance, the bill prohibits anti-competitive throttling and paid prioritization. It also mandates transparency for consumers and much more.

These are also the goals outlined by President Obama in his Directive to the FCC of November 10. Logically then, net neutrality proponents should be happy with the goals of the draft, but some want more than their stated goals. They want Title II and the power that comes with it. But make no mistake: Title II would drag America's tech sector under its purview.

The Supreme Court said as much when it held in 2005 that reclassification of broadband Internet under Title II, "would subject to mandatory common carrier regulation all information service providers that use telecommunications as an input to provide information services to the public." Translated, if you think you are merely a content, or application provider, or a tech company, after Title II reclassification you could be eventually regulated like an old-fashioned phone company. This is especially true as tech and telecom companies continue to morph to look like one another. And FCC attempts to refrain or forebear from the vast majority of Title II's 1,000 or so requirements will likely fail an appeal because any reasons given to justify sweeping forbearance logically undercut the reasons for applying Title II to begin with. In other words, Title II classification and massive forbearance contradict each other.

Although I continue to advocate for a comprehensive rewrite of our communications laws to focus more on consumer protection, as Senator Nelson pointed out, rather than outdated technology-centric approaches, the draft in front of the Senate today provides all sides of this debate with the opportunity to declare victory. The last question is, will they?

Thank you very much, and I look forward to your questions.

[The prepared statement of Mr. McDowell follows:]

PREPARED STATEMENT OF HON. ROBERT M. MCDOWELL, PARTNER, WILEY REIN LLP AND SENIOR FELLOW, HUDSON INSTITUTE

Overview

Chairman Thune, Ranking Member Nelson and distinguished Members of the Committee, thank you for having me testify before you today. My name is Robert McDowell. From 2006 until 2013, I served as a Commissioner of the Federal Communications Commission (FCC). Currently, I am a partner of the internationally recognized law firm of Wiley Rein LLP. I am also a Senior Fellow at the Hudson Institute's Center for Economics of the Internet, a non-profit, non-partisan policy research organization. Nonetheless, I am not testifying today on behalf of any client of Wiley Rein or on behalf of the Hudson Institute. The opinions I express today are strictly my own.

I am especially honored to be testifying at the first substantive hearing of this Committee in the 114th Congress. From my biased perspective, it is quite appropriate that your first hearing is focused on the future of Internet freedom.

I have always supported policies that promote an open and freedom-enhancing Internet. That is precisely what the American private sector built as the result of long-standing and bipartisan public policy that insulated the Net from unnecessary regulation.

During my tenure at the FCC, the issue of government regulation of Internet network management, or "net neutrality," came before me several times in a variety of contexts. I am deeply familiar with the arguments for and against new regulations in this area. I voted against the Commission's first two attempts to issue new rules for many reasons, not the least of which was that the FCC was reaching beyond the powers Congress gave it. Each time, the appellate courts largely agreed and largely struck down the FCC's attempt to regulate in this space.[1]

The 114th Congress has a historic opportunity to end the debate by forging ahead with a legislative alternative.

In the meantime, however, the FCC faces one of the most important questions in its 80-year history: are its intentions to protect an open Internet, or merely to establish its unlimited power over the entire Internet ecosphere? FCC Chairman Tom Wheeler says we will have an answer on February 26.

As he said at the Consumer Electronics Show on January 7, his preference is to depart from Clinton-era bipartisan policy and classify the Internet as a "utility" using Title II of the Communications Act of 1934.[2] Chairman Wheeler noted that while the Commission initially considered a regulatory approach under Section 706, such an approach—based on a "commercially reasonable" standard—was deemed insufficient because "commercially reasonable could be interpreted as what is reasonable for the ISPs, not what's reasonable for consumers or innovators."[3] Instead, Chairman Wheeler indicated that the Commission will impose the Title II "just and reasonable" standard.[4]

I am deeply familiar with Title II, having studied its mandates for seven years as a senior Commissioner on the FCC and as an attorney for more than 24 years in the telecommunications arena. I can say with confidence that bringing down the blunt "command-and-control" sledge hammer of Title II onto the Internet will eventually cause collateral damage to America's tech economy.

As "tech" and "telecom" companies morph to look like each other by deploying their own massive fiber and wireless networks embedded with software and content to better serve consumers, Title II will end up regulating all such companies under its "mother-may-I-innovate" dictates. The Supreme Court said as much in 2005 in its *Brand X* decision.[5]

Furthermore, as the Progressive Policy Institute determined last year, Title II regulation of the Net could trigger state and local regulations, taxes and fees costing consumers "a whopping $15 billion" a year. And that's "on top of the adverse impact on consumers of less investment and slower innovation that would result" from Title II.[6]

And make no mistake, trying to refrain, or "forbear," from applying most of Title II's approximately 1,000 heavy-handed requirements while selecting only a few, as proposed by Chairman Wheeler, will make an FCC order impossible to defend in court because the picking and choosing between who gets regulated and who does not will look arbitrary and politically-driven to appellate judges.

The tragedy of this debate is that no one, including phone, wireless and cable companies, has ever contested the goals of keeping the Internet open. It has been open and freedom-enhancing since it was privatized in the mid-1990s due to market forces and protections under existing antitrust and consumer protection laws. Instead, the fight has devolved into a question of how overreaching and heavy-handed the FCC would be in pursuing its ostensible goals.

It's time to choose a different path and put to rest this debate. Although I still hope for a comprehensive rewrite of our Nation's communications laws, the legislation being considered today has the potential to provide all sides with a way out.

For net neutrality supporters, they would achieve their long-sought-after goals of: adding protections for consumers and tech start-ups; ensuring Internet service providers could not unlawfully block or throttle content and applications or impose anticompetitive paid prioritization requirements; creating Congressionally-defined

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[1] *Verizon* v. *FCC,* 740 F.3d 623 (D.C. Cir. 2014); *Comcast Corp.* v. *FCC,* 600 F.3d 642 (D.C. Cir. 2010).

[2] 47 U.S.C. § 201 *et seq.*

[3] Hon. Tom Wheeler, Chairman, FCC, Address to the 2015 International Consumer Electronics Show (Jan. 7, 2015).

[4] *Id.* (noting that the FCC will "propose rules that say no blocking, no throttling, [and no] paid prioritization," and that the "yardstick against which behavior should be measured . . . is just and reasonable").

[5] *NCTA v. Brand X Internet Servs.,* 545 U.S. 967, 994 (2005) ("[Reclassification] would subject to mandatory common-carrier regulation all information-service providers that use telecommunications as an input to provide information service to the public.").

[6] Robert Litan and Hal Singer, *Outdated Regulations Will Make Consumers Pay More for Broadband,* Progressive Policy Institute, at 1 (Dec. 1, 2014).

enforcement authority for the FCC in this space, and more. They would also be able to enjoy, for the first time, the *certainty* that a court cannot hand them another loss, or that a future FCC could not roll back the rules.

For opponents of new FCC rules, the bill would: take the specter of Title II off the table; restore regulatory certainty; protect freedom of speech; clip the FCC back onto its Congressional leash so it can't regulate the entire Net; and create a legal firewall that would protect investment and innovation in the computer network infrastructures that underpin the Internet ecosphere.

The unelected FCC stands at a fork in the road. If it rushes down the Title II lane, it will own the consequences: decreased investment, a hobbled tech sector, new taxes and fees on consumers and global regulators emboldened to regulate the Net like an old-fashioned phone company as well.[7] Going in this direction would reveal that having full power over the Net economy was what the FCC really wanted all along.

In the other direction, however, the FCC can attain its and the White House's stated policy goals, be protected by Congressional action, and bask in the glow of achieving a bipartisan consensus of historic proportions. The future of the Internet, and America's digital economy, deserve no less.

Extended Analysis

Classifying Broadband as a "Utility"—Style Common Carrier Under Title II of the Communications Act of 1934 Would Generate Litigation and Uncertainty, Cause Unintended Consequences and Undermine Growth in the Entire Internet Ecosystem

The notion that retrofitting Title II, an antiquated—but powerful—80-year-old statute designed for the copper-based, analog, voice-only phone monopolies of the early 20th Century, would somehow be good for the dynamic and ever-evolving Internet ecosphere is a faulty premise. Title II has the potential to be devastating to the entire Internet ecosystem. While I was a Commissioner, I kept my grandmother's 1950s black rotary-dial phone from San Angelo, Texas in my office as a reminder of the lack of innovation and investment produced by Title II. The law erroneously presumed that a natural monopoly for telecommunications would always exist and, accordingly, it froze in place the technologies of the day. As a result, America was denied the benefits of entrepreneurial risk taking such as new investment, innovation, lower prices and improved consumer choice. Over time, markets, regulators and legislators were able to create a deregulatory environment that fostered a virtuous cycle of investment and innovation that obviated the need for regulation.

During my 24 year career in the telecommunications space, I have become quite familiar with the Communications Act. As the FCC moves forward with its plan to impose Title II onto the Internet, even if ostensibly "lightly,"[8] I am deeply concerned about the ramifications of excavating an ancient law that was written when people held their phones in two hands and applying it not only to America's beautifully chaotic tech sector but also to technologies and services that have not yet been invented.

As a threshold matter, FCC Chairman Tom Wheeler's proposal to apply sections 201 and 202[9] to Internet access will inevitably lead to litigation. Not only will the legality of the FCC's new order be challenged, but subsequent enforcement actions will be as well.

Let's allow history to be our guide. Since being signed into law by President Franklin D. Roosevelt in 1934, the principles underpinning sections 201 and 202 have spawned nearly 400 court cases.[10] The first appellate case was decided in

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[7] Expansion of the government's reach into the operations of the Internet is only providing cover and encouragement to foreign governments as well as multilateral and intergovernmental institutions that want to have, as Vladimir Putin said, "international control of the Internet." Vladimir Putin, Prime Minister of the Russian Federation, Working Day, *Prime Minister Vladimir Putin Meets with Secretary General of the International Telecommunications Union Hamadoun Touré,* GOV'T OF THE RUSSIAN FED'N (June 15, 2011), available at *http://premier.gov.ru/eng/events/news/15601/*.

[8] *See* Wheeler, *supra* note 3.

[9] *Id.*

[10] This estimate of court cases was determined by researching cases citing the "just and reasonable" or "unjust or unreasonable" standards in the context of sections 201(b) and 202(a) of the Communications Act. The cases included in this estimate vary with respect to the depth of analysis involved and provide a general context as to the amount of litigation sections 201 and 202 have spawned over the years. *See, e.g.,* Global Crossing Telecomms., Inc. v. *Metrophones Telecomms., Inc.,* 550 U.S. 45, 47 (2007); *Ambassador, Inc.* v. *United States,* 325 U.S. 317, 323 (1945); *AT&T Co.* v. *United States,* 299 U.S. 232, 246–47 (1936); *Cellco P'ship* v. *FCC,* 700 F.3d

1936[11] and the most recent appellate court decision was handed down in 2012.[12] Additionally, as the result of decades of administrative litigation, the FCC itself has issued over 1,000 decisions attempting to apply the same "just and reasonable" standard Chairman Wheeler proposes today.

In short, the term "just and reasonable" is perhaps the most litigated phrase in telecommunications jurisprudence. Is this what we want America's 21st Century tech policy to look like? And I say this as an attorney, with all due respect to my fellow practitioners: do we want our world-leading Internet economy to be shaped by engineers, consumers and entrepreneurs, or *lawyers*?

Additionally, not only would a new Title II regime, however "skinny," produce an abundance of lawsuits and uncertainty, but the premise of applying it to begin with is flawed as well. Proponents of regulating the Internet under Title II argue that doing so would prevent "two-sided markets," usage-based pricing and "discrimination"[13] of Internet traffic. In fact, the exact opposite is true. Not only does Title II allow usage-based pricing, that is exactly what it is designed to regulate.[14] Not only does it allow for the "reasonable" discrimination of traffic, it mandates that similarly situated producers of traffic can be charged similar rates if those rates are just or reasonable.[15] Title II would not prevent network operators from charging some content and application—or "edge"—providers to carry their Internet traffic. Indeed, Title II would allow for a "sending party pays" construct that some American edge providers and network operators are battling against *together* in international regulatory arenas.[16] Furthermore, it would provide cover and encouragement to the Vladimir Putins of the world who are looking to regulate the Internet globally.

At the consumer level, industry analysts have concluded that new utility-like economic regulation of the Internet would likely "have the perverse effect of raising prices to all users" (hitting low-income users the hardest), and some users would likely see the end of their service entirely.[17]

534, 548 (D.C. Cir. 2012); *Virgin Islands Tel. Corp.* v. *FCC,* 444 F.3d 666, 669–70 (D.C. Cir. 2006); *AT&T Corp.* v. *FCC,* 448 F.3d 426, 435 (D.C. Cir. 2006); *Nat'l Ass'n of State Util. Consumer Advocates* v. *FCC,* 372 F.3d 454, 456, 460 (D.C. Cir. 2004); *Orloff* v. *FCC,* 352 F.3d 415, 419 (D.C. Cir. 2003); *Hi-Tech Furnace Sys., Inc.* v. *FCC,* 224 F.3d 781, 792 (D.C. Cir. 2000); *Bell Atlantic Tel. Co.* v. *FCC,* 79 F.3d 1195, 1202 (D.C. Cir. 1996); *Am. Message Centers* v. *FCC,* 50 F.3d 35, 39 (D.C. Cir. 1995); *MCI Telecommunications Corp.* v. *FCC,* 59 F.3d 1407, 1414 (D.C. Cir. 1995); *Capital Network Sys., Inc.* v. *FCC,* 28 F.3d 201, 204 (D.C. Cir. 1994); *Nat'l Rural Telecom Ass'n* v. *FCC,* 988 F.2d 174, 184 (D.C. Cir. 1993); *Illinois Bell Tel. Co.* v. *FCC,* 988 F.2d 1254, 1260 (D.C. Cir. 1993); *Competitive Telecomms. Ass'n* v. *FCC,* 998 F.2d 1058, 1064 (D.C. Cir. 1993); *MCI Telecomms. Corp.* v. *FCC,* 917 F.2d 30, 39 (D.C. Cir. 1990); *MCI Telecomms. Corp.* v. *FCC,* 842 F.2d 1296, 1303 (D.C. Cir. 1988); *Ad Hoc Telecomms. Users Comm.* v. *FCC,* 680 F.2d 790, 795 (D.C. Cir. 1982); *Am. Broad. Companies, Inc.* v. *FCC,* 663 F.2d 133, 138 (D.C. Cir. 1980); *MCI Telecomms. Corp.* v. *FCC,* 627 F.2d 322, 336 (D.C. Cir. 1980); *AT&T Co.* v. *FCC,* 449 F.2d 439, 450 (2d Cir. 1971).

[11] *AT&T Co.,* 299 U.S. at 246–47.

[12] *Cellco P'ship.,* 700 F.3d at 548.

[13] The term "discrimination" is often misused in the net neutrality debate. Discrimination can have many meanings. To a network engineer, discrimination is absolutely necessary and means having the ability to manage Internet Protocol networks. For instance, consumers downloading movies want those video bits to arrive on their screens quickly and without interference from other Internet traffic such as e-mail or voice over Internet protocol (VoIP) communications. Similarly, a caller using VoIP in an emergency wants his/her call to 911 to take priority over Internet traffic carrying a cat video. Another example is Internet traffic carrying heart monitoring data from a patient to his/her doctor. During a medical crisis, the patient will want discrimination, thus allowing life-saving data to reach the doctor as quickly as possible and ahead of other traffic. This is also known as "prioritization," something net neutrality proponents oppose. Treating all Internet traffic "equally," as many net neutrality proponents want, would undermine the beneficial aspects of allowing the freedom to innovate through the ability to discriminate in the engineering context. What should *not* be permitted, and is prohibited under existing antitrust and consumer protection laws, is discrimination that has an anticompetitive effect that harms consumers. Boiling the net neutrality debate down to the bumper sticker of "treat all Internet traffic equally" may have popular appeal, but it is a misleading slogan that will likely have dangerous implications if it is codified as public policy.

[14] 47 U.S.C. §§ 201–202.

[15] *Id.* § 202(a).

[16] *Revisions of the International Telecommunications Regulations—Proposals for High Level Principles to be Introduced in the ITRs,* ETNO, CWG–WCIT12 Contribution 109, at 2 (2012), available at *http://www.itu.int/md/T09–CWG.WCIT12–C–0109/en.*

[17] Howard Buskirk, *Investors, Analysts Uneasy About FCC Direction on Net Neutrality,* COMM. DAILY, Oct. 2, 2009, at 2; *see also* National Cable & Telecommunications Association Comments at 19 and Verizon and Verizon Wireless Reply Comments at 17–18 to *Preserving the Open Internet,* GN Docket No. 09–191; *Street Talk,* CableFAX, June 14, 2010 ("But while it's business as usual now, capital investment will come down if Title II becomes a reality, said Credit Suisse

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Finally, a Title II framework would lay a broad-based legal foundation for the Commission eventually to regulate the entire Internet ecosystem—not just network operations, but content, applications and potentially devices. Such is the goal of the influential thought-leader of the movement, the man who coined the term "net neutrality," Columbia law professor, Timothy Wu. He provided refreshingly honest testimony alongside me at a House Judiciary Committee hearing on net neutrality last June.[18] His influence over shaping the arc of net neutrality policies is not merely theoretical—it is real and highly effective. For example, Professor Wu has tremendous influence at the FCC, having authored the first-ever net neutrality merger conditions during the Commission's approval of the AT&T/BellSouth transaction in 2006.[19] In short, the ultimate policy goal of many Title II proponents is comprehensive industrial policy for the entire Internet space.

Furthermore, turning information services into telecommunications services via a *de novo* classification effort by the FCC would render drawing a principled line between broadband service providers and other entities that combine transmission with information processing or storage, such as the content delivery networks that give us Netflix movies or YouTube videos, impossible. In short, as "tech" and "telecom" companies blend their technologies and business operations, or "converge," to better serve consumers, the differences between them are disappearing. Many such companies have thousands of miles of fiber (embedded with intelligence and content) that connect servers and routers all over the country to deliver a slurry of ones and zeros (which present themselves to consumers as voice, data and video services) as quickly as possible to consumers. Designed in 1934, Title II is incapable of seeing these 21st Century technological distinctions and is likely to draw all such companies under its powerful purview. The Supreme Court has warned that this scenario could develop. It held in its *Brand X* decision in 2005 that "[reclassification] would subject to mandatory common-carrier regulation all information-service providers that use telecommunications as an input to provide information service to the public."[20] Or, as Robert Litan recently explained, "[t]here is a very slippery slope from having designated ISPs as being subject to common carriage regulation to having to include other forms of Internet transmissions as well because they arguably use 'telecommunications services', the legal hook in Title II for its application."[21] That captures nearly any edge provider that owns even the smallest amount of transmission, processing, storage or caching facilities.

This analysis is neither new nor partisan.[22] In fact, the Clinton-era FCC Chairman, William Kennard, presciently said in 1998:

> Turning specifically to the matter of Internet access, we note that classifying Internet access services as telecommunications services could have significant consequences for the global development of the Internet. We recognize the unique qualities of the Internet, and do not presume that legacy regulatory frameworks are appropriately applied to it.[23]

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telecom services dir[ector] Jonathan Chaplin. He said the next place companies would look to capture some of the return is costs, which would mean jobs.").

[18] *See* House Judiciary Subcommittee on Regulatory Reform, Commercial and Antitrust Law, *Net Neutrality: Is Antitrust Law More Effective than Regulation in Protecting Consumers and Innovation*?, 113th Congress, 2nd sess., 2014 (testimony of Timothy Wu), available at *http://judiciary.house.gov/__cache/files/bcecca84–4169–4a47-a202–5e90c83ae876/wu-testimony.pdf.* (noting that state manipulation of the Net would shape "not merely economic policy, not merely competition policy, but also media policy, social policy" and "oversight of the political process").

[19] Spencer E. Ante, *Tim Wu, Freedom Fighter,* BUS. WK., Nov. 8, 2007, available at *http://www.businessweek.com/stories/2007–11–08/tim-wu-freedom-fighterbusinessweek-business-news-stock-market-and-financial-advice;* Robert M. McDowell, *This is Why the Government Should Never Control the Internet,* WASH. POST, July 14, 2014, available at *http://www.washingtonpost.com/posteverything/wp/2014/07/14/this-is-why-the-government-should-never-control-the-internet/*.

[20] *Brand X,* 545 U.S. at 994.

[21] *See* Robert E. Litan, *Regulating Internet Access as a Public Utility: A Boomerang on Tech If It Happens,* Economic Studies at Brookings, at 2 (June 2, 2014).

[22] American Internet policy enjoys a rich heritage of bipartisanship. The Clinton-Gore-era flexible "hands-off" approach to Internet governance, and other Internet policy matters, has been supported by both Republicans and Democrats in Congress and the FCC for over two decades. These policies have served not only American consumers and the U.S. economy well, but also have helped spread freedom and prosperity across the globe through the power of the mobile Internet. This year, Congress has an opportunity to recast American Internet policy in a constructive and bipartisan manner worthy of its heritage.

[23] *Federal-State Joint Board on Universal Service,* CC Docket No. 96–45, Report to Congress, 13 FCC Rcd 11501, ¶82 (1998).

Just two years later, he reiterated:

> It just doesn't make sense to apply hundred-year-old regulations meant for copper wires and giant switching stations to the IP networks of today. . . . We now know that decisions once made by governments can be made better and faster by consumers, and we know that markets can move faster than laws.[24]

And here's what the Clinton White House had to say about placing legacy regulations on the Internet: "We should not assume. . .that the regulatory frameworks established over the past sixty years for telecommunications, radio and television fit the Internet."[25]

Rather than applying the 80-year old Communications Act to the Internet, if Congress believes that a change is needed to protect consumers, entrepreneurs, innovation and free markets, it should consider new legislation that is narrowly tailored and reflects the market realities of the early 21st Century. Even more importantly, Congress should consider a comprehensive update of our communications laws, and I hope that would be a topic for a future hearing.

Wireless Broadband Is Different from Wireline Internet Services and Should Not Be Subject to Rigid Rules

The American wireless industry has been a crown jewel of the American economy for over 30 years. In fact, since its inception, the domestic wireless industry has invested more than $430 billion in infrastructure.[26] The White House Office of Science and Technology has noted that "[a]nnual investment in U.S. wireless networks grew more than 40 percent between 2009 and 2012, from $21 billion to $30 billion."[27]

Analysts' projections estimate that between 2013 and 2017 wireless infrastructure investment will generate as much as $1.2 trillion in economic growth and create (directly and indirectly) up to 1.2 million new jobs.[28] This will result in an estimated $85 to $87 billion of economic growth each year from 2013 through 2017, giving a 2.2 percent boost in GDP by 2017.[29] Furthermore, the use of unlicensed spectrum, like Wi-Fi, generates an estimated $62 billion a year for the U.S. economy.[30]

Wireless carriers are investing in the world's best infrastructure because competition is fierce. According to an FCC report released just last month, as of January 2014, 93.8 percent of the U.S. population had access to at least three mobile broadband providers, and 83.8 percent lived in areas with coverage by four or more mobile broadband providers.[31] Robust competition is providing a strong check against anti-competitive behavior. Accordingly, the long-standing and bipartisan consensus regarding public policy in the wireless space has been to allow competition to obviate the need for command-and-control regulation and industrial policy. As the statistics reveal, this hands-off approach has produced a constructive explosion of entrepreneurial brilliance which is benefiting consumers. Now is not the time to put our gains at risk by injecting rigid regulations into a thriving competitive market.

Furthermore, America is leading the world in 4G wireless technologies and services, or LTE. U.S. consumers account for more than 37 percent of the world's LTE subscribers even though America is home to less than five percent of the world's

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[24] Hon. William E. Kennard, Chairman, FCC, Remarks at the Voice Over Net Conference: Internet Telephony—America Is Waiting (Sept. 12, 2000).

[25] The White House, *A Framework for Global Electronic Commerce* (July 1, 1997).

[26] CTIA—The Wireless Association, *CTIA's Wireless Industry Summary Report: Year-End 2013 Results* (2014), available at *http://www.ctia.org/docs/default-source/Facts-Stats/ctia_survey_ye_2013_graphics-final.pdf?sfvrsn=2;* John C. Hodulik, *et al., U.S. Wireless 411: Version 5,* UBS, Nov. 25, 2014, at 10.

[27] FCC, *Fact Sheet: Internet Growth and Development* (2014), available at *https://apps.fcc.gov/edocs_public/attachmatch/DOC-325653A1.pdf.*

[28] Alan Pearce, J. Richard Carlson & Michael Pagano, *Wireless Broadband Infrastructure: A Catalyst for GDP and Job Growth 2013–2017* (2013), available at *http://www.pcia.com/images/IAE_Infrastructure_and_Economy_Fall_2013.PDF.*

[29] *Id.*

[30] Consumer Electronics Association, *Unlicensed Spectrum and the American Economy: Quantifying the Market Size and Diversity of Unlicensed Devices* (2014), available at *http://www.ce.org/CorporateSite/media/gla/CEAUnlicensedSpectrumWhitePaper-FINAL-052814.pdf.*

[31] *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Mobile Conditions with Respect to Commercial Mobile Services,* Seventeenth Report, WT Docket No. 13–135, Table III.A.v (rel. Dec. 18, 2014).

population.[32] By contrast, Western Europe, with a population greater than the U.S., accounts for just 13 percent of the world's LTE subscribers.[33]

Dominance in 4G penetration and adoption is giving America a decisive advantage in the highly competitive global marketplace. We didn't get here through government mandates or industrial policy, however. Investment in new wireless technologies, unfettered by unnecessary government regulation, is producing faster mobile data connection speeds. Specifically, average mobile connection speeds in the U.S. are 30 percent higher than in Western Europe.[34] Best of all, that gap is expected to grow. As the "Internet of Everything" ("IoE") explodes to connect billions more devices to the Net—through mobile technologies, from cars to health monitoring equipment to inventory control technologies—it will transform the global economy and America will have an advantage over our economic rivals.[35]

New phone-monopoly-style regulations applied to wireless broadband by the FCC, however, could inhibit investment and innovation, and America could lose her competitive advantage in the mobile and IoE space.

In view of the unique characteristics of wireless broadband, it was the bipartisan and unanimous consensus of the FCC in its 2010 *Open Internet Order* that the heart of new net neutrality rules not be applied to wireless broadband services.[36] The primary reason for treating wireless and wireline differently is that mobile broadband technologies use shared networks. Wireless consumers may not realize it, but they are sharing bandwidth with their neighbors. The sharing of wireless bandwidth creates a host of technical and operational challenges associated with the availability of capacity, the lack of predictability about consumer demand and the scarcity of spectrum. As such, the intricate art of network management of wireless networks is far different from that of fiber or coaxial-based networks.[37] Applying rigid, one-size-fits-all regulations to mobile broadband would tie the hands of engineers trying to maximize network efficiency for consumers as they are forced to live under new government supervision. Innovation, investment and consumer well-being would be at risk as new rules would create uncertainty and spark a counterproductive regulation/litigation cycle.[38] Any new legislation should take into account the unique characteristics of wireless broadband.

Furthermore, as a matter of law, Congress would have to act to create a new framework for wireless broadband. The FCC cannot accomplish this on its own. In Title III, Congress wisely prohibited the FCC from regulating wireless broadband services as common carriage under Title II.[39] It is a misconception that Section 332 provides the FCC with the power to regulate wireless broadband under Title II, as Chairman Wheeler stated at the Consumer Electronics Show two weeks ago. In fact, the U.S. Court of Appeals for the D.C. Circuit has held recently that wireless broadband providers "are statutorily immune, perhaps twice over, from treatment as common carriers."[40]

In Section 332, Congress codified an important distinction between a "commercial" mobile service and "private" mobile service.[41] A commercial mobile service "intercon-

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[32] Ovum's Informa Telecoms & Media World Cellular Information Service (WCIS+) (as of Sept. 2014).

[33] 4G Americas, *Global LTE Connections* (as of Sept. 2014), available at *http://www.4gamericas.org/index.cfm?fuseaction=page&pageid=2055.*

[34] *See* Cisco *VNI Forecast Highlights,* available at *http://www.cisco.com/web/solutions/sp/vni/vni_forecast_highlights/index.html.*

[35] *See* Deloitte, How policy actions could enhance or imperil America's mobile broadband competitiveness, Sept. 2014, at 17, available at *http://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-tmt-mobile-index-09262014.pdf* ("Bullish industry forecasts include an estimate of 26 billion installed Internet of things units by 2020, impacting the global supply chain, and a prediction of 24 billion connected devices globally by 2016, resulting in a $1.2 trillion impact to North American economies from revenues, cost reductions, or service improvements.").

[36] *Preserving the Open Internet,* GN Docket No. 09–191, WC Docket No. 07–52, Report and Order, 25 FCC Rcd 17905, ¶¶ 80–92 (2010).

[37] For instance, according to CTIA—The Wireless Association, "a single fiber strand can carry 1,000 times more bits per second than a 10 GHz radio channel." Reply Comments of CTIA—The Wireless Association, GN Docket Nos. 14–28, 10–127, at 3 (filed Sept. 15, 2014). Wireless technologies are, indeed, different and highly complex, and should not be burdened by new "one-size-fits-all" regulation.

[38] *See* Robert Litan and Hal Singer, *The Best Path Forward on Net Neutrality,* Progressive Policy Institute, at 8 (Sept. 4, 2014) (noting that "a heavy-handed Title II approach could risk substantial core investment without generating any offsetting incremental investment at the edge").

[39] 47 U.S.C. § 332(c)(2).

[40] *Cellco P'ship,* 700 F.3d at 538.

[41] 47 U.S.C. § 332(d).

nects" with the public switched telephone network ("PTSN").[42] A private mobile service, by contrast, is not interconnected with the PSTN.[43] By definition, wireless broadband does not connect to the PSTN because it is an Internet access service.

In 1993, Congress enacted legislation mandating that the FCC treat these two services differently.[44] For commercial mobile services, or traditional voice cellular services connected to the PSTN, Congress instructed the FCC to impose narrowly defined common carrier regulations.[45] For private mobile services, including what are now mobile broadband services, however, Congress declared that "[a] person engaged in the provision of a service that is a private mobile service shall not, insofar as such person is so engaged, be treated as a common carrier for any purpose."[46] In short, to be "treated as a common carrier" means the FCC cannot impose Title II-style public utility regulation on a wireless broadband service provider.[47]

Simply put, Congress has already spoken: Section 332 clearly bars the FCC from regulating wireless broadband under Title II.[48] Attempts to circumvent Congress's direct mandate will be overturned in court.

Conclusion

The Internet ecosphere is blossoming beautifully, resulting in the most positive and constructive transformation of the human condition in history. If Congress chooses to act, it should do so in a tailored manner. In the meantime, while the directly elected representatives of the American people work together in good faith on these issues, the FCC should delay further action.

Thank you for the opportunity to testify and I look forward to your questions.

The CHAIRMAN. Thank you, Mr. McDowell.

Mr. Misener?

STATEMENT OF PAUL MISENER, VICE PRESIDENT, GLOBAL PUBLIC POLICY, AMAZON.COM

Mr. MISENER. Thank you, Mr. Chairman, and Ranking Member Nelson. I really appreciate the opportunity to testify today. Thank you for your attention to this very important topic. I will be focusing on your draft bill.

Amazon has long supported maintaining the fundamental openness of the Internet, which has been so beneficial to consumers and innovation. Now, there is widespread acceptance of the need for government action to ensure that Internet openness. Now policymakers need only to decide how to ensure that Internet openness of net neutrality is maintained and effective.

At Amazon, our consistent business practice is to start with customers and work backward. That is, we begin projects by determining what customers want and how we can innovate for them. Here in the context of net neutrality public policy, we have done the same. We take our position from our customers: that is, consumers' point of view.

Consumers want to keep the fundamental openness of the Internet and the choice it provides. Consumers will recognize if net neutrality is taken from them, and if net neutrality is taken, they will not care how or, for example, where in the network infrastructure it is taken. We believe that the FCC has ample existing authority to maintain net neutrality, but obviously Congress has the power

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[42] *Id.* § 332(d)(1); *see also* 47 C.F.R. § 20.3.
[43] 47 U.S.C. § 332(d)(3).
[44] Pub. L. No. 103–66, 107 Stat. 312 (1993).
[45] *Id.* § 332(c)(1).
[46] *Id.* § 332(c)(2).
[47] *Verizon,* 740 F.3d at 652; 47 U.S.C. §§ 201, 202. Even though wireless carriers will often provide their customers with both commercial and private mobile services under a single contract, the FCC may only treat wireless carriers as common carriers under Title II when they are providing traditional mobile voice services. *See Cellco,* 700 F.3d at 538.
[48] 47 U.S.C. § 332(c)(2).

to set new policies for net neutrality either entirely through a new statute or through a mix of new and existing statute.

Amazon remains very grateful for Congress's continuing attention to net neutrality. The topic certainly is worth your vigilant oversight. Thank you also, Mr. Chairman, for creating and sharing your discussion draft bill and for providing me the opportunity to being discussing it today.

The principles of net neutrality contained in the discussion draft are excellent. For example, the draft clearly acknowledges that throttling and paid prioritization must be banned, that net neutrality protections must apply to wireless as well as to wire lines, and that providers must disclose their practices. Of course, for these excellent principles of Internet openness to be meaningful to consumers, they need to be effective. In at least three instances, however, the discussion draft could be interpreted to undermine that effectiveness, so that the bill should be modified accordingly.

First, in subsection (d), while requiring consumer choice, the bill would explicitly exempt specialized services from that requirement. This could create a huge loophole if, for example, specialized services involve the prioritization of some content and services just like prescribed paid prioritization. Consumer choice is baked into the Internet. Nothing would protect consumer choice more than protecting the open Internet from interference by broadband Internet access providers.

Second, in subsection (f), the discussion draft would permit broadband Internet access providers to engage in "reasonable network management." But any claim of reasonable network management should be viewed suspiciously if in practice it undermines prohibitions of blocking, throttling, and paid prioritization, et cetera.

Third, the discussion draft is unclear or silent on an important point of clarification. Which part of a broadband Internet access service provider's network is covered by the net neutrality protections? As indicated earlier, a consumer will not care where in her service provider's network any interference occurs, only whether it occurs. In sum, these three areas of the discussion draft should be modified in order to ensure that Internet openness of net neutrality is maintained and effective.

In addition, the discussion draft should be modified to provide adequate legal detail and certainty to consumers and businesses in the Internet ecosystem. Like all businesses, Internet companies need confidence in the state of law and regulation in order to innovate and invest in products and services on behalf of their customers. Details, including the factors that would be considered during formal complaint procedures, are essential for businesses and consumers to have the confidence to make informed choices about investments and purchases.

We believe that the FCC should be empowered to create adequate legal certainty and detail through effective enforcement tools and notice and comment rulemaking, but the discussion draft bill would limit the FCC in several ways. So Section B says the FCC may not expand Internet openness obligations beyond the obligations established in the bill. If the intention here is to establish a ceiling for these obligations, this is Congress's prerogative for sure,

and we would support a provision like this if the bill went only so far.

However, with such a ceiling in place, it is not necessary to rescind the FCC's authority under Title II of the Communications Act, as in Subsection (e), which could leave the Agency helpless to address improper behaviors well within the authority below the ceiling, and would leave consumers and businesses in the Internet ecosystem without adequate certainty about FCC's enforcement powers.

Also because Subsection (b) could be interpreted to bar the FCC from notice and comment and rulemaking in this area, if that's the intent, we would oppose it. Directing the FCC not to expand statutorily established obligations is one thing. But we believe it would be a mistake to prohibit the Commission from providing through notice and comment rulemaking adequate legal detail and certainty consumers and businesses.

So in conclusion, Mr. Chairman, I look forward to working with you, and the Committee, and the FCC to ensure that the Internet openness of net neutrality is maintained and effective. And I welcome your questions. Thank you.

[The prepared statement of Mr. Misener follows:]

PREPARED STATEMENT OF PAUL MISENER, VICE PRESIDENT FOR GLOBAL PUBLIC POLICY, AMAZON.COM

Thank you, Chairman Thune and Ranking Member Nelson. My name is Paul Misener, and I am Amazon's Vice President for Global Public Policy. Thank you for your attention to this important topic; for calling this hearing; and for inviting me to testify.

I. Introduction

Amazon has long supported maintaining the fundamental openness of the Internet, which has been so beneficial to consumers and innovation. We made our first FCC filing in support of the open Internet over twelve years ago, even before the term "net neutrality" was coined. Amazon also has long joined with other parties in support of net neutrality. A decade ago, we were a leading member of a coalition that included dozens of companies, as well as dozens of public interest groups from across the political spectrum. At the time, many policymakers questioned the benefits of Internet openness, and whether such benefits needed to be ensured by government. But now there is widespread acceptance of the need for government action to ensure Internet openness; now policymakers need only decide how to ensure that the Internet openness of net neutrality is maintained and effective. Amazon currently supports net neutrality through the Internet Association, as well as directly and through other organizations.

At Amazon, our consistent business practice is to start with customers and work backwards. That is, we begin projects by determining what customers want and how we can innovate for them. Here, in the context of net neutrality public policy, we have done the same: we take our position from our customers'—consumers'—point of view.

Consumers want to keep the fundamental openness of the Internet and the choice it provides. After two decades of the World Wide Web, it's no longer a novelty: Consumers have come to expect and demand openness and choice on the Internet—to demand net neutrality. Consumers also have come to understand that bits are bits; that it shouldn't be any harder or more expensive for their broadband Internet access service provider to deliver one bit over another, and that there's no technical or other inherent reason to discriminate against one bit over another, or prioritize one bit over another.

Consumers will recognize if net neutrality is taken from them. And if their net neutrality is taken, they won't care how or, for example, *where* in the network infrastructure it is taken: If net neutrality is taken at one point in the network, rather than another, consumers won't care. They are results-oriented: At the end of public policy discussions and decisions, consumers ultimately will judge whether Internet

openness was ensured—whether they got to keep net neutrality, or whether it was taken away from them.

II. Legal Authority

Consumers certainly will be results-oriented in their assessment of what particular legal authority the United States Government uses to ensure that net neutrality is maintained: The authority will either work, or it won't. We believe that the FCC has ample existing statutory authority to maintain net neutrality, and we welcome Chairman Wheeler's attention to this issue and his efforts to use his statutorily-granted authority in a measured, focused way. We would not want discussions of new statutory authority to derail or delay Chairman Wheeler's work but, like he recently has said, we also would welcome additional statutory direction from Congress.

Some telecom lawyers believe the FCC cannot fully maintain historic net neutrality protections employing only the provisions of Section 706 of the Telecommunications Act. Recent litigation suggests they are right. Such lawyers also point out that the FCC could "un-forebear" the entirety of Title II of the Communications Act for this purpose, and they are right. But some other telecom lawyers believe that if the FCC reinstated *all* of Title II, there would be myriad unintended consequences unrelated to net neutrality. They are probably right, too, and Amazon is focused on strong, enforceable net neutrality protections, so we don't support a complete return to Title II here. We have concluded that reinstating only a few provisions of Title II—particularly all or parts of Sections 201, 202, and 208—plus relying on other existing statute, including Section 706, would be adequate to maintain net neutrality without creating unintended consequences.

But, of course, these approaches are within the confines of existing statutory authority. Obviously, Congress has the power to set new policies for net neutrality, either entirely through a new statute, or through a mix of new and existing statutory authority.

III. Discussion Draft

Amazon remains very grateful for Congress's continuing attention to net neutrality. The topic certainly is worthy of your vigilant oversight. Thank you also, Mr. Chairman, for creating and sharing your Discussion Draft bill, and for providing me the opportunity to begin discussing it today. I look forward to continuing conversations about net neutrality protections in the coming weeks and months.

The principles of net neutrality contained in the Discussion Draft are excellent: For example, the draft clearly acknowledges that throttling and paid prioritization must be banned; that net neutrality protections must apply to wireless, as well as wireline; and that providers must disclose their practices.

Of course, for these excellent principles of Internet openness to be meaningful to consumers, they need to be effective. In at least three instances, however, the Discussion Draft could be interpreted to undermine that effectiveness, so the bill should be modified accordingly to ensure that the Internet openness of net neutrality is maintained and effective.

First, in Subsection (d), while requiring "Consumer Choice," the bill would explicitly exempt "specialized services" from that requirement. This could create a huge loophole if, for example, specialized services involved the prioritization of some content and services, just like proscribed "paid prioritization," the only difference being that the content or service prioritized came from the broadband Internet access service provider itself, instead of a third party.

Subsection (d)(1) reads, "Nothing in this section shall be construed to limit consumer choice of service plans or consumers' control over their chosen broadband Internet access service. . . ." Hopefully, no one wants to limit actual consumer choice. Indeed, consumer choice is exactly what advocates of net neutrality have been trying to preserve and protect for over a dozen years. But other than the "specialized services" that are explicitly exempted from the consumer choice requirement, it is not obvious what part of the bill might be construed as limiting consumer choice. Almost explicitly, therefore, the bill acknowledges that the provision of such specialized services would defeat consumer choice and the Internet openness of net neutrality, despite the limitations of Subsection (d)(2).

Consumer choice is baked into the Internet. Nothing would protect consumer choice more than protecting the open Internet from interference by broadband Internet access service providers. As I have described in previous testimony before Congress, the Internet is fundamentally different—both in technical design and practical operation—from other major media, including newspapers, radio broadcasting, satellite TV, and cable. In those media, content is "pushed" out to consumers—and thus fills up the papers, channel, or channels—in the hope that many consumers

will want to read, hear, or watch the content. In contrast, Internet consumers "pull" to themselves the content of their choosing, so Internet content does not fill a broadband Internet access provider's network unless a consumer has pulled it through there. Again, the open Internet is all about consumer choice, so Subsection (d) is unnecessary if this bill otherwise would ensure the Internet openness of net neutrality.

If, contrary to these concerns, the purpose of Subsection (d) is to ensure that consumers are allowed to choose among various, non-discriminatory plans based on bit rates or monthly data volumes, then there are ways to say that more clearly: Something along the lines of, "Nothing in this section should be construed to limit the ability of consumers to choose to pay for higher or lower data rates or volumes of broadband Internet access service based on their individual needs." We agree that it makes no sense to require an infrequent e-mail user to pay the same for Internet access as a 24/7 gamer and, if such a clarification is needed, we would support it. But the current language of Subsection (d) does not accomplish this goal and introduces the other noted problems.

Second, in Subsection (f), the Discussion Draft bill would permit broadband Internet access providers to engage in "reasonable network management." This is a standard caveat to net neutrality, and we support it, at least in theory. But particularly with the inclusion of wireless broadband in the ambit of net neutrality protections, any claim of reasonable network management should be viewed very suspiciously if, in practice, it undermines prohibitions of blocking, throttling, paid prioritization, etc., or if it tends to favor content or services offered by the broadband provider itself.

Third, the Discussion Draft bill is unclear or silent on an important point of clarification: Which parts of a broadband Internet access service provider's network are covered by the net neutrality protections? As indicated earlier, a consumer will not care *where* in her service provider's network any interference with net neutrality occurs, only *whether* it occurs. Providers should not be allowed to accomplish blocking, throttling, paid prioritization, etc., further upstream in the network, just because the bill could be construed to address only the network facilities closer to consumers, such as the "last mile." If, by this possible omission and limitation of FCC powers, net neutrality were made ineffective by allowing the otherwise prohibited behaviors to occur further upstream, consumers would rightly judge their net neutrality to have been taken away.

In sum, these three areas of the Discussion Draft bill should be modified in order to ensure that the Internet openness of net neutrality is maintained and effective.

In addition, the Discussion Draft should be modified to provide adequate legal detail and certainty to consumers and businesses in the Internet ecosystem. Although the Discussion Draft's net neutrality principles are promising, they also are fairly general. And, although the Discussion Draft would require, in Subsection (a)(5), broadband Internet providers to disclose their practices, these disclosures would merely reflect what providers currently are doing, not what they would be legally permitted to do.

Like all businesses, Internet companies need confidence in the state of law and regulation in order to innovate and invest in products and services on behalf of their customers. They need to know, with a reasonable degree of certainty, whether a new product or service could be deployed without interference by broadband Internet access service providers. Certainty does not require legal certitude, but it does require confidence-inspiring transparency, predictability, stability, and fairness. Yet statutes are necessarily less detailed than agency-written rules. And such details—including the factors that would be considered during formal complaint procedures—are essential for businesses and consumers to have the confidence to make informed choices about investments and purchases.

We believe that the FCC should be empowered to create adequate legal certainty and detail through effective enforcement tools and notice and comment rulemaking. But the Discussion Draft bill would limit the FCC in several ways. Subsection (b) says that the FCC "may not expand . . . Internet openness obligations . . . beyond the obligations established" in the bill "whether by rulemaking or otherwise." The word "expand" is vague, but if the intention here is to establish a ceiling for these obligations, *i.e.,* a cap on the FCC's authority respecting the substantive provisions of the bill, this is Congress's prerogative and reasonable expectation; we certainly don't support allowing an agency to act beyond its statutory authority, and would support a provision like this, if the bill went only so far.

However, with such a ceiling in place, it is not necessary to rescind the FCC's authority under Title II of the Communications Act, as in Subsection (e). Summarily blocking the FCC's use of existing statutory enforcement authority could leave the agency helpless to address improper behaviors well within its authority under the

ceiling created in Subsection (b), and would leave consumers and businesses in the Internet ecosystem without adequate certainty about the FCC's enforcement powers. With so much at stake for consumers and businesses, this very real possibility should not be left to chance. We believe that the FCC's Title II authority should be maintained to ensure the effectiveness of Internet openness, subject to any reasonable substantive ceiling on Internet openness obligations.

Also, in part because Subsection (b) directs the FCC to establish "formal complaint procedures" and "enforce the obligations [of the bill] though adjudication of complaints," this provision could be interpreted to bar the FCC from notice and comment rulemaking in this area. If that is the intent, we oppose it. Directing the FCC not to "expand" statutorily-established obligations is one thing, but we believe it would be a mistake to prohibit the Commission from providing, through notice and comment rulemaking, adequate legal detail and certainty to consumers and businesses. Outlining the parameters around permissible forms of "reasonable network management" is but one example of where the FCC could provide important detail to consumers and businesses through notice and comment rulemaking. Notice and comment rulemaking also would more readily expose any attempt by the FCC to "expand" the open Internet obligations of the bill, and thus would promote the core purpose of this subsection. And notice and comment rulemaking provides an important avenue for public participation in the work of government agencies; this avenue should not be blocked for net neutrality.

Thus, at a minimum, Subsection (e) should be amended to ensure that the FCC retains its Title II tools, subject to a substantive ceiling on Internet openness obligations, such as included in Subsection (b)(1), which itself should be clarified to allow the FCC to provide, through notice and comment rulemaking, adequate legal detail and certainty to consumers and businesses.

IV. Conclusion

In conclusion, Mr. Chairman, I look forward to working with you, your committee, and the FCC to ensure that the Internet openness of net neutrality is maintained and effective.

And I welcome your questions.

The CHAIRMAN. Thank you, Mr. Misener.

Mr. Simmons?

STATEMENT OF W. TOM SIMMONS, SENIOR VICE PRESIDENT, PUBLIC POLICY, MIDCONTINENT COMMUNICATIONS

Mr. SIMMONS. Chairman Thune, Ranking Member Nelson, members of the Committee, thank you so much for inviting me here today to discuss how Congress can update our Internet laws to ensure vigorous broadband investment and an open Internet for the future. My name is Tom Simmons. I am the Senior Vice President of Public Policy for Midcontinent Communications.

Midcontinent is the leading provider of cable television, telephone, high-speed Internet access, and cable advertising services in North Dakota, South Dakota, and Minnesota. Our communities vary in size from densities of five to 116 homes per mile of cable plant, and their population ranges from less than 125 in Dodge, North Dakota to more than 160,000 in Sioux Falls, South Dakota. Our mission is to ensure that the rural communities we serve are at the leading edge of technology.

The FCC's decision a decade ago to regulate Internet service only lightly encouraged Midcontinent to invest nearly $400 million in our networks over the past 10 years. We recently doubled our customers' download speeds, and just this past November we unveiled our new gigabit initiative, which will make gigabit Internet speeds available that are five times faster than our current best, and about 35 times faster than the average high-speed Internet access speed in the country today. Once complete, gigabit Internet access

will be available to the majority of our customers, including those in some of our most rural areas of the country.

And we're not alone in our investment. Since 1996, ISPs Internet service providers have invested $1.3 trillion in their broadband networks. Last year, ISPs invested more in America than any other non-financial sector. Today, more than 85 percent of U.S. homes have access to networks that can achieve 100 megabit speeds or faster. The overall Internet economy in the U.S. supports 869,000 jobs. In 2014 alone, Midcontinent's customers' bandwidth usage increased by 77 percent, and bandwidth consumption is doubling for us every 15 months. Midcontinent has a tremendous business incentive to invest, but not if we are subjected to regulation that limits our ability to innovate.

Midcontinent supports the draft legislation. It would establish basic principles of Internet fairness and set this country on a path to regulatory certainty and stability. It would ensure that broadband customers can enjoy unconstrained use of the service they pay for, that the FCC can protect consumers, that Internet-based businesses can invest without concern that an ISP can interfere with their access to customers, and that ISPs can develop their service freely. And it would accomplish all these goals without dragging the provision of Internet service back to the monopoly telephone era.

Many of the draft's obligations reflect our existing business practices. Every Internet user should be able to access any lawful content service or application they choose. Purposely throttling customers would directly interfere with our business strategy of offering the fastest-possible broadband speeds. And no ISP has adopted a strategy of paid prioritization, even in the absence of rules.

The draft legislation also wisely protects the need for network management. ISPs need to utilize reasonable network management practices to ensure customers are getting the maximum benefits of their broadband service, and to protect consumers against harmful cyber intrusion. The draft legislation's transparencies principles strike an appropriate balance between consumers' need for and the right to clear and easy-to-understand information about the broadband service, and the need to ensure that in the name of transparency, potential wrongdoers do not have a road map for the best means of thwarting safeguards that we put in place to protect the network.

While we can support well-crafted regulations, we are adamantly opposed to the imposition of an outdated common carrier regulatory regime. Imposing Title II regulations would work against the government's policy goals of increasing broadband deployment and adoption. The regulatory burdens and costs associated with a Title II approach would have a significant and disproportionate impact on our ability to invest further in our broadband networks.

Title II proponents often point to the FCC's forbearance authority which is intended to allow the FCC to alleviate some of Title II's regulatory burdens as a simple solution to our concerns. But in reality, those same Title II proponents are pressing the FCC not to forbear from vast swathes of Title II now that they think the reclassification decision might be going their way.

While it seems clear that applying a Title II regulatory framework to broadband Internet access will only interfere with the dynamic Internet, the FCC is poised to take just that step. Truly there is a better way, and the proposed legislation is an important part of finding the right path forward. Therefore, I urge the Committee to move forward with a bipartisan draft so that Midcontinent and others can continue to ensure that all Americans, including those in rural America, receive the full potential of America's broadband networks.

Thank you so much again for inviting me to be here today, and we look forward to working with you on these very important measures.

[The prepared statement of Mr. Simmons follows:]

PREPARED STATEMENT OF W. TOM SIMMONS, SENIOR VICE PRESIDENT, MIDCONTINENT COMMUNICATIONS

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you for inviting me here today to share my thoughts on the ways Congress can update our Internet laws to ensure vigorous broadband investment and an open Internet for the future. I also appreciate the opportunity to address the proposed legislation for achieving these goals.

My name is Tom Simmons and I am the Senior Vice President of Public Policy for Midcontinent Communications. Midcontinent is the leading provider of cable television services, as well as local and long distance telephone service, high-speed Internet access services, and cable advertising services in North Dakota, South Dakota, and Minnesota. Midcontinent's service area includes over 335 communities serving approximately 300,000 customers. The communities we represent vary in size from densities of 5 to 116 homes per mile of cable plant, and their population ranges from less than 125 in Dodge, North Dakota to our largest community, Sioux Falls, South Dakota, which has a population of more than 160,000.

Innovation and foresight have shaped Midcontinent's course for more than 80 years. At Midcontinent, we have made it our mission to ensure that the rural communities we serve are at the leading edge of technology. Our goal throughout our footprint is always to continue to find ways not only to meet, but to exceed the communications needs of our customers.

A Positive Regulatory Environment Has Spurred Broadband Investment

The Federal Communications Commission's ("FCC") decision a decade ago to lightly regulate Internet service encouraged Midcontinent to invest nearly $400 million in our networks over the past 10 years and to make our network increasingly faster and more robust. This past summer, we doubled our customers' download speeds, raising the speed of the standard wideband 1.0 service tier from 30 Mbps to 60 Mbps and the fastest wideband 3.0 tier from 100 Mbps to 200 Mbps.

In November 2014, Midcontinent unveiled our exciting new Gigabit Initiative. Our new investment will make gigabit Internet speeds available to approximately 600,000 homes and 55,000 businesses along a high-capacity fiber network that covers more than 7,600 miles in North Dakota, South Dakota and Minnesota. Our network will offer download speeds that are five times faster than our current best and 35 times faster than the average high-speed Internet access speed in America. And we are not limiting these speeds to a few neighborhoods in the largest cities. Once the initiative is complete in 2017, gigabit Internet access will be available to the majority of our customers, including those in some of the most rural areas of our country.

Midcontinent's decision to make these investments has been driven by the knowledge that we will not be limited in our ability to use that investment to create and develop the most compelling broadband service offerings possible. Unconstrained by the type of regulations that preclude and hinder our innovation in the television space, we are incented to continue to invest and expand. And we are not alone in this approach. Since 1996, ISPs have invested $1.3 trillion in their broadband networks. Last year, ISPs invested more in America than any other nonfinancial sector. Today, more than 85 percent of U.S. homes have access to networks that can achieve 100 Mbps speeds or faster. The overall Internet economy in the U.S. supports 869,000 jobs.

Midcontinent Supports Open Internet Principles

While the FCC's light regulatory touch has created an environment that enables investment and innovation by increasing the odds of a positive return on investment, our business decisions are also driven by consumer demand. Our decision to upgrade our network's capacity and download speeds was made in response to our customers' ever increasing demand for—and expectation of—fast and unfettered access to any lawful content, applications, and services. In 2014 alone, Midcontinent's customers' bandwidth usage increased by 77 percent, and we see bandwidth consumption doubling every 15 months. Midcontinent has a tremendous business incentive to ensure that we continue to have the enhanced bandwidth to deliver a superior user experience.

An important part of a positive user experience is ensuring a free and open Internet. From a business perspective, it makes no sense for us to engage in any behavior that would alienate our current and future customers. We do not engage in anti-consumer practices such as throttling or blocking disfavored content or the use of devices because our customers would not tolerate it. Cable ISPs continued to abide by open Internet principles even after the FCC's net neutrality rules were overturned because many of them make good business sense. The fact is, while it is popular to view the current net neutrality debate as an "us versus them", "David versus Goliath" battle with broadband ISPs as the villain of the piece, Midcontinent, and the cable broadband industry as a whole, agree with the widespread consensus that certain open Internet principles promote the virtuous cycle of innovation and investment that characterizes the Internet economy.

Midcontinent Supports The Draft Legislation

The draft legislation would establish basic principles of Internet fairness and set this country on a path to regulatory certainty and stability that would incite the broadband deployment that invigorates our American economy. The draft's thoughtful approach ensures that broadband Internet access service will meet consumers' expectations for unconstrained use of the service they pay for, that the FCC has the ability to protect consumers from any adverse consequences of a bad actor, that Internet businesses can invest and grow without concern that an ISP can interfere with their access to potential customers, and that ISPs can create, grow and develop their service freely, subject to important restrictions on anticompetitive behavior. And it will accomplish all these goals without dragging the provision of Internet service back to the monopoly telephone era, resulting in years of litigation, uncertainty and the stifling of innovation and investment enthusiasm.

As I mentioned, many of the draft's obligations reflect the business practices of most ISPs today. There is little debate, for example, that every Internet user should be able to access any lawful content, service, or application that they choose. ISPs like Midcontinent do not engage in blocking practices because we understand that our customers purchase our services because they want access to their favorite content, services, and applications, and they want to explore the many new offerings emerging every day. ISPs have nothing to gain and everything to lose by restricting customers' access to lawful Internet offerings.

Similarly, broadband providers like Midcontinent constantly upgrade their networks to enhance capacity and offer faster speeds to anticipate and get in front of increased consumer demand. Purposely throttling customers would directly interfere with our business strategy of offering the fastest possible broadband speeds. And despite the apocalyptic warnings of a two-tier Internet, no ISP has adopted a strategy of paid prioritization, even in the absence of rules, as there is no real business case today that favors it.

At the same time, we commend the draft legislation for its careful preservation of consumers' ability to choose service plans and features they want. No rule should preclude customers from being able to select the service plan or features they want to receive.

The draft legislation also wisely protects the need for network management. Even the most vocal net neutrality advocates recognize that ISPs need to utilize reasonable network management practices to ensure customers are getting the maximum benefits of their broadband service. ISP networks are flooded every day with spam attacks, viruses, and times of network congestion. ISPs devote significant time and energy to protecting consumers and the networks against harmful cyber intrusions, and to ensuring that traffic flows as smoothly as possible.

The draft legislation's transparency principles strike an appropriate balance between consumers' need for, and right to, clear and easy-to-understand information about their broadband service so that they can make informed choices, and ISPs' concern that the rules not require so much network information to be posted pub-

licly that potential wrongdoers have a roadmap to the best means of thwarting safeguards put in place to protect the network.

The cable industry supports each of these open Internet principles. Why wouldn't we? The same open Internet economy that has brought tremendous opportunities to consumers and given birth to industry giants like Google, Amazon, and Netflix has also created significant incentives for ISPs to expand deployment of high-speed broadband infrastructure to all corners of the country.

While it often seems that those of us engaged in the net neutrality debate have diametrically opposing views, the truth is that we are all working towards the same goal—a sensible public policy that preserves and facilitates the "virtuous circle" of innovation, demand for Internet services, and deployment of broadband infrastructure. The only point of debate is how to get there. We commend the Committee on its carefully balanced approach.

Title II Would Be the Wrong Approach

Despite the fact that ISPs have no real incentives to violate the principles of the open Internet, making rules arguably unnecessary, we at Midcontinent understand the concerns that have led us to where we are today, and so we are not necessarily opposed to well-crafted regulations that would effectively support the twin goals of preserving the open Internet and encouraging continued innovation and investment. But we are adamantly opposed to the imposition of an outdated common carrier regulatory regime that is not equipped to govern the modern communications market.

Title II of the Communications Act was designed for the 1930s telephone monopoly era, and carries with it thousands of common carrier regulations that could stifle our industry's ability to continue deploying the next generation of high-speed networks. Taking this radical and destructive step to fix what isn't even broken simply makes no sense.

As the representative of a relatively small broadband ISP that serves a predominantly rural area, I strongly believe that imposing Title II regulations would work against the government's policy goals of increasing broadband deployment and adoption. The regulatory burdens and costs associated with a Title II approach would have a significant and disproportionate impact on Midcontinent's—and other small and medium-sized providers'—ability to invest further in our broadband networks.

The idea that Title II reclassification would harm providers' ability to obtain the capital needed to invest is not merely speculation. Roughly 90 percent of the $73 billion invested in telecommunications infrastructure in 2013 was spent on those industry segments that are exempt from Title II regulation. There can be no better example of the market's disdain for Title II services than Google's decision to forgo offering voice services over their newly built fiber infrastructure due to concerns about common carrier regulation.

Title II proponents often argue that common carrier regulations offer clear and simple answers to difficult policy questions. This is demonstrably false. Attempting to impose an outdated regulatory framework on the modern communications system has led to rampant uncertainty and confusion. The FCC has struggled in a variety of contexts (including special access regulation, universal service reform, network unbundling) to develop clear and effective policies that adapt outdated regulations to today's complex marketplace. Many point to the FCC's forbearance authority, which is intended to allow the FCC to alleviate some of Title II's regulatory burdens, as the simple solution to any regulatory dilemma. In reality, many of those same Title II proponents who once claimed that forbearance would be easy are now pressing the FCC not to forbear from vast swaths of Title II now that they think the reclassification decision is going their way.

Given these realities, it seems clear that applying the Title II regulatory framework to broadband Internet access service will serve only to interfere with the dynamic Internet marketplace that has had a profound impact to the way we live and work. Yet the FCC is poised to take just this step. Truly there is a better solution to be found, and the proposed legislation is an important part of finding the right path forward. I urge the Committee to move forward with a bipartisan draft so that Midcontinent and others can continue to ensure that all Americans—including those in rural America—receive the full potential of America's broadband networks.

Thank you again for inviting me here today, and we look forward to working with all of you on these important issues.

The CHAIRMAN. Thank you, Mr. Simmons.

Dr. Turner-Lee?

STATEMENT OF NICOL E. TURNER-LEE, PH.D., VICE PRESIDENT AND CHIEF RESEARCH AND POLICY OFFICER, MULTICULTURAL MEDIA, TELECOM AND INTERNET COUNCIL (MMTC)

Dr. TURNER-LEE. I am a little short, so I have to pull up. Chairman Thune, Ranking Member Nelson, and distinguished members of the Committee, I am honored to appear before the Committee to address this Nation's efforts to preserve the open Internet, particularly as it concerns communities of color and other more vulnerable populations.

And I have to say to keep my job as Vice President and Chief Research and Policy Officer that we changed our name today, and so for the record, we just became the Multicultural Media, Telecom and Internet Council after 28 years. And for those of you that are less familiar with MMTC, what we primarily do is work to preserve and expand opportunity, equal access, and ownership among people of color, particularly minority and women business enterprises, and we proudly partner with groups that consist of the National Urban League, LULAC, AAJC, Rainbow Push Coalition, among others, to actually advance that mission.

And our groups have been intricately involved with this issue for quite some time. We have been actively engaged in the debate as historically disadvantaged communities embark on a journey toward first class digital citizenship and all of its opportunities. So today we applaud the draft legislation addressing the President's values as a starting point for further discussion.

And I would like to bring to your attention three issues, and my statement is on record in much more detail, but my time is best spent on these points. I would first like to highlight the unique benefits that the open Internet brings to people of color and vulnerable populations, and encourage the Committee's consideration of legislation that promotes an open Internet. And finally in my testimony, I would like to offer two friendly recommendations to the legislation that will promote the open Internet while at the same ensuring consumer protections.

Let me start by saying that broadband access adoption and digital literacy are civil rights prerequisites. Broadband allows all Americans to gain new skills, secure good jobs, obtain a quality education, and receive greater access to healthcare. Today, however, too many Americans still do not benefit from all that broadband enables. The rate of broadband adoption among vulnerable populations is disproportionately low, contributing to a persistent digital divide.

Despite growth in minority home broadband adoption, rates among African-Americans and Hispanics are still lower than whites. African-Americans over the age of 65, for example, still exhibit especially low rates. Forty-five percent of African-American seniors are Internet users, and only 30 percent have broadband at home compared to 63 percent and 51, respectively, for white seniors. Non-users, overall, cite perceived lack of relevance, affordability, and the lack of a device in that order as their prime reasons for not being online. So closing the digital divide should and must be an important goal for policymakers, and steering the right

course of action to promote and protect an open Internet is one way for us to get there.

Now, Congress has had a proud history of recognizing structural injustices in our society and acting to correct them. In the 1860s, Congress framed and passed the 13th, 14th, and 15th Amendments which ended slavery, extended equal policy, and enfranchised millions of Americans for the first time. In the 1960s, Congress enacted the Civil Rights Act of 1964, the Voting Rights Act of 1965, and the Fair Housing Act of 1968, all due in great measure to a great man whose birthday we just celebrated.

And today, Congress has the opportunity to show that leadership yet again. By enacting a legislative solution that preserves the open Internet we all have to come to enjoy, Congress can extend the promise of justice, equality, and democracy for all, and avoid a legal quagmire that will lead the unending uncertainty for our economy and citizens.

An open Internet stimulates demand for broadband, which in turn stimulates investment in infrastructure and innovation, all too important to multicultural communities and vulnerable populations. It is our belief at MMTC increased investment in broadband also improves access adoption, and the types of innovations that we like to drive in our communities, including telehealth, distance learning, and open government.

For the past 20 years, the FCC chairs from both political parties' administrations that have charted a successful regulatory paradigm for the Internet and communities of color have benefited from that. Although overall broadband adoption by people of color has lagged, for example, certain categories have not. Nearly 75 percent of African-Americans and 70 percent of Hispanic cell phone owners use their devices to access the Internet, more than the overall population. And people of color have embraced broadband as a tool of empowerment under the current rules as evidenced in places like Ferguson, Missouri, New York City, and Columbus, Ohio.

These stats should tell us that we need to continue this progress, but unfortunately recent efforts by the FCC to enact meaningful open Internet rules have failed. Last year the D.C. Circuit Court struck down key portions of the Commission's Open Internet Order. Now, notwithstanding the current regulatory framework that has allowed broadband to flourish and take hold, the FCC is considering the imposition of Title II regulation, which we at MMTC believe is ill suited to the current realities. Imposing such a heavy-handed framework on the Internet would only serve to stifle broad band's deployment, discourage investment, and harm innovation. It would also place uncertainty for consumers to regressive taxation on universal service and potential ambiguity on consumer enforcements.

Some have argued that the FCC could reduce the adverse effects of Title II regulation through judicious applications of forbearance authority. We think that suggestion misses the point. Even if the Commission could exercise its forbearance authority in a productive manner, it would take years to sort out an appropriately calibrated set of rules. And meanwhile, this regulatory uncertainty harms communities of colors for the reasons I have already mentioned.

The bottom line is that even if the Commission were to forbear, delay would stifle the progress we have seen in connected communities of color and put us behind on the discussion of areas that matter the most of us, universal service, ensuring public safety, as well as digital redlining.

I would like to just close really quickly with two additional amendments that we think could actually enhance this. First, as Congress considers the bill, Congress should address the harmful practice of digital redlining. Digital redlining is the refusal to build and service lower income communities on the same terms as well as wealthier communities. It imposes, in essence, digital segregation.

Sadly, as the experience of this country shows, segregation harms and degrades all, and we cannot bring that into the digital age. Congress should empower the FCC to prohibit digital redlining, and, therefore, ensure equal access for all, and that could be considered under the FCC's current 706 authority.

Second, we think to enhance the consumer protections in the bill, perhaps there is a way to suggest something that we actually put into record, which is the creation of an accessible, affordable, and expedited procedure for the reporting and resolution of complaints. Modeled after the probable cause paradigm in Title 7 of the Civil Rights of 1964, we feel that the precise details of that structure could be applied to the communications ecosystem, and, therefore, allow people to get their complaints heard without feeling like they have to have a lawyer.

So in closing, the time is now to get past the morass of a debate that has been lingering for more than a decade. And with Congress's discussion and guidance on the issue, I think we can make it happen. So we offer those, and I welcome any questions, and we're here to help in the crafting of this legislation.

[The prepared statement of Dr. Turner-Lee follows:]

PREPARED STATEMENT OF NICOL E. TURNER-LEE, PH.D., VICE PRESIDENT AND CHIEF RESEARCH & POLICY OFFICER, MULTICULTURAL, MEDIA, TELECOM AND INTERNET COUNCIL (MMTC)

Introduction

Chairman Thune, Ranking Member Nelson, distinguished Members of the Committee, esteemed colleagues on the panel, I am pleased and honored to appear before the Committee today to address this Nation's efforts to preserve the open Internet—particularly as it concerns our Nation's communities of color and other vulnerable populations including the economically disadvantaged, seniors and people with disabilities. I currently serve as Vice President and Chief Research & Policy Officer of the Multicultural Media, Telecom and Internet Council, previously known as the Minority Media and Telecommunications Council ("MMTC"). It is my privilege to help lead this national not-for-profit organization that for 28 years has been dedicated to promoting and preserving equal opportunity and civil rights in the mass media, telecommunications, and broadband industries. The MMTC proudly represents historic civil rights and advocacy organizations such as the NAACP, the National Urban League, LULAC—and hundreds of others. In a previous role, I served as Vice President and first Director of the Media and Technology Institute of the Joint Center for Political and Economic Studies where we developed the first comprehensive study on minority broadband adoption.[1]

[1] *See* Nicol Turner-Lee, Jon P. Gant and Joseph Miller, *National Minority Broadband Adoption: Comparative Trends in Adoption, Acceptance and Use,* Joint Center for Political and Eco-

Continued

At MMTC, we believe that every consumer, entrepreneur, and business has the right to an accessible and open Internet. An open Internet is essential to enabling all Americans—including and especially Americans of color and other vulnerable groups—to experience first class digital citizenship in the 21st century.

Digital citizenship is the new passport that guarantees full access to the opportunities powered by broadband and the Internet, especially those applications and broadband-enabled devices that help promote physical wellness, civic engagement, wealth creation, economic development and educational readiness. The cost of digital exclusion–whether as consumers or producers–is too high to ignore for people of color and other vulnerable populations. With new technology transforming how we live, learn and earn in our society, it is imperative that no one is left behind: especially your constituents striving to break through the daily challenges of social and economic isolation. Policies that deter efforts to foster broadband adoption will have a profound effect on people of color, particularly those who have not adopted Internet access and as a result are unable to participate fully in society through job search, civic discourse and access to government services. It is essential that we assess these "opportunity costs" for consumers as this discussion is elevated toward a legislative solution.

Consistent with these views, I would like to bring three issues to the Committee's attention today. *First,* I would like to highlight the unique benefits that an open Internet brings to people of color and vulnerable populations, and explain why MMTC—along with a diverse range of other nonprofit, consumer, and labor organizations, as well as businesses and scholars—came out in support of open Internet rules based on the Federal Communications Commission's (FCC) Section 706 regulatory authority, rather than the Commission's Title II authority that applies to legacy utilities.[2] *Second,* I would like to encourage the Committee to consider a legislative proposal to promote an open Internet, provided it preserves the Commission's ability to protect consumers. *Third,* I would like to offer two friendly recommendations that are designed to ensure: (1) that all consumers are included in the promise of first class citizenship in the digital age; and (2) that policymakers refocus on other critical broadband priorities that can render positive net impacts for historically disenfranchised communities, such as such as prohibiting redlining, promoting universal service, and ensuring public safety.

I. An Open Internet Benefits Communities of Color

As the Nation recognizes the legacy of the Reverend Dr. Martin Luther King, Jr. this week, we can all acknowledge that the journey towards civil and human rights is incomplete. Recent events in Ferguson, Missouri, Columbus, Ohio, and New York City serve as painful reminders. Today, broadband access, adoption and digital literacy join the suite of civil rights prerequisites to first class citizenship in the digital age. Broadband is essential for living a life of equal opportunity in the 21st Century. And broadband access allows all Americans—African American, white, Latino, Asian, women, men, abled, and disabled—to gain new skills, secure good jobs, obtain a quality education, and receive greater access to healthcare through state of the art tele-health technologies. Broadband has also become the new broadcast, streaming in "real time" what transpires both nationally and internationally, and in recent history mobilizing people around social change.

Too many Americans, however, still do not benefit from all that broadband enables. They do not have general Internet access or have not adopted broadband technology at home.[3] This problem is particularly acute in many communities of color and among the poor, seniors and less educated citizens, contributing to a persistent "digital divide." Despite increases in minority home broadband adoption over the

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nomic Studies (March 2010), available at *http://jointcenter.org/sites/default/files/MTI__BROADBAND__REPORT__WEB.pdf* (last visited January 19, 2015).

[2] *See generally* Comments of the National Minority Organizations, FCC GN Docket No. 14–28 (July 18, 2014). *See also* Comments of the Chicagoland Black Chamber of Commerce (July 17, 2014); Comments of the U.S. National Black Chamber of Commerce, National Gay & Lesbian Chamber of Commerce, U.S. Hispanic Chamber of Commerce, and U.S. Pan Asian American Chamber of Commerce (July 18, 2014); Comments of the Black Women's Roundtable (July 18, 2014); Florida State Hispanic Chamber of Commerce (July 14, 2014); Asian Americans Advancing Justice (July 15, 2014); Comments of the Communications Workers of America and National Association for the Advancement of Colored People (July 15, 2014); Comments of League of United Latin American Citizens, National Action Network, National Association for the Advancement of Colored People, the National Coalition on Black Civic Participation, and the National Urban League (July 18, 2014).

[3] *See* FCC, *Connecting America: The National Broadband Plan* 167–68 (2010) ("National Broadband Plan"); David Honig, Esq. & Nicol Turner-Lee, Ph.D., MMTC, *Refocusing Broadband Policy: The New Opportunity Agenda for People of Color* 7–8 (Nov. 21, 2013) ("MMTC White Paper").

past few years, African Americans and Hispanics are still not getting broadband connections at home in sufficient numbers. This is especially the case among two demographic subgroups within minority populations: elderly minorities and those with limited formal education.[4] Recent data from the Pew Research Center found that older African Americans, as well as those that had not attended college, are significantly less likely to go online or have residential broadband access compared to whites of similar demographic profiles.[5] In the case of African Americans, individuals age 65 and older have especially low rates of adoption when compared to whites. Forty-five percent of African American seniors are Internet users and 30 percent have broadband at home as compared to 63 percent and 51 percent respectively for whites.[6] While younger, college educated, and higher-income African Americans are just as likely as their white counterparts to use the Internet and to have home broadband access, these statistics are less promising as socioeconomic status and educational attainment levels decline.

Nearly 70 percent of Hispanic Americans access the Internet through cell phone devices.[7] Less than 60 percent of Hispanics, however, have a home broadband connection,[8] which may impose some limitations when applying for jobs or completing certain homework assignments.

Non-Internet users cite a perceived lack of relevance, affordability, and the lack of an Internet-capable device as their prime reasons for not being online.[9] And, as a recent study conducted by the National Telecommunications and Information Administration, which included analysis from two FCC economists, found, approximately two-thirds of non-subscribing households say they will not subscribe to broadband at any price.[10] Closing the digital divide, therefore, must be a vital goal for policy makers: Our challenge is to look toward promoting adoption. Historically disadvantaged groups often have the most to gain from accessing broadband technology.

The current debate concerning whether and how the Commission might regulate the Internet has largely over-shadowed the adoption crisis. Last year, MMTC and a coalition of 45 highly respected, national civil rights, social service and professional organizations representing millions of constituents, urged the Commission to focus its broadband policies on promoting engagement, adoption and informed broadband use by communities of color, and to exercise its authority to promote broadband to protect all consumers' rights to an open Internet. These groups, including the National Coalition on Black Civic Participation, Rainbow PUSH Coalition, MANA—A Latina Organization, National Hispanic Caucus of State Legislators and National Organization of Black County Officials, asked the Commission to establish an accessible, affordable, and expedited procedure for the resolution of complaints. Modeled after the probable cause paradigm in Title VII of the 1964 Civil Rights Act, which ensures equal employment opportunity, our proposal sought to complement the Commission's Ombudsperson proposal and the Commission's efforts to expand transparency. Other national civil rights organizations—including the National Urban League, the National Action Network, the NAACP, and the League of United Latin American Citizens—also urged the Commission not to use its Title II authority.

We all agree with President Obama that this Nation needs to advance and enforce those values undergirding Internet openness. In our joint filing, our coalition urged the Commission to take a straightforward approach that includes [11]:

- The immediate reinstatement of no-blocking rules to protect consumers.

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[4] Aaron Smith, Pew Research Center, *African Americans and Technology Use, A Demographic Portrait,* 1–17 (Jan. 6, 2014), available at *http://www.pewInternet.org/files/2014/01/African-Americans-and-Technology-Use.pdf* (last visited January 19, 2015).

[5] *Id.*

[6] *Id.*

[7] *See* Maeve Duggan & Aaron Smith, Pew Research Center, *Cell Internet Use* (Sept. 2013) available at *http://www.pewInternet.org/files/old-media//Files/Reports/2013/PIP_CellInternetUse2013.pdf* (last visited January 19, 2015).

[8] *See* Pew Research Internet Project, Pew Research Center, *Broadband Technology Fact Sheet* (2015), available at *http://www.pewInternet.org/fact-sheets/broadband-technology-fact-sheet/* (last visited January 19, 2015).

[9] *Id.*

[10] *See* Carare, Octavian and McGovern, Chris and Noriega, Raquel and Schwarz, Jay A., The Willingness to Pay for Broadband of Non-Adopters in the U.S.: Estimates from a Multi-State Survey (November 18, 2014). Information Economics and Policy, Forthcoming. Available at SSRN: *http://ssrn.com/abstract=2375867* or *http://dx.doi.org/10.2139/ssrn.2375867* (Last accessed January 20, 2015).

[11] *See* Comments of the National Minority Organizations 11–12, FCC GN Docket No. 14–28 (July 18, 2014).

- Creation of a new rule barring commercially unreasonable actions, while affording participants in the broadband economy, particularly minority entrepreneurs, the opportunity to enter into new types of reasonable commercial arrangements,[12] and through monitoring by FCC's Office of Communications Business Opportunities, ensuring that minority entrepreneurs are never overlooked by carriers seeking to develop new commercial arrangements.
- The establishment of a rebuttable presumption against paid prioritization that protects against "fast lanes" and any corresponding degradation of other content, while ensuring that such presumption could be overcome by business models that sufficiently protect consumers and have the potential to benefit consumer welfare (for example, telemedicine applications).[13]
- The need for greater transparency and enforceable disclosure requirements to maintain online consumer protections.
- The reigning in of bad actors, especially those engaged in blocking, as the D.C. Circuit confirmed the Commission has the authority to do.[14]

Like our President, we believe that an open Internet stimulates demand for broadband, which in turn stimulates investment in broadband infrastructure.[15] Increased investment in broadband infrastructure improves access in all communities.[16] This is especially true in poor and low-income communities that tend to be affected most by increases or decreases in investment and concomitant price changes.[17] This is basic economics.[18] That is why our Coalition opposes Title II reclassification of broadband as a telecommunications service.

We believe that preserving the open Internet is one of the fundamental civil rights issues of our time. And that is why this is an issue that Congress should address.

II. Congress is Well Positioned to Preserve the Open Internet

Congress has a proud history of recognizing structural injustices in our society and acting to correct them. In the 1860s, Congress framed and passed the Thirteenth, Fourteenth, and Fifteenth Amendments, which ended slavery, extended equal protection, and enfranchised millions of Americans for the first time. In the 1960s, Congress enacted the Civil Rights Act of 1964, the Voting Rights Act of 1965 and the Fair Housing Act of 1968—all due in great measure, I hasten to add, to the work of a man whose birthday we celebrated this past weekend.

Today, Congress has the opportunity to show leadership yet again. By enacting a legislative solution that preserves the open Internet, Congress can extend the promise of justice, equality, and democracy not only to all citizens, but especially to communities of color and more vulnerable groups who are most in need of the opportunity provided by access to high-speed broadband.

For the past 20 years, FCC Chairs from both political parties have charted a successful regulatory paradigm for the Internet.[19] And although overall adoption of

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[12] *See In the Matter of Protecting & Promoting the Open Internet,* 29 F.C.C. Rcd. 5561, ¶ 116 (2014).

[13] As indicated in our Comments, any prioritized service that overcomes the presumption would remain subject to enforcement, and consumers would be able to obtain rapid relief by working with the Ombudsperson and through the complaint process modeled after the probable cause paradigm found in Title VII of the 1964 Civil Rights Act.

[14] *See Verizon v.* FCC, 740 F.3d 623, 655 (D.C. Cir. 2014).

[15] *See, e.g.,* Daniel A. Lyons, *Internet Policy's Next Frontier: Usage-Based Broadband Pricing,* 66 Fed. Comm. L.J. 1, 31 (2013) (explaining that an economically rational network operator faced with regular congestion (demand) will "invest capital to expand the network and provide more bandwidth to all users").

[16] *See* National Broadband Plan, *supra* note 3, at 129.

[17] *See, e.g.,* Kevin A. Hassett & Robert J. Shapiro, Georgetown Center for Business and Public Policy, *Towards Universal Broadband: Flexible Broadband Pricing and the Digital Divide* 12 (Aug. 2009) (*"Towards Universal Broadband"),* available at *http://www.gcbpp.org/files/Academic_Papers/AP_Hassett_Shapiro_Towards.pdf* (last visited January 19, 2015).

[18] *See, e.g.,* J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet,* 2 J. Comp. L. & Econ. 349, 357 (2006) ("Private investors will fund the construction of a broadband network only if they have a reasonable expectation that the company making that investment will recover the cost of its investment, including a competitive (risk-adjusted) return on capital.")

[19] *See, e.g.,* Michael Powell, Chairman, FCC, *Preserving Internet Freedom: Guiding Principles for the Industry,* at 2 (Feb, 8, 2004) available at *http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-243556A1.pdf* (articulating four principles); Julius Genachowski, Chairman, FCC, *Statement re Preserving the Open Internet* (2010), available at *https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A2.pdf* (last visited January 19, 2015) ("The rules . . . we adopt today are rooted in ideas first articulated by Republican Chairmen . . . and endorsed in a unanimous FCC policy statement in 2005.").

broadband by people of color has lagged,[20] innovation among certain broadband technologies has not. For example, nearly 75 percent of African American and 68 percent of Hispanic cell phone owners use their devices to access the Internet,[21] and these numbers are increasing.[22] African Americans and Latinos use smartphones for non-voice applications, such as web surfing and accessing multimedia content, at a higher rate than the population in general.[23] Asian Americans have adopted smartphones at a higher rate than the total U.S. population.[24] And people of color have largely embraced social media, such as Twitter and Instagram.[25] This along with the increasing availability of Wi-Fi services through fixed broadband providers has enabled mobility, which is critically important to communities of color. These are encouraging signs as wireless becomes the new broadcast for American citizens and demonstrates that the broadband market is both dynamic and competitive in wireless and wireline. Yet, policymakers must act to ensure that this progress continues.

Although the Internet has remained open, recent efforts by the FCC to enact prospective open Internet rules have not succeeded. Last year, the D.C. Circuit struck down significant portions of the Commission's Open Internet Order, while offering a roadmap to potentially sustainable rules.[26] Now the agency is considering the imposition of Title II regulations on the Internet notwithstanding the current regulatory framework that has allowed broadband to flourish. But Title II was designed for a telephone era that assumed monopoly control of the communications infrastructure and regulated accordingly.[27] Its tools include common carriage, rate regulation, and the imposition of increased access charges and taxes.[28]

Monopoly control of the broadband marketplace is not what we have today.[29] Because Title II is ill suited to current realities, imposing its heavy-handed framework on the broadband marketplace would only serve to discourage investment and stifle infrastructure deployment.[30] The effects of this investment dis-incentivizing approach could disproportionately impact communities where lower adoption makes the economics of deployment more challenging. It also threatens those innovations inspired by broadband and the Internet to address and solve problems that hold our communities hostage, such as chronic disease, the absence of robust educational resources, and "in line" versus "online" government services. In short, just as the costs of digital exclusion are high, so are the risks associated with Title II.

Some have argued that the FCC could reduce the adverse effects of Title II regulation through judicious application of its forbearance authority.[31] Although this suggestion is well intentioned, it misses the point. Even if the Commission could exercise its forbearance authority in a productive manner, it would take years to sort out an appropriately calibrated set of rules, whether due to lengthy rulemakings or litigation. Meanwhile, this regulatory uncertainty would send capital to the sidelines. The economic literature suggests that these regulatory uncertainty effects

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[20] *See* MMTC White Paper, *supra* note 3, at 7.

[21] Maeve Duggan and Aaron Smith, Pew Research Center's Internet & American Life Project, *Cell Internet Use 2013* 5 (Sept. 16, 2013), available at *http://pewInternet.org/Reports/2013/Cell-Internet.aspx* (last visited January 19, 2015).

[22] *Id.* at 7.

[23] *See* Kathryn Zickuhr & Aaron Smith, Pew Research Center's Internet & American Life Project, *Home Broadband 2013* (Aug. 26, 2013) available at *http://pewInternet.org/Reports/2013/Broadband.aspx. See also* Nielsen, *More of What We Want: The Cross Platform Report of Q1 2014* (June 30, 2014) ("Nielsen"), available at *http://www.nielsen.com/us/en/insights/reports/2014/more-of-what-we-want.html* (last visited January 17, 2015). (reporting that African Americans and Hispanics are more likely than other ethnic groups to watch video on demand).

[24] Nielsen, *Significant, Sophisticated, and Savvy: The Asian American Consumer* 19 (2013), available at *http://www.aaja.org/wp-content/uploads/2013/12/Nielsen-Asian-American-Consumer-Report-2013.pdf* (last visited January 19, 2015).

[25] *See* Yoree Koh, *Twitter Users' Diversity Becomes an Ad Selling Point*, The Wall Street Journal (Jan. 20, 2014), available at *http://online.wsj.com/news/articles/SB10001424052702304419104579323442346646168?mg=reno64-wsj* (last visited July 14, 2014); Nielsen, *supra* note 23, at 11.

[26] *See Verizon v. FCC,* 740 F.3d 623 (D.C. Cir. 2014).

[27] *See* Robert Litan, Brookings Inst., *Regulating Internet Access as a Public Utility* 2 (June 2, 2014) available at *http://www.brookings.edu/~/media/research/files/papers/2014/06/regulating__Internet__access__public__utility__litan/regulating__Internet__access__public__utility__litan.pdf* (last visited January 19, 2015).

[28] *See id.* at 1.

[29] *See id.* at 2 ("[Title II] never was intended . . . to apply to services that were not characterized by monopoly, such as Internet access.").

[30] *See* Comments of the Communications Workers of America and National Association for the Advancement of Colored People, FCC GN Docket No. 14–28 (July 15, 2014).

[31] *See, e.g.,* Statement by the President on Internet Neutrality, Daily Comp. Pres. Doc. No. 00841, 2 (Nov. 10, 2014).

would disproportionately harm communities of color.[32] The bottom line is that even if the Commission were to exercise its forbearance authority, the delay inherent in the process would likely stifle the progress we have seen in connecting communities of color. Our communities deserve better than this.

Congress should act to preserve the open Internet, and with it the promise of first class digital citizenship and equal opportunity for all. Congress has the ability to amend the Communications Act to provide strong, bright-line open Internet protections. That is why MMTC and four dozen national minority organizations have urged the Commission to preserve the open Internet without implementing Title II regulations. We encourage Congress to follow the same effective course.

III. MMTC'S Recommendations

As Congress considers how best to achieve these goals, we ask that they keep all options on the table. The legislative proposal should transition to a legislative debate for how to get past this morass so we can address other issues causing strain in the telecommunications ecosystem. Along those lines, we believe it is imperative that Congress narrowly target its effort in resolving the issue of the open Internet, and not attempt to diminish the FCC's authority to address other important consumer protection issues such as prohibiting redlining, promoting universal service, and ensuring public safety.

To this point, I would like to offer two recommendations that I believe are consistent with the spirit of the "eleven principles for bipartisan rules in the Internet Age" that the Committee has laid out.[33]

First, Congress should address, or at a minimum reinforce the FCC's ability to address, the practice of "digital redlining." "Digital redlining" is the refusal to build and serve lower-income communities on the same terms as wealthier communities.[34] It imposes, in essence, digital segregation. Sadly, as the experience of our country shows, both *de jure* and *de facto* segregation harms and degrades all of us—especially the most vulnerable among us. This is no less true in the digital age. Congress has recognized this in the past, which is why it has directed the Commission to collect demographic information concerning unserved areas when it measures deployment of advanced telecommunications capability.[35] Speaking in Cedar Rapids last week, President Obama observed that high-speed broadband is "not a luxury, it's a necessity."[36] Congress should build on its past work and the President's observation by empowering the FCC to prohibit digital redlining and thereby ensure equal access for all.

Second, Congress should ensure that its open Internet rules will be enforced. This requires the creation of an accessible, affordable, and expedited procedure for the reporting and resolution of complaints. As mentioned, one approach would be to use a consumer-friendly complaint process modeled on the probable cause paradigm in Title VII of the Civil Rights Act of 1964.[37] Congress designed Title VII to offer rapid and affordable remedies for employment discrimination faced by women and people of color.[38] Under Title VII, a complainant receives an expedited ruling from the EEOC, and does not need to hire a lawyer or write a complicated filing. The same ought to be true in the context of broadband. Instead of the formal and often byzantine process envisioned by Section 208 of the Communications Act,[39] consumers ought to have an effective, straightforward, expeditious way to provide the

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[32] *See, e.g.,* Hassett & Shapiro, *supra* note 17, at 4–5, 12 (linking increased private investment with increased minority access); J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet,* 2 J. Comp. L. & Econ. 349, 466–67 (2006) (explaining that marginal broadband users—who tend to be minorities—are most affected by price increases).

[33] *See* Republican Press Office, Press Release, *Congressional Leaders Unveil Draft Legislation Ensuring Consumer Protections and Innovative Internet* (Jan. 16, 2015), available at *http://1.usa.gov/1wgzCia* (last visited January 19, 2015).

[34] Broadband & Social Justice, Press Release, *MMTC Urges Government to Address Digital Redlining; Ensure Equitable Access for All* (Jan. 15, 2015), *http://broadbandandsocialjustice.org/2015/01/mmtc-urges-government-to-address-digital-redlining-ensure-equitable-access-for-all/* (last visited Jan. 17, 2015).

[35] *See* Broadband Data Services Improvement Act, Pub. L. No. 110–385, § 103, 122 Stat. 4095, 4096–97 (2008) (codified at 47 U.S.C. § 1302(c)).

[36] Remarks by the President on Promoting Community Broadband (Jan. 14, 2015), available at *http://www.whitehouse.gov/the-press-office/2015/01/14/remarks-president-promoting-community-broadband* (last visited January 19, 2015).

[37] *See* Civil Rights Act of 1964, Pub. L. No 88–352, 78 Stat. 241 (1964) (codified as amended at 42 U.S.C. §§ 2000e *et. seq.*)

[38] *See* 42 U.S.C. § 2000e-2 (prohibiting employment discrimination on the basis of "race, color, religion, sex, or national origin").

[39] *See* 47 U.S.C. § 208. Section 208 directs complainants to submit a petition to the Commission, the Commission then forwards the complaint to the common carrier for response, and the Commission may then open an investigation.

Commission with enough information to determine whether there is a *prima facie* case of specific or systemic harm. If the Commission finds probable cause to believe that its rules have been violated, the agency could immediately implement a mediation process or take enforcement action. Whatever the precise details of this mechanism, the core principle remains the same: consumers, particularly individuals from vulnerable populations, deserve an accessible, affordable, and expedited procedure for ensuring that their government protects them from harm.

Honorable Members of the Committee, we are at an impasse. If we do not act, the largest sacrifice will be the next generation: children from all classes, races and educational backgrounds may never experience the possibilities that new technology can offer to our communities, our Nation, and their world.

Thank you again for the opportunity to testify, and I look forward to your questions.

APPENDIX A

Minority Media and Telecommunications Council—November 21, 2013

REFOCUSING BROADBAND POLICY: THE NEW OPPORTUNITY AGENDA FOR PEOPLE OF COLOR

By David Honig, Esq. and Nicol Turner-Lee, Ph.D.

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Executive Summary

People of color have long been involved in and impacted by communications policy issues. From the denial of broadcast licenses to minority entrepreneurs dating back to the 1930s to the censure of political activists of color during highly charged social justice debates of the 1960s, people of color have long advocated for inclusion in this space. More recently, people of color and their communities have been greatly affected by a lack of digital resources and information to further their economic, civic and educational goals. These particular issues involve, for example, low levels of computer ownership, major gaps in digital literacy, failing schools, lack of awareness of the benefits and uses of broadband, regressive taxation of advanced communications services (especially wireless), and inadequate access to spectrum, capital, and opportunity for multicultural digital entrepreneurs.

As such, the core concern for advancing broadband adoption and digital innovation in the U.S. is to assure that first class digital citizenship is afforded to people of color and other vulnerable groups that include low-income populations, seniors and people with disabilities. A passport to digital citizenship guarantees full access to the opportunities powered by broadband and the Internet, especially those applications and Internet-enabled devices that drive physical wellness, wealth creation and educational readiness. With nearly half of the African American and Hispanic community unconnected to these resources, policymakers should champion broadband policies that facilitate, not stifle, digital diversity, inclusion and entrepreneurship.

While broadband access is more readily available to consumers where they live and work, the last few years have underscored a simple fact about broadband adoption dynamics: *they are extremely complex and unique to each user group.* And for communities of color, the barriers that are impeding more robust adoption and use of broadband are many in number and multifaceted in nature.

Encouraging a more inclusive digital ecosystem could not be more timely. Recent debates on Internet regulation, particularly net neutrality, have minimized the importance of these critical issues and largely overshadowed the adoption crisis. Overwhelmingly, public, private and community stakeholders all desire to create and maintain an "open Internet," yet some of these same discussions have driven apart the very parties that should be working together to address inequities in digital access that diminish opportunities for minority consumers.

In an effort to return concerns about broadband adoption and digital equity to the forefront, this paper calls forth broadband policies that are focused on closing the digital divide and bringing more people of color into the innovation age. In doing so, this paper explores current trends in minority broadband adoption and assesses how current policy debates are supporting or detracting from strategies to promote higher adoption rates in minority communities. In the end, the paper outlines a more progressive agenda to achieve first class digital citizenship for people of color, including:

1. Modernizing E-rate and using broadband to transform education;
2. Facilitating universal telemedicine and mobile health innovation;
3. Expanding digital employment and entrepreneurship opportunities for people of color; and,
4. Rolling back the regressive taxation of wireless services and e-commerce that hinders broadband adoption and use.

This agenda is by no means exhaustive. Numerous other issues must be addressed before communities of color can be fully included in ongoing broadband debates. Indeed, there is likely to be disagreement regarding which issues to prioritize. Such debate is welcomed and encouraged, provided, of course, that collective attention remains focused on adoption and notions of digital equality. In an environment where advocates and community leaders are working together to connect the unconnected, bolster digital literacy, modernize public policy frameworks, and spread the good news about broadband, it's vital that the esoteric debates focused on Internet regulation not be permitted to consume all of the energies and time that must be devoted to these aforementioned issues.

I. Introduction

People of color have long been involved in and impacted by communications policy issues. From the denial of broadcast licenses to minority entrepreneurs dating back to the 1930s to the censure of political activists of color during highly charged social justice debates of the 1960s, people of color have long advocated for inclusion in this space. More recently, people of color and their communities have been greatly affected by a lack of digital resources and information to further their economic, civic

and educational goals. These particular issues involve, for example, low levels of computer ownership, major gaps in digital literacy, failing schools, lack of awareness of the benefits and uses of broadband, regressive taxation of advanced communications services (especially wireless), and inadequate access to spectrum, capital, and opportunity for multicultural digital entrepreneurs.

As such, the core concern for advancing broadband adoption and digital innovation in the U.S. is to assure that first class digital citizenship is afforded to people of color and other vulnerable groups that include low-income populations, seniors and people with disabilities. A passport to digital citizenship guarantees full access to the opportunities powered by broadband and the Internet, especially those applications and Internet-enabled devices that drive physical wellness, wealth creation and educational readiness. With nearly half of the African American and Hispanic community unconnected to these resources, policymakers should champion broadband policies that facilitate, not stifle, digital diversity, inclusion and entrepreneurship.

While broadband access is more readily available to consumers where they live and work, the last few years have underscored a simple fact about broadband adoption dynamics: *they are extremely complex and unique to each user group.*[1] And for communities of color, the barriers that are impeding more robust adoption and use of broadband are many in number and multifaceted in nature (See Figure 1).

Figure 1: Barriers To Broadband Adoption—Minority Communities[2]

Barriers
▪ Perception that broadband is not relevant and/or a necessary investment ▪ Low levels of computer ownership (not including smartphones) ▪ Underdeveloped digital literacy skills ▪ Cost/affordability concerns (these are tied to notions of relevancy) ▪ Lack of minority-oriented and, especially, minority-owned online content and services ▪ Lack of awareness of the many welfare-enhancing tools and services that are enabled by a broadband connection (*e.g.*, telemedicine, digital education tools) ▪ Lack of targeted outreach, education, and training services in minority communities ▪ Perception that the Internet is unsafe and/or fears of identity theft (among older adults) ▪ Online privacy and cybersecurity concerns ▪ Language barriers (especially relevant for non-English speaking Hispanics).

Given these barriers, it is imperative that policymakers focus more resources on these complex but solvable problems. Addressing these barriers will require a significant commitment of time, funding, and patience to carefully tailor and target outreach and digital literacy programs. Successfully designed and deployed, these efforts have proven to be extremely successful in connecting unconnected minorities, even though they can be a challenge to implement.[3]

Federal policymakers should also foster a balanced environment that encourages the type of multi-stakeholder collaboration that is essential to bringing more minorities online. The U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) has done an exceptional job in working with local stakeholders to design and deploy community-specific outreach and training programs. The Connect2Compete program, an outgrowth of efforts by the Federal Communications Commission (FCC) in this space, recently launched a new national radio and broadcast ad campaign, in partnership with the Ad Council, to promote the benefits of broadband to millions of Americans.[4] As to be discussed in this paper, continuing forward with this type of "collaborate first" instead of a "regulate first" approach cultivates a more proactive environment for addressing broadband adoption issues.

Encouraging a more inclusive digital ecosystem could not be more timely. Recent debates on Internet regulation, particularly net neutrality, have minimized the importance of these critical issues. Overwhelmingly, public, private and community stakeholders all desire to create and maintain an "open Internet," yet some of these same discussions have driven apart the very parties that should be working together to address inequities in digital access that diminish opportunities for minority consumers.

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adoption and assesses how current policy debates are supporting or detracting from strategies to promote higher adoption rates in minority communities. In the end, the paper outlines a more progressive agenda to achieve first class, digital citizenship for people of color and ensuring that people experience the economic benefits that access and use of broadband provides.

Section I of the paper summarizes current data on broadband adoption among African Americans and Hispanics. Section II examines current debates on Internet policy that can advance or limit broadband adoption rates in communities of color. Section III, the final section, outlines a pathway that ensures increased engagement of people of color in the digital economy. In Section III, four core policy areas that are both pragmatic and targeted in scope are introduced to close the digital divide: (1) modernizing E-rate and using broadband to transform education; (2) facilitating universal telemedicine and mobile health innovation; (3) expanding digital employment and entrepreneurship opportunities for people of color; and (4) rolling back the regressive taxation of wireless services and e-commerce that hinders broadband adoption and use.

This agenda is by no means exhaustive. Numerous other issues must be addressed before communities of color can be fully included in ongoing broadband debates. Indeed, there is likely to be disagreement regarding which issues to prioritize. Such debate is welcomed and encouraged, provided, of course, that collective attention remains focused on adoption and notions of digital equality. In an environment where advocates and community leaders are working together to connect the unconnected, bolster digital literacy, modernize public policy frameworks, and spread the good news about broadband, it's vital that the esoteric debates focused on Internet regulation not be permitted to consume all of the energies and time that must be devoted to these aforementioned issues.

II. The State of Digital Equity

Broadband is the foundation upon which the 21st century economy is being built. It is rapidly transforming virtually every aspect of modern life—from how we communicate to how we receive medical care to the types of businesses that develop in under-served communities. And most important for minorities and any other group that has been pushed to the margins of society, broadband represents the apex of equality—an on-ramp to a digital world where everyone can compete on a level playing field.[5] Striking the right balance between tinkering with policy and helping to forge the partnerships and collaborations needed to close the digital divide are all core to the recalibration of broadband policy, especially if these groups are to benefit from the digital economy.

Despite slight increases in minority broadband adoption over the last few years, African Americans and Hispanics are still under-adopting.[6] Figure 2 provides a historical overview of the digital divides that has plagued these communities for much of the last decade.

Figure 2: Trends In Broadband Adoption Rates Across Demographic Groups: 2005–2013

Year	Overall	White	African American	Hispanic	White-African American Gap	White-Hispanic Gap
2005[8]	33%	31%	14%	28%*	17%	n/a**
2006[9]	42%	41%	31%	41%*	10%	n/a**
2007[10]	47%	48%	40%	47%*	8%	n/a**
2008[11]	55%	57%	43%	56%*	14%	n/a**
2009[12]	65%	69%	59%	49%	10%	20%
2010[13]	68%	72%	55%	57%	17%	15%
2011[14]	69%	74%	55%	56%	19%	18%
2012[15]	65%	70%	53%	49%	17%	21%
2013[16]	70%	74%	64%	53%	10%	21%

*Notes: *English-speakers only; **Not applicable because adoption surveys only covered English-speaking Hispanics*

As shown in Figure 2, African Americans have experienced a 50 percent increase in broadband adoption, while Hispanics are only at half of that rate of growth in the last eight years. Increasing mobile Internet use by people of color can partially explain higher levels of broadband adoption among minorities. According to recent research by the Pew Internet and American Life Project, 63 percent of Americans

use their cell phone to access the Internet or use e-mail; and, one in five cell owners do most of their online browsing on their phone.[17] Seventy four percent of African Americans are cell phone Internet users as compared to 68 percent of Hispanics and 59 percent of whites.[18] Low-income populations, less-educated and younger Internet users were also more likely to go online using their cell phones at higher rates than wealthier, more educated and older populations.[19]

The emergence of smartphones has contributed to the expanded use of the mobile Internet by people of color. In 2013, Pew research found that 56 percent of American adults own a smartphone of some kind, compared with 70 percent who have broadband at home.[20] In their study of smartphone usage, Pew research found that African Americans and Latinos over-indexed in their use of these devices for non-voice applications such as web surfing, playing games and accessing multimedia content.[21] A report issued by the Joint Center for Political and Economic Studies mirrored these findings reporting that 46 percent of whites have smartphones compared to 49 percent of African Americans and Hispanics.[22] E-mail (90 percent), online social media (82 percent) and research for school or work (70 percent) were the primary activities of Internet users connecting solely through a smartphone.[23] While the Joint Center study concluded that access to multiple Internet-enabled devices (*i.e.,* home broadband, tablet and smartphone) increases the likelihood that individuals will access more welfare-enhancing content such as jobs, health/medical information and e-commerce, wireless access is clearly addressing one major barrier to adoption—the absence of a home broadband connection for people of color.[24]

While the promise of broadband is being realized by some, a large number of African Americans and Hispanics are still not online, citing relevance first and the lack of digital literacy skills second as critical reasons. Among non-Internet users, recent Pew research found that 15 percent of American adults over the age of 18 were not online.[25] According to this data, 34 percent of non-Internet users reported that the Internet was just not that relevant to them, pointing to the lack of interest, desire and need for it as the main reasons for lack of a connection.[26] Digital illiteracy was cited by 32 percent of survey respondents as to the reason for their lack of a connection, while 19 percent cited the expense of service and/or computer as another reason for not getting online.[27]

According to Pew's research on why people are not getting online, 24 percent of Hispanics are non-Internet users as compared to 15 percent of African Americans, and 14 percent of Whites.[28] Seniors, low-income populations, and rural residents also ranked high as non-Internet users.[29] When these variables are combined with race and ethnicity, disparities in broadband adoption rates are even more dramatic.

Despite their lack of online use, non-Internet users reported, both in 2010 and 2013, adequate availability of and access to broadband services either at home, through family members or friends, or at their place of employment.[30] Compared to 2010 Pew data, access to Internet resources is even greater now—only seven percent of study respondents reported no access to an Internet Service Provider (ISP) in 2013.[31]

This finding alone suggests that the market for broadband services has blossomed over the last decade, despite gaps in demand. Some researchers and advocates would also argue that the certainty provided by a long-standing, minimalist regulatory approach to broadband policy served to preserve and expand the ecosystem, resulting in both continued investment in infrastructure and rapid deployment of next-generation wireline and wireless networks to nearly every part of the country.[32] Today, the vast majority of households in the U.S. are served by broadband ISPs, with most having multiple wireline and wireless options.[33] Equally as important, the quality of broadband service—measured in terms of speed, the range of offerings, and other factors—has greatly increased,[34] and prices have fallen.[35] Figure 3 summarizes some key achievements in the U.S. broadband market.

Figure 3: A Snapshot Of Key Metrics For The U.S. Broadband Market

Availability
▪ Some form of broadband – wireline, wireless, or satellite – is available to just about every household in the country. Only 6% of the population remains without a wireline connection; 0.2% are without a wireless provider.[36]
Investment
▪ ISPs have invested over $1 trillion in their networks between 1996 and 2011. Considerable increases in investment levels have been consistently observed in response to legal and regulatory actions that have affirmed the light-touch regulatory approach to broadband that grew out of the 1996 Act. Over the last few years, wireline and wireless providers have invested an average of $60+ billion annually in maintaining and bolstering their infrastructure.[37]
Competition
▪ The majority of the population in the U.S. has access to multiple providers of wireline and wireless broadband. According to recent research, households have access to at least two wireline providers and four wireless providers.[38]
Speeds
▪ The average speed of Internet connections continues to rise each year. Indeed, the FCC has observed on several occasions that service providers are meeting consumer demand for faster speeds.[39]

Highlighting these accomplishments in the broadband market is important because the notion of universal service and equal access to communications technology and media has long been at the core of minority advocacy in this space.[40] Many national civil rights organizations have continually exerted pressure on stakeholders in the public and private sectors to ensure that historically disadvantaged groups, along with low-income households and others that have been pushed to the margins of society, have robust access to these transformative services.[41]

The juxtaposition of the state of broadband markets against current rates of adoption therefore should draw attention to the mismatch between growth and consumer demand, suggesting the need to focus on increasing broadband adoption.

III. The Impact of Internet Regulation on Broadband Adoption

The current debate centered over whether and how the FCC might regulate the Internet has largely overshadowed the adoption crisis.[42] The roots of this debate stretch all the way back to discussions in the 1990s and early 2000s about the appropriateness of imposing common carrier-style "open access" rules on cable broadband service providers with one of the first early concerns being local franchise regulation.[43] Coined in the early 2000s, "network neutrality" attempts to both capture an amorphous set of values for Internet governance and levy an indictment of sub-par competition in the market for high-speed Internet access.[44]

Over time, the conversation has evolved into a broader examination of the market for high-speed Internet access in the United States and the extent to which ISPs could possibly position themselves as gatekeepers to content on the World Wide Web.[45] To that end, those who advocate in favor of more regulation of the Internet have long punctuated their arguments with ominous "what ifs" that might befall an "unregulated" broadband sector.[46] In their view, the absence of affirmative rules governing how ISPs can and cannot manage their networks leaves the market vulnerable to a range of hypothetical dangers.[47] On the other hand, those who argue for a minimalist regulatory framework view other governmental entities such as the Department of Justice or Federal Trade Commission mitigating genuine market failures and consumer harms on a case-by-case basis.

Recapping the History of Broadband Policies

While both of these sides have their merits, they do not fully embrace solutions for addressing the broadband adoption crisis. Despite the FCC's 2010 National Broadband Plan's[48] articulation of an inspiring vision for a more inclusive and robust culture of digital engagement, the type of rules needed to monitor and preserve the open Internet have undergone scrutiny from government, industry and advocacy groups. Historically, a hands-off approach has long been the primary guiding principle for regulating the Internet in the United States. One of the clearest interpretive statements of the FCC's mandate in this space came from FCC Chairman William Kennard, who served as FCC chair in the late 1990s when the commercial

Internet began to reach the general population and when broadband networks first began to emerge.

At that time, some local franchise authorities had decided to impose "open access" requirements, a form of common carrier regulation, on cable modem broadband service. Further, many consumer advocates and cable competitors were calling for the FCC to impose an open access obligation when approving AT&T's (the long distance company) acquisition of the largest cable company, TCI. In 1999, recognizing that this new service and the Internet sector were poised for exponential growth, Kennard stated:

> In a market developing at these speeds, the FCC must follow a piece of advice as old as Western Civilization itself: first, do no harm. Call it a high-tech Hippocratic Oath.
>
> So with competition and deregulation as our touchstones, the FCC has taken a hands-off, deregulatory approach to the broadband market. We approved the AT&T–TCI deal without imposing conditions that they open their network.
>
> The competitive fires are burning. The market has a degree of certainty and investment dollars have followed. Yet some local cable franchising authorities want to try a different approach. Instead of a national policy of de-regulation and competition, they want a local policy of regulation.
>
> It is in the national interest that we have a national broadband policy. The FCC—as I've said before—has the authority to set one, and we have. We have taken a deregulatory approach, an approach that will let this nascent industry flourish.[49]

After several court challenges regarding the efficacy of imposing open access rules on cable broadband ISPs,[50] the FCC endeavored to clarify, once and for all, the appropriate regulatory framework for all broadband platforms.[51] To that end, between 2002 and 2007 the FCC classified every type of broadband platform as an "information service," reflecting the dynamic and interactive nature of information flowing over these networks.[52] The practical impact of these decisions was that broadband would be subjected only to the Commission's ancillary regulatory authority under Title I of the Communications Act, which provides for little to no government oversight. This contrasted greatly with the policy framework that had been developed for basic telephone service, which is regulated under Title II as a common carrier.[53] The FCC concluded that a minimalist regulatory framework for broadband services was necessary given the dynamism of the market, and was also essential to "promot[ing] widespread deployment of broadband services."[54]

While these policy imperatives were clearly focused on facilitating more widespread access to broadband services, a goal shared by communities of color, the FCC during this period also explored how to ensure that "the various capabilities of [broadband] technologies [were] not used in a way that could stunt the growth of the economy, innovation and consumer empowerment."[55] Addressing these concerns, FCC Chairman Michael Powell put forth four principles that would "preserve the freedom of use broadband consumers [had] come to expect."[56] These "Powell Principles," which would be eventually adopted by the FCC in a non-binding Policy Statement in 2005, entitled consumers to:

- Access the lawful Internet content of their choice;
- Run applications and use services of their choice, subject to the needs of law enforcement;
- Connect their choice of legal devices that do not harm the network; and
- Experience competition among network providers, application and service providers, and content providers.[57]

Each principle was subject to the reasonable network management needs of the broadband service provider.[58] While these were not formal, enforceable rules, the FCC did express an intention to "incorporate the. . .principles into its ongoing policymaking activities."[59]

Despite the rapid build-out of the Nation's broadband infrastructure, skepticism regarding the ability of organic market forces to drive the marketplace to positive, consumer-focused outcomes has lingered. In the mid-and late-2000s, there were repeated calls for the imposition of common carrier-style rules on broadband ISPs, even though the FCC had expressly declined to do so for fear that such rules would choke innovation.[60] Moreover, calls for formal network neutrality rules increased as some advocates argued that the Commission's Policy Statement enshrining the Powell Principles was insufficient to protect against the potential for content discrimination, blocking, throttling, and other such activities by ISPs. However, until 2007 the

FCC did not receive a single complaint claiming unlawful or unreasonable behavior by ISPs.[61] And even when it did—in a case involving alleged throttling of the bandwidth-intense data traffic of BitTorrent by cable broadband provider Comcast[62]—the debate over the proper scope of Internet regulation and consumer protection quickly snowballed into what some saw as a proxy battle over the future of the open Internet.

The subsequent inquiry by the FCC, which began in early 2008, set in motion a series of interrelated events that, over the next two years, largely dominated the discussion of removing barriers to broadband adoption and resulted in the adoption of network neutrality rules. Having anticipated legal challenges, a year earlier the FCC launched a rulemaking proceeding to "provide greater clarity regarding the Commission's approach to these issues."[63] Specifically, the Commission wished to codify the four principles included in the 2005 Policy Statement, along with two new rules: a nondiscrimination rule and a transparency requirement for ISPs.[64]

The FCC's Proposed New Regulatory Framework

In December 2010, the Commission closed its rulemaking proceeding by adopting a completely new regulatory framework for the Internet, a framework that went far beyond what the FCC had outlined previously in its 2005 Policy Statement. The FCC rationalized that such sweeping and historic action was necessary to preserve the open Internet. These new rules encompassed:

- *Blocking.* Subject to reasonable network management, providers of fixed broadband Internet access services were prohibited from blocking lawful Internet content, applications, services, or non-harmful devices.[65] Mobile broadband providers were afforded more latitude and prevented only from blocking lawful websites or applications that provide voice or video telephony services.[66]
- *Transparency.* All ISPs were required to disclose their network management practices (*e.g.,* congestion management, attachment rules), performance characteristics (*e.g.,* service description and impact of specialized services), and commercial terms (*e.g.,* pricing and privacy policies).[67] Consumer and civil rights organizations favored strong transparency requirements.[68]
- *Unreasonable discrimination.* Recognizing that "[a] strict nondiscrimination rule would be in tension with our recognition that some forms of discrimination, including end-user controlled discrimination, can be beneficial,"[69] the FCC adopted a rule that prohibited only providers of fixed broadband service from "unreasonably discriminat[ing] in transmitting lawful network traffic over a consumer's broadband Internet access service."[70]

Several carve-outs and exceptions were included in this framework. In one major carve-out, the FCC, recognizing the unique capacity constraints and other distinctive qualities of wireless networks, limited the extent to which the rules applied to mobile broadband ISPs. In particular, the FCC opted to "apply certain of the open Internet rules, requiring compliance with the transparency rule and a basic no-blocking rule."[71] In a second exception, the FCC created a new category of services—specialized services—that are to be exempt from the rules for the foreseeable future.[72] This class of services includes VoIP and IP video and might eventually embrace applications like telemedicine. According to the exception, these specialized services must also be closely monitored by the FCC in order to "verify that [they] promote investment, innovation, competition, and end-user benefits without undermining or threatening the open Internet."[73]

As soon as these rules were finalized and put into effect,[74] they were appealed to the Court of Appeals for the District of Columbia Circuit on the grounds that the FCC had exceeded the regulatory authority granted to it by Congress.[75] A decision in the case is expected by the end of 2013.[76]

The Impact of FCC Regulatory Decisions on Broadband Adoption

While this paper takes no position on which side will prevail in the court decision on the net neutrality rules, it's worth noting that an "open Internet" and increased broadband adoption should still be the goals regardless of the decision. As stated earlier, broadband growth and technology innovation have created the backdrop for greater digital engagement by all citizens, yet more vulnerable populations are not immediately adopting. As shown in Figure 2, disparities still exist despite the fact that the FCC explicitly stated that it "expect[ed] that open Internet protections [would] help close the digital divide by maintaining low barriers to entry for underrepresented groups and allowing the development of diverse content, applications and services."[77] Moreover, gaps between African Americans, Hispanics, and Whites have persisted both before and after the imposition of Internet regulation.[78] *Given*

this scenario, what could be the impact of more or less Internet regulation now narrowing the current digital divide?

If the rules were to be upheld in this decision, minority consumers and other newcomers to the Internet might be subjected to cost shifting by ISPs to shoulder the cost of heavier users that congest the Internet with heavy video streaming and multimedia downloads. The idea that minority consumers, who are already disproportionately adopting broadband and sensitive to any changes in price, should incur the expense of heavier bandwidth users does not appear to further the goals of broadband adoption. Previous data points presented in this paper indicated that e-mail, social media and access to multimedia content (*e.g.,* photos, music, etc.) were primary activities online for minority consumers.[79] These three functions taken together do not require enormous amounts of bandwidth and justify the need for service and price differentiation for late adopters and non-Internet users to match usage expectations and their discretionary income.

Moreover, over-regulating this industry could undermine business models that have essentially kept, and continue to keep, the cost of broadband services lower. In a paper on broadband competition, Everett Ehrlich argues that the Internet's "two-sided" market is what drives down consumer pricing.[80] Comparing the broadband ecosystem to that of newspapers, Ehrlich notes that the daily newspaper generates its revenue through consumer subscriptions and advertising, and concludes that if newspapers were over-regulated and told to keep ad revenues marginalized, newspapers—much like the Internet—would find themselves substantially raising consumer prices and possibly impacting consumer demand for the product."[81] Today, the cost of broadband services is, in fact, decreasing due to flexible business models that capitalize on competition and market-driven revenue opportunities, *e.g.,* online advertising.[82]

On this same issue, online content and applications that serve the needs of Internet users and entice those who are offline to adopt, should take some priority in this content's arrival to the PCs and smart devices of consumers. In his article on the "two-sided" market of the Internet, Nicholas Economides, a net neutrality proponent, suggested that prioritization of monetized content over non-paying firms on an "open Internet" is discriminatory.[83] While his conclusions have some plausibility due to the diverse interests of Internet users, safeguards are already in place to monitor industry's performance in this area. The FCC's annual "Measuring Broadband America" report details the speed and performance of broadband connections and calls out degrading services among broadband providers.[84] In this annual report card, any negative effect on broadband performance due to content prioritization is designed to show up, thus making the industry more accountable—and in some cases, more competitive in touting their service quality. Therefore, there is little danger that prioritizing some content will cause a degradation of general Internet traffic. Moreover, some legitimate cases for content prioritization do exist—one being in the area of telemedicine.

As more minorities, for example, suffer from chronic diseases and inadequate access to health care, more advanced and consumer-focused telemedicine and telehealth applications should take priority over leisurely downloads, especially if the need for data is critical for patient care and insurance companies are willing to pay for it.[85] The ability of high-speed broadband networks to facilitate patient to doctor connections, especially for low-income or rural communities, is another step towards assuring first class digital citizenship for all Americans. Given that most minorities are also using the mobile Internet to access the web, the combination of spectrum shortages for commercial wireless and the imposition of overly stringent neutrality rules might limit the expedited delivery of this type of content, especially if applications like telemedicine are not exempted from the rules.

In sum, if the net neutrality rules are ultimately upheld by the Federal courts, then policymakers, minority advocates and community stakeholders must consider the potential impacts of regressive cost structures, stalled competition and innovation on efforts to advance broadband adoption and use. The Commission should also interpret and apply its rules and policies in a reasonable, forward-looking manner commensurate with the minimalist regulatory framework for broadband that has encouraged investment and innovation throughout the ecosystem for nearly two decades. Failure to do so could adversely impact users by undermining business model experimentation (*e.g.,* new ad-supported services, or non-monopolistic partnerships between content providers and ISPs that hinge on granting preferred network access) and the emergence of new services that are being developed in direct response to consumer demand (*e.g.,* telemedicine tools that require prioritization; new streaming media services).[86]

If the rules are invalidated, on the other hand, the "open Internet" should still remain an essential policy focus. Policymakers, minority advocates and community

stakeholders should place continued pressure on industry to invest, innovate and extend its efforts to bring more underserved populations online, particularly by stabilizing or reducing consumer costs for broadband services. In the absence of rules, the FCC should also recognize that broadband service is different from what has historically been considered a common carrier service. These fundamental technological differences are also evident in the ability to enable broadband Internet access via different platforms—*e.g.,* cable, DSL, BPL, fiber, 3G wireless, 4G wireless, and satellite. This type of intermodal competition that was impossible in the context of basic telephone service suggests the maintenance of a minimalist, Title I-based regulatory framework under which the market has long thrived. On this basis alone, attempting to reclassify broadband as a Title II telecommunications service could prove harmful for consumers and companies alike.[87]

If history is any guide, debates around Internet regulation will continue to dominate the discussion around the future of the Internet, but, as suggested in this paper, at a cost to closing the digital divide. The time, resources and efforts focused on picking "winners" and "losers" in this debate can detract from solving the enormously complex and top priority task of connecting and serving the unconnected.

Going forward, numerous other barriers and issues are ripe for narrowly tailored interventions that, if properly calibrated, can help deliver more robust and evenly distributed gains in consumer welfare. The final section of this paper expounds upon these opportunities and proposes more pragmatic policy solutions that would advance the cause of digital inclusion.

IV. Refocusing Broadband Policy to Advance Digital Inclusion for People of Color

Broadband policy should engage communities of color to leverage broadband for individual and community empowerment. As such, this paper offers an alternative approach to broadband policy that shifts the resources and energy from a protracted and unnecessary battle over regulation to connection of underserved and under-connected demographic groups.

With these dynamics in mind, the remainder of this paper articulates an alternative path forward for the FCC, Congress, ISPs, advocates, and other stakeholders in the broadband space. The issues discussed below are of fundamental importance not only to communities of color, but to every demographic group, sector, and institution in the United States.

Modernizing the E-rate and Using Broadband to Transform U.S. Education

A critical component of solving the adoption crisis in the United States is ensuring that children are equipped with the skills needed to excel in our digital society. While Internet access has diffused across nearly every school in the nation,[88] high-speed access is unavailable in many schools, and the disruptive power of broadband remains largely untapped in this vital sector. The issues are well known: average bandwidth per student is low across the entire student population; many schools lack adequate computing equipment (*e.g.,* laptops and tablets) to tap into the full power of broadband; too many teachers are unprepared to apply or teach new technologies in the classroom; and lack of home access to broadband access profoundly inhibits learning outside of school.[89]

Addressing these barriers is essential for all children and our country generally, but especially vital for African American and Hispanic students, particularly those from low-income, low-wealth families. As in many other contexts, significant disparities exist in the educational achievement and performance of communities of color vis-à-vis other demographic groups. Despite significant gains in recent years, African American and Hispanic students still lag behind children in other demographic groups by a number of measures, including high school graduation rates and reading and math test results.[90] As a result, African Americans and Hispanics are less likely to attend and finish college than White counterparts.[91]

Broadband cannot and will not solve all of these problems on its own, but ensuring that high-speed Internet access is widely available in schools and being applied to enhance educational engagement will be significant steps toward bridging the achievement gap. Broadband supports an ever-expanding array of tools and services that can provide students with more individualized learning experiences that can be accessed regardless of location. Modernizing the E-rate program to ensure that funding is being used to support these types of outcomes must be a priority for Federal policymakers. Fortunately, the FCC has begun the process of updating and streamlining this program to better reflect the modern educational and technological environment.[92]

To ensure that E-rate 2.0 is aligned with the educational and technology goals of minority communities, the FCC should engage directly with stakeholders working

in these communities to benefit from their expertise and explore what works when it comes to designing programs aimed at enhancing educational outcomes in minority communities.[93] The next iteration of the E-Rate program can be pivotal in upgrading technology-deficient schools and libraries located in poor and minority communities and initiating the pathway to digital citizenship for isolated populations. Robust digital learning environments will also enable the use of 21st century devices, as well as pedagogies that support science, technology, engineering and mathematics (STEM) core competencies for disadvantaged schools and students.

All of these gains, of course, will be for naught if home broadband adoption rates remain low. In this new world of broadband-enabled communication and education, learning should not stop once a student leaves the schoolyard. A growing body of evidence suggests that children in households that adopt broadband have better educational outcomes than children in households that remain unconnected.[94] These gains, however, also hinge on parents who are themselves digitally literate and who are engaged in helping their children use broadband to enhance their education.[95] Much work remains to be done at the community level to ensure that parents, grandparents, teachers, community leaders, and other authority figures agree to use broadband to create a culture of adoption, a culture of digital learning, and a culture of digital empowerment and achievement for minority students of all ages.

Facilitating Telemedicine and Mobile Health Innovation

As previously discussed, advanced broadband technology is rapidly transforming healthcare in the United States. This real-time, always-on communications platform allows for dramatic new approaches to delivering and consuming medical care regardless of location.[96] A wide range of broadband-enabled technologies—from wireless sensors to mobile devices to electronic health records—are already being used by practitioners to deliver in-home care, to remotely monitor patients' vital signs, to provide healthcare services in underserved areas, and to more conveniently connect patients with specialists.[97] Together, these new approaches are generating impressive results in the form of better health outcomes, lower costs, and wider availability.[98] Yet the very groups that are poised to benefit most immediately and profoundly from these more advanced healthcare services—*i.e.,* older adults, people with disabilities, African Americans, and Hispanics—have the lowest broadband adoption rates.

For minorities in particular, broadband-enabled telemedicine provides convenient and affordable ways to address chronic illnesses and diseases. This is especially critical for African Americans and Hispanics, who collectively are at a higher risk of developing costly chronic diseases (*e.g.,* diabetes, heart disease) than other groups.[99] They are also less likely to have health insurance, which reduces the likelihood that chronically ill patients will seek out and obtain preventative care or other services that could lead to early diagnosis and treatment.[100] As such, African Americans and Hispanics are poised to benefit greatly from the full panoply of telemedicine services, especially those enabled by and accessible on mobile devices. Since African Americans and Hispanics are already avid users of wireless broadband services,[101] there is growing evidence that mobile telemedicine interventions and solutions are well positioned to deliver the kind of preventive, real-time medical care that is not readily accessible to these patients.[102]

Uncertainty regarding the ability to prioritize healthcare data traffic, and the persistence of numerous legal and regulatory barriers, could thwart continued progress in telehealth. As the National Foundation for Women Legislators (NFWL) and the National Organization of Black Elected Legislative (NOBEL) Women observed in 2010, having wide latitude to manage networks and prioritize certain types of critical, time-sensitive data is essential to promoting continued innovation in this space.[103] While it could be determined that telehealth applications could be exempted from neutrality rules, several other barriers can also impede further progress and innovation in this space.[104] These include a range of analog-era rules impacting physician licensure and credentialing,[105] as well as antiquated insurance reimbursement mechanisms and health data privacy rules.[106] Addressing and potentially resolving these impediments can unleash the full disruptive power of broadband in the healthcare space. To that end, it is imperative that policymakers at the Federal and state levels work to remove barriers and encourage more innovation throughout the burgeoning telemedicine ecosystem. Ultimately, a windfall of benefits and opportunity for communities of color and other underserved groups should be at the top of a new broadband policy agenda.

Expanding Digital Employment and Entrepreneurship for People of Color

An important consequence of addressing the adoption crisis and removing persistent barriers to broadband adoption in education will be increased use of ad-

vanced communications tools to bolster minority entrepreneurship, employment, and overall wealth creation and economic standing.

High-speed Internet access is an increasingly essential tool for workers of all kinds. Broadband rapidly creates new jobs and new kinds of jobs[107] and represents a unique platform that allows anyone with an idea, ambition, and digital literacy skills to launch a small business.[108] This is potentially a boon for people of color in particular, who have endured decades of stubbornly high unemployment rates.[109] Such chronic employment disparities, coupled with the lingering vestiges of marginalization, have also contributed to a staggering gap in household wealth between Whites, African Americans, and Hispanics. A recent analysis by Pew found that the "median wealth of white households is 20 times that of [B]lack households and 18 times that of Hispanic households."[110] Together with limited access to capital,[111] low rates of broadband adoption, and lagging digital literacy skills,[112] these factors combine to put African Americans and Hispanics at a grave disadvantage in the new digital economy.

Becoming a digital entrepreneur, however, can be difficult. As with any other business endeavor, using broadband to start a new venture is fraught with uncertainty. Success often hinges on funding, relationships, skill, and luck. Unfortunately, the deck has long been stacked against minorities in the high tech space. A 2011 report by MMTC found that "minorities, particularly African Americans, Hispanics, and women, remain sorely underrepresented across the high tech sector and in the ranks of some of the sector's biggest companies." [113] Numerous factors have contributed to this outcome—low participation rates and achievement in STEM subjects (science, technology, engineering, and math) by African American and Hispanic students; a general disregard for Equal Employment Opportunity (EEO) reporting and compliance by high tech firms; little support for minority and women business enterprises in the sector; and limited access to critical resources (*e.g.,* spectrum).[114] Indeed, despite lofty rhetoric promising equal access and openness, the high tech sector still remains largely closed to African Americans and Hispanics.[115] Such an inhospitable environment discourages the type of risk-taking needed to succeed in this highly dynamic and competitive space.[116]

At a time when many high tech companies are advocating for immigration law reforms in an effort to import more talent—and thus fill viable openings with noncitizens—policymakers should work to bolster the domestic supply of technologically proficient workers.[117] The urgency around these issues is made even more acute by Federal sequestration and budget cuts that make it necessary for public officials to choose how to deploy increasingly scarce resources in a way that will realize the largest return on investment. In such an environment, policymakers—while insisting on strict enforcement of EEO and other civil rights mandates—should tread carefully on relying entirely on rigid policies dependent upon government oversight. Instead, a collaborative approach that partners public and private sectors to advance minority participation in the high tech sector should be considered. To that end, policymakers should support efforts to improve minority STEM achievement,[118] make minority employment data more transparent, raise awareness of effective minority hiring practices in the private sector, increase access to capital and other critical resources needed for minority entrepreneurs to thrive in this space, and improve broadband adoption rates in minority communities.[119]

These and other actions must be taken to equip eager minority candidates with the skills, resources, and confidence needed to compete for and secure positions in this space.[120] These efforts will also undoubtedly encourage and embolden would-be digital entrepreneurs to enter the fray and attempt to build successful businesses.

Rolling Back the Regressive Taxation of Wireless Services and E-Commerce that Hinders Broadband Adoption and Use

As previously discussed, African Americans and Hispanics are over-indexing in their use of the mobile Internet and increasingly becoming the avid users of smartphones. Yet, despite these positive trends, wireless services continue to be taxed at disproportionately high rates.

This preference by minorities for mobile services makes high wireless taxes a significant burden on low-income users, and particularly minorities. A 2012 analysis of wireless taxes found that the average tax burden on wireless consumers was just over 17 percent, with many states having rates over 20 percent.[121] State and local levies and fees comprise the largest share of these taxes (11.36 percent of the overall burden).[122]

The regressive nature of these taxes could discourage continued use of wireless services, including mobile broadband, in communities of color and low-income households.[123] Combined with an array of other state and local taxes being levied on dig-

ital goods, the overall tax burden associated with using mobile services to purchase goods could deter more robust use of these tools by the very groups that are turning to them as their primary means of communication. As the Joint Center for Political & Economic Studies noted in a 2011 report,

> "[s]uch regressive taxation schemes create a broadband adoption barrier for low-income individuals that have no other reliable way to go online. The higher total cost of service created by these taxes may cause many low-income consumers to either forego purchasing a mobile device and subscribing to a mobile service plan or cancel their service upon discovering the true cost of maintaining their service." [124]

Similar concerns abound in communities of color, where mobile broadband has emerged as the primary pathway to first class digital citizenship.[125]

There are several ways in which policymakers can work together to reverse these trends. First, local and state policymakers should work closely with community leaders, advocates for minorities and the poor, and other stakeholders to appreciate how integral wireless services have become to everyday life. Acquiring such perspective could help to begin the process of equalizing the tax treatment of wireless services with other services. Second, the FCC should work to rein in growth of the USF portion of the overall wireless tax burden. In particular, the Commission could accelerate reforms aimed at creating economies in the operation of the High Cost Fund, and more accurately targeting subsidies and thus driving down overall costs.[126] Continued support of the Lifeline program will ensure that people of color, irrespective of their ability to pay, will be able to benefit from wireless services. Third, Congress should pass legislation that would place a moratorium on new state and local wireless taxes for the foreseeable future. In the recent past, several bills to this effect have been introduced, but none has gained momentum towards enactment.[127]

In sum, according to the 2011 report from the Joint Center for Political and Economic Studies,

> "[w]hile regressive state and local wireless taxation structures may appear to generate revenues to provide needed services, these taxes also put mobile opportunities farther out of reach for those consumers who would most benefit from wireless broadband." [128]

As such, there are many opportunities for stakeholders to come together and develop fairer tax structures for wireless and E-commerce.

V. A Call to Action

This agenda is by no means exhaustive. Numerous other issues must be addressed before communities of color can be confident in their inclusion in ongoing broadband debates. Indeed, there is likely to be disagreement regarding which issues to prioritize. Such debate is welcomed and encouraged, provided, of course, that collective attention remains focused on adoption and notions of digital equality. In an environment where advocates and community leaders are working together to connect the unconnected, bolster digital literacy, modernize public policy frameworks, and spread the good news about broadband, more complex debates focused on Internet regulation seem to redirect energies and time spent on these aforementioned issues.

As stated throughout the paper, the current focus on the enforcement of rules that are designed to be prophylactic [129] towards hypothetical "what ifs" has detracted from this critical conversation on how the Nation will ensure a more inclusive and beneficial Internet for all citizens. The critical concern of advancing digital inclusion should resonate with all stakeholders who want to assure that millions of Americans are privileged to the social, economic and education benefits powered by the broadband ecosystem. In particular, the call to action must include:

- Modernizing E-rate and using broadband to transform education;
- Facilitating universal telemedicine and mobile health innovation;
- Expanding digital employment and entrepreneurship opportunities for people of color; and,
- Rolling back the regressive taxation of wireless services and e-commerce that hinders broadband adoption and use.

These are all actionable policy issues that serve to engage and remove the deterrents to broadband adoption for more vulnerable populations.

While priorities will differ on how to reach these goals, agreement on the core issue of first class, digital citizenship for people of color, low-income, senior and disabled Americans should resonate, especially in the achievement of digital equity. Ul-

timately, this aspirational state will only be achieved if all interests are aligned around common goals that are focused on empowering vulnerable populations to seize the many opportunities afforded by informed broadband use.

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Endnotes

[1] The literature on this point is vast and growing. For a representative sampling, *see National Minority Broadband Adoption* (identifying minority-specific barriers*); Barriers to Broadband Adoption: A Report to the FCC,* New York Law School (Oct. 2009), available at *http://www.nyls.edu/user_files/1/3/4/30/83/ACLP%20Report%20to%20the%20FCC%20%20Barriers%20to%20BB%20Adoption.pdf (identifying dozens of barriers impacting broadband adoptions by seniors, people with disabilities, and stakeholders throughout the education, energy, and healthcare sectors) ("Barriers to Broadband Adoption"*); Paula Gardner *et al., Getting turned on: Using ICT training to promote active ageing in New York City,* The Journal of Community Informatics, 8(1) (2012), available at *http://ci-journal.net/index.php/ciej/article/view/809* (identifying barriers and methods for overcoming barriers in the senior citizen community).

[2] These barriers are derived from: *National Broadband Plan; National Minority Broadband Adoption; Promoting Broadband Adoption Among Minorities,* Florida Conference of Black State Legislators (Oct. 2011), available at *http://communicationsconsumersunited.com/wp-content/uploads/2011/10/Florida-Conference-of-Black-State-Legislators-Broadband-Adoption-paper-092010.pdf;* Robert Shapiro and Kevin Hassett, *A New Analysis of Broadband Adoptions Rates by Minority Households,* Georgetown Center for Business and Public Policy (June 2010), available at *http://www.sonecon.com/docs/studies/Report_on_Broadband_Pricing_and_Minorities-Shapiro-Hassett-June-21-2010.pdf; Broadband Imperatives for African Americans: Policy Recommendations to Increase Digital Adoption for Minorities and Their Communities,* Joint Center for Political & Economic Studies *et al.* (Sept. 2009), available at *http://www.jointcenter.org/sites/default/files/upload/research/files/MTI_Broadband_Report_Print.pdf;* Nicol Turner-Lee, *The New Era of Broadband and Democracy: Pathways to Digital Inclusiveness,* Joint Center for Political & Economic Studies (Aug. 2009), available at *http://www.jointcenter.org/sites/default/files/upload/research/files/turnerlee_0.pdf.*

[3] *See, e.g., Broadband Adoption Toolkit,* National Telecommunications & Information Administration, U.S. Dept. of Commerce (April 2013), available at *http://www2.ntia.doc.gov/files/toolkit_042913.pdf* (highlighting dozens of successful adoption programs) ("*Broadband Adoption Toolkit*").

[4] See Press Release, Ad Council & Connect2Compete Launch Nationwide PSA Campaign to Increase Digital Literacy for 62 Million Americans, March 21, 2013, Ad Council, available at *http://www.adcouncil.org/News-Events/Press-Releases/Ad-Council-Connect2Compete-Launch-Nationwide-PSA-Campaign-to-Increase-Digital-Literacy-for-62-Million-Americans.*

[5] See, *e.g.,* Universal Broadband Adoption.

[6] See *e.g.,* Jon P. Gant *et al., National Minority Broadband Adoption: Comparative Trends in Adoption, Acceptance and Use,* Joint Center for Political & Economic Studies (March 2010), available at *http://www.jointcenter.org/sites/default/files/upload/research/files/MTI_BROADBAND_REPORT_WEB.pdf* (examining the myriad of barriers impeding more robust adoption in these communities ("*National Minority Broadband Adoption*"). Additoinal data nd analysis can be found in Figure 1 and accompanying citations.

[7] These barriers are derived from: *National Broadband Plan; National Minority Broadband Adoption; Promoting Broadband Adoption Among Minorities,* Florida Conference of Black State Legislators (Oct. 2011), available at *http://communicationsconsumersunited.com/wp-content/uploads/2011/10/Florida-Conference-of-Black-State-Legislators-Broadband-Adoption-paper-092010.pdf;* Robert Shapiro and Kevin Hassett, *A New Analysis of Broadband Adoptions Rates by Minority Households,* Georgetown Center for Business and Public Policy (June 2010), available at *http://www.sonecon.com/docs/studies/Report_on_Broadband_Pricing_and_Minorities-Shapiro-Hassett-June-21–2010.pdf; Broadband Imperatives for African Americans: Policy Recommendations to Increase Digital Adoption for Minorities and Their Communities,* Joint Center for Political & Economic Studies *et al.* (Sept. 2009), available at *http://www.jointcenter.org/sites/default/files/upload/research/files/MTI_Broadband_Report_Print.pdf;* Nicol Turner-Lee, *The New Era of Broadband and Democracy: Pathways to Digital Inclusiveness,* Joint Center for Political & Economic Studies (Aug. 2009), available at *http://www.jointcenter.org/sites/default/files/upload/research/files/turnerlee_0.pdf.*

[8] *See* John Horrigan, *Home Broadband Adoption 2008,* Pew Internet & American Life Project (July 2008), available at *http://www.pewinternet.org/~/media//Files/Reports/2008/PIP_Broadband_2008.pdf*

[9] *Id.*

[10] *Id.*

[11] *Id.*

[12] *See* John Horrigan, *Broadband Adoption and Use in America,* at p. 3, FCC OBI Working Paper Series No. 1 (Feb. 2010), available at *http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296442A1.pdf*

[13] *See Exploring the Digital Nation: Computer and Internet Use at Home,* National Telecommunications & Information Administration, U.S. Dept. of Commerce (Nov. 2011), available at *http://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_computer_and_internet_use_at_home_11092011.pdf*

[14] *See Exploring the Digital Nation: America's Emerging Online Experience,* NTIA, U.S. Dept. of Commerce (June 2013), available at *http://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_-_americas_emerging_online_experience.pdf*

[15] *See* Joanna Brenner & Lee Rainie, *Pew Internet: Broadband,* Pew Internet & American Life Project (Dec. 2012), available at *http://pewinternet.org/Commentary/2012/May/Pew-Internet-Broadband.aspx*

[16] *See* Kathryn Zickuhr & Aaron Smith, *Home Broadband 2013,* Pew Internet & American Life Project (Aug. 2013), available at *http://pewinternet.org/~/media//Files/Reports/2013/PIP_Broadband%202013.pdf*

[17] *See* Maeve Duggan., & Aaron Smith, *Cell Internet Use 2013,* Pew Internet & American Life Project (September 16, 2013, available at *http://www.pewinternet.org/Reports/2013/Cell-Internet/Summary-of-Findings.aspx*

[18] *Id.*

[19] *Id.*

[20] *Supra,* note 16

[21] *Id.*

[22] See John Horrigan, *Recent Tech Adoption Trends and Implications for the Digital Divide,* Joint Center for Political and Economic Studies (August 2012), available at *http://www.jointcenter.org/research/recent-tech-adoption-trends-and-implications-for-the-digital-divide,*

[23] *Id.*

[24] *Id.*

[25] *See* Kathryn Zickhur, *Who's Not Online and Why?,* Pew Internet & American Life Project (Sept. 25, 2013), available at *http://www.pewinternet.org/Reports/2013/Non-internet-users.aspx*

[26] *Id.*

[27] *Id.*

[28] *Id.*

[29] *Id.*

[30] *Id.*

[31] *Id.*

[32] *See, e.g.,* Patrick Brogan, *Updated Capital Spending Data Show Continued Significant Broadband Investment in Nation's Information Infrastructure,* at p. 2, chart 1, Research Brief, U.S. Telecom (April 2012), available at *http://www.ustelecom.org/sites/default/files/documents/042012_Investment_2011_Research_Brief.pdf* (observing tens of billions of dollars in annual investment in network infrastructure by ISPs) ("*Updated Capital Spending Data*").

[33] For an overview, *see* National Broadband Map, Summarize: Nationwide, *http://www.broadbandmap.gov/summarize/nationwide.*

[34] For recent data, *see Measuring Broadband America, FCC (Feb. 2013),* available at *http://www.fcc.gov/measuring-broadband-america/2013/february* ("Measuring Broadband America—Feb. 2013"); *Measuring Broadband America, FCC (July 2012),* available at *http://www.fcc.gov/measuring-broadbandamerica/2012/july ("Measuring Broadband America—July 2012"); Measuring Broadband America, FCC (Aug. 2011),* available at *http://www.fcc.gov/measuring-broadband-america/2011/august.* For data from the mid- to late-2000s, *see generally Internet Access Services: Status as of June 30, 2010, FCC (March 2011),* available at *http://hraunfoss.fcc.gov/edocs—public/attachmatch/DOC-305296A1.pdf.*

[35] *See, e.g.,* Shane Greenstein & Ryan C. McDevitt, *Evidence of a Modest Price Decline in U.S. Broadband Services,* National Bureau of Economic Research, NBER Working Paper 16166 (July 2010), available at *http://www.nber.org/papers/w16166.pdf?new_window=1.*

[36] *See* National Broadband Map, Summarize: Nationwide, *http://www.broadbandmap.gov/summarize/nationwide*

[37] Updated Capital Spending Data.

[38] *Id.*

[39] See, *e.g.,* Measuring Broadband America—Feb. 2013; Measuring Broadband America—July 2012.

[40] *See generally Beloved Community (*". . . our "digital Beloved Community" envisions a future where everyone has the ability to participate in our digital ecosystem. It exhibits an economy that enables innovative individuals from culturally diverse backgrounds to benefit equally from the technological advancement and innovations they create. Like Dr. King's dream, the digital Beloved Community gains its strength from empowering every individual and thereby advancing the whole." *Id.* at p. 1.)

[41] *See, e.g.,* In the Matter of Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992, Reply Comments of MMTC *et al.,* MB Docket No. 05–311 (March 28, 2006), available at *http://mmtconline.org/lp-pdf/MMTCRedliningReply101A8B.pdf* (MMTC, along with dozens of other national civil rights and minority advocacy organizations, calling for protections against redlining, which would have had disproportionately negative impacts on communities of color).

[42] The "historical origins" of the debate, however, can be traced to the *Computer Inquiries,* which were launched in the 1970s and early 1980s to examine "the relationship between traditional "common carriers". . . and the emerging data-processing industry." *See* JONATHAN E. NUECHTERLEIN AND PHILIP J. WEISER, DIGITAL CROSSROADS: TELECOMMUNICATIONS LAW AND POLICY IN THE INTERNET AGE (2nd ED.) 188 (MIT 2013) ("DIGITAL CROSSROADS").

[43] *See, e.g.,* Mark A. Lemley and Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era,* 48 U.C.L.A. L. Rev. 925 (2001) (arguing in favor of open access policies in order to preserve the "end-to-end" principle, which is at the core of modern conceptions of "network neutrality" and the "open Internet") ("*End of End-to-End*").

[44] *See,* e.g., Tim Wu, Network Neutrality, Broadband Discrimination, 2 J. on Telecomm. & High Tec. L. 141 (2003) ("Network Neutrality, Broadband Discrimination").

[45] *See, e.g., id.*

[46] *See, e.g.,* SavetheInternet.com, Network Neutrality 101, *http://www.savetheinternet.com/net-neutrality-101* (providing a list of hypothetical outcomes if network neutrality rules are absent from the marketplace) ("*Network Neutrality 101*").

[47] *See, e.g.,* Tim Burners-Lee, *Long Live the Web: A Call for Continued Open Standards and Neutrality,* Nov. 22, 2010, Scientific American, available at *http://www.scientificamerican.com/article.cfm?id=long-live-the-web&print=yes* ("Although the Internet and Web generally thrive on lack of regulation, some basic values have to be legally preserved.") ("*Long Live the Web*").

[48] *Id.*

[49] Quotes excerpted from speech given by former FCC Chairman William Kennard at *The Cable Show,* 1999, available at *http://transition.fcc.gov/Speeches/Kennard/spwek-921.txt*

[50] *AT&T v. City of Portland,* 43 F.Supp.2d 1146 (U.S.D.C. Or. 1999), *rev'd,* 216 F.3d 871 (9th Cir. 2000).

[51] *See* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, 17 F.C.C.R 4798 (2002), aff'd, sub nom. *Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Serv.,* 545 U.S. 967 (2005) ("*Brand X*").

[52] *See Appropriate Framework for Broadband Access to the Internet over Wireline Facilities,* 20 FCC Rcd 14,853 (2005); Classification of Broadband Over Power Line Internet Access Service as an Information Service, 21 FCC Rcd 13281 (2006); *In the Matter of Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks,* 22 FCC Rcd 5901 (2007).

[53] *See, e.g.,* DIGITAL CROSSROADS at p. 40–82 (discussing this regulatory regime and its evolution in detail).

[54] *See* Press Release, *FCC Classifies Cable Modem Service as an "Information Service,"* March 14, 2002, FCC, available at *http://transition.fcc.gov/Bureaus/Cable/News__Releases/2002/nrcb0201.html.*

[55] *See* FCC Chairman Michael Powell, *Preserving Internet Freedom: Guiding Principles for the Industry,* at p. 2, Remarks at the Silicon Flatirons Symposium on "The Digital Broadband Migration: Toward a Regulatory Regime for the Internet Age," University of Colorado School of Law, Boulder, Colorado, Feb, 8, 2004, available at *http://hraunfoss.fcc.gov/edocs__public/attachmatch/DOC-243556A1.pdf.*

[56] *Id.* at p. 5.

[57] *See* Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Policy Statement, 20 FCC Rcd 14986 (2005).

[58] *Id.* at ¶5, fn. 15.

[59] *Id.*

[60] *See, e.g.,* Barbara A. Cherry, *Maintaining Critical Rules to Enable Sustainable Communications Infrastructures,* 24 Georg. St. U. L. Rev. 947 (2007) (calling for common-carrier regulation); Susan Crawford, *Transporting Communications,* 89 Boston U. L.R. 871 (2009) (same).

[61] *See In the Matter of Broadband Industry Practices,* Notice of Inquiry, at ¶3, WC Docket No. 07–52 (rel. April 16, 2007). It should be noted that the FCC in 2005 did mediate a settlement in a case alleging the blocking of VoIP traffic by a small ISP. *See In the Matter of Madison River Communications LLC and Affiliated Companies,* Consent Decree, 20 FCC Rcd 4295 (2005).

[62] *See In the Matters of Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications and Broadband Industry Practices Petition of Free Press et al., for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management,* Petition for Declaratory Ruling, FCC, File No. EB–08–IH–1518 (filed Nov. 1, 2007), available at *http://transition.fcc.gov/broadband__network__management/fp__et__al__nn__declaratory__ruling.pdf.* Comcast countered that its network management practices vis-à-vis BitTorrent were necessary to assure a reliable and consistent user experience for the vast majority of users who did not engage in such bandwidth-heavy uses. Indeed, a small

handful of users engaging in such online behavior (*e.g.,* peer-to-peer swapping of massive data files) have discernible impacts on the overall online experience for all users. At peak times, such uses can cause congestion, which degrades the speeds and reliability of online connections for all users. Over time, ISPs and others have experimented with a range of business models—including data caps and tiered pricing—to more accurately price data consumption.

[63] *See In the Matter of Preserving the Open Internet,* Notice of Proposed Rulemaking, at ¶6, GN Docket No. 09–191 (rel. Oct. 22, 2009).

[64] *See* generally id.

[65] Open Internet Order at ¶88.

[66] *Id.*

[67] *Id.* at ¶54.

[68] *See, e.g.,* Comments of the National Organizations at p. 14.

[69] Open Internet Order at ¶77.

[70] *Id.* at ¶88.

[71] *Id.* at ¶96.

[72] *Id.* at ¶¶112–114.

[73] *Id.* at ¶113.

[74] *See Preserving the Open Internet; Final Rule,* 76 Fed. Reg. 59,191–59,235 (Sept. 23, 2011), available at *http://www.gpo.gov/fdsys/pkg/FR-2011-09-23/html/2011-24259.htm.*

[75] *See, e.g.,* Nate Anderson, *Verizon Sues to Halt FCC's Net Neutrality Rules,* Oct. 2, 2011, Ars Technica, available at *http://arstechnica.com/tech-policy/news/2011/10/verizon-sues-to-halt-fccs-net-neutrality-rules.ars.* The case is *Verizon v. FCC,* No. 11–1355 (D.C. Cir.).

[76] *See, e.g.,* John Eggerton, *Court Sets Oral Argument Date for Network Neutrality Challenge,* June 25, 2013, Multichannel News, available at *http://www.multichannel.com/news-article/court-sets-oral-argument-date-network-neutrality-challenge/144114* (reporting that oral arguments in the case are scheduled for Sept. 9, 2013).

[77] *See Preserving the Open Internet,* Report and Order, 25 FCC Rcd 17905, at ¶18 (2010).

[78] *See* data analyzed in Figure 2. *See supra* note, 7.

[79] *Supra,* note 22.

[80] *See* Ev Ehrlich, *Shaping the Digital Age: A Progressive Broadband Agenda* (p. 24). Washington, DC: Progressive Policy Institute (July 2013), available at *http://www.progressivepolicy.org/wp-content/uploads/2013/07/07.2013-Ev-Ehrlich__Shaping-the-Digital-Age__A-Progressive-Broad-Agenda.pdf.*

[81] *Id.*

[82] *Supra,* note 35.

[83] *See* Nicholas Economides and Joacim Tag, *Network Neutrality on the Internet: A Two-Sided Market Analysis,* Information Economics and Policy, Vol. 24, 2012, NET Institute Working Paper No. 07–45; NYU Law and Economic Research paper 0–70; NYU Working Paper No 2451/26057 (August 2012), available at SSRN: *http://ssrn/cp,abstract=101921* or *http://dx.doi.org/10.2139/ssrn.1019121*

[84] *Supra,* note 34.

[85] *See* Nicol Turner-Lee, Brian Smedley and Joseph Miller, *Minorities, Mobile Broadband and the Management of Chronic Diseases,* Joint Center for Political and Economic Studies (April 2012), available at *http://www.jointcenter.org/research/minorities-mobile-broadband-and-the-management-of-chronic-diseases.*

[86] For a discussion of additional potential harms, *see generally* Ev Ehrlich, *Shaping the Digital Age: A Progressive Broadband Agenda,* Progressive Policy Institute (July 2013), available at *http://www.progressivepolicy.org/wp-content/uploads/2013/07/07.2013-Ev-Ehrlich__Shaping-the-Digital-Age__A-Progressive-Broad-Agenda.pdf.*

[87] *See, e.g.,* Austin Schlick, *A Third-Way Legal Framework for Addressing the* Comcast *Dilemma,* FCC (rel. May 6, 2010), available at *http://hraunfoss.fcc.gov/edocs__public/attachmatch/DOC-297945A1.pdf* (proposing a common carrier-like regulatory framework for broadband).

[88] *See Fact Sheet: Update Of E-Rate For Broadband In Schools And Libraries,* FCC (July 2013), available at *http://transition.fcc.gov/Daily__Releases/Daily__Business/2013/db0719/DOC-322288A1.pdf.*

[89] For additional discussion and analysis of these and other impediments, see National Broadband Plan; Barriers to Broadband Adoption. See also Modernizing the E-rate Program for Schools and Libraries, Notice of Proposed Rulemaking, WC Docket No. 13–184, FCC 13–100 (rel. July 23, 2013), available at *http://transition.fcc.gov/Daily__Releases/Daily__Business/2013/db0723/FCC-13-100A1.pdf* ("E-rate NPRM 2013").

[90] *See, e.g.,* Valerie Strauss, *U.S. High School Graduation Rates See Big Minority Gains—Analysis,* June 6, 2013, Wash. Post, available at *http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/06/06/u-s-high-school-graduation-rate-sees-big-minority-gains-analysis/; NAEP 2012: Trends in Academic Progress,* National Center for Education Statistics, U.S. Dept. of Education (June 2013), available at *http://nces.ed.gov/nationsreportcard/subject/publications/main2012/pdf/2013456.pdf.*

[91] For an historical overview of these data, *see Enrollment rates of 18-to 24-year-olds in degree-granting institutions, by level of institution and sex and race/ethnicity of student: 1967 through 2010,* National Center for Education Statistics, U.S. Dept. of Education, available at *http://nces.ed.gov/programs/digest/d11/tables/dt11__213.asp. See also* Anthony P. Carnevale and Jeff Strohl, *Separate & Unequal: How Higher Education Reinforces the Intergenerational Reproduction of White Racial Privilege,* Georgetown University Public Policy Institute (July 2013), available at *http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/Separate%26Unequal.FR.pdf* (arguing that "The racial and ethnic stratification in educational opportunity entrenched in the Nation's K–12 education system has faithfully reproduced itself across the full range of American colleges and universities." *Id.* at p. 7).

[92] *E-rate NPRM 2013* at ¶ 1 (noting that "there is a growing chorus of calls to build on the success of the E-rate program by modernizing the program and adopting clear forward-looking goals aimed at efficiently and effectively ensuring high-capacity connections to schools and libraries nationwide.")

[93] Leveraging public-private partnerships for these purposes should be pursued whenever possible. *See, e.g.,* Statement of Acting Chairwoman Mignon L. Clyburn, *Re: Modernizing the E-rate Program for Schools and Libraries,* WC Docket No. 13–184, available at *http://www.fcc.gov/article/doc-322284a2.*

[94] *See, e.g., National Broadband Plan* at p. 246–247; *The Impact of Broadband on Education,* Report to the U.S. Chamber of Commerce (Dec. 2010), available at *http://www.uschamber.com/sites/default/files/about/US__Chamber__Paper__on__Broadband__and__Education.pdf.*

[95] *See, e.g.,* CFY, Impact, *http://cfy.org/impact/* (providing several case studies of how effective this organization's particular approach to using broadband to bolster learning at home, and engaging parents in the process, has been over the last few years).

[96] *See, e.g., National Broadband Plan* at p. 197–222 (discussing the impacts of broadband on healthcare).

[97] For additional examples and discussion, *see Policy Framework for Empowering Women with Broadband* at p. 8–14; *The Impact of Broadband on Telemedicine,* Report to the U.S. Chamber of Commerce (April 2009), available at *http://www.nyls.edu/user__files/1/3/4/30/83/BroadbandandTelemedicine.pdf.*

[98] *See, e.g.,* Joseph Conn, Report Finds Telehealth Services are Cost Effective, Clinically Successful, July 11, 2013, ModernHealthcare.com, available at *http://www.modernhealthcare.com/article/20130711/NEWS/307119951* (reporting on the results of several studies demonstrating the many positive impacts of telehealth programs in the U.S. and abroad).

[99] *See generally CDC Health Disparities ad Inequalities Report—United States, 2011,* Morbidity and Mortality Weekly Report, Vol. 60, CDC (Jan. 2011), available at *http://www.cdc.gov/mmwr/pdf/other/su6001.pdf* (providing a broad array of data regarding minority health disparities). *See also* U.S. Dept. of Health & Human Services, Office of Minority Health: African American Profile, *http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlid=51* (providing recent data regarding incidences of major chronic diseases among African Americans); U.S. Dept. of Health & Human Services, Office of Minority Health: Hispanic/Latino Profile, *http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlid=54* (providing recent data regarding incidences of major chronic diseases among Hispanics/Latinos).

[100] *Id.*

[101] For a review of recent data regarding adoption trends and the benefits of such robust wireless adoption among communities of color, *see* James E. Prieger, *The Broadband Digital Divide and the Benefits of Mobile Broadband for Minorities,* Pepperdine University School of Public Policy Working Paper No. 45 (April 2013), available at *http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1044&context=sppworkingpapers.*

[102] *Supra,* note 81.

[103] Policy Framework for Empowering Women with Broadband at p. 13.

[104] *See, e.g.,* Barriers to Broadband Adoption at p. 36–50 (identifying many of these barriers).

[105] For additional discussion, *see Medical Licensure and Practice Requirements,* American Telemedicine Association (June 2011), available at *http://www.americantelemed.org/docs/default-source/policy/ata-policy-on-state-medical-licensure-and-practice-requirements.pdf.*

[106] *Barriers to Broadband Adoption* at p. 36–50.

[107] The best recent example of this dynamic is the emergence of the "app economy," which has generated tens of thousands of new jobs in just a few years. *See* Michael Mandel, *Where the Jobs Are: The App Economy,* TechNet (Feb. 2012), available at *http://www.technet.org/wp-content/uploads/2012/02/TechNet-App-Economy-Jobs-Study.pdf.*

[108] *See, e.g.,* Universal Broadband Adoption at p. 28–38.

[109] *See, e.g.,* The African American Labor Force in the Recovery, U.S. Dept. of Labor (Feb. 2012), available at *http://www.dol.gov/__sec/media/reports/BlackLaborForce/BlackLaborForce.pdf* (analyzing employment trends among African Americans and comparing them to those of Hispanics and Whites).

[110] *See* Rakesh Kochhar *et al., Wealth Gap Rises to Record Highs Between Whites, Blacks, Hispanics,* at p. 1, Pew Research Center (July 2011), available at *http://www.pewsocialtrends.org/files/2011/07/SDT-Wealth-Report__7-26-11__FINAL.pdf.*

[111] *See, e.g.,* Alicia Robb, *Access to Capital Among Young Firms, Minority-owned Firms, Women-owned Firms, and High-tech Firms,* Report to the Small Business Administration Office of Advocacy (April 2013), available at *http://www.sba.gov/sites/default/files/files/rs403tot%282%29.pdf.*

[112] *See, e.g.,* David Honig, *Digital Literacy Beyond Social Media,* July 10, 2012, Huffington Post, available at *http://www.huffingtonpost.com/david-honig/digital-literacy-beyond-s__b__1662456.html.*

[113] *See* Dorrissa Griffin and Kristal Lauren High, *Minorities and High Tech Employment,* at p. 3, MMTC (July 2011), available at *http://mmtconline.org/lp-pdf/Jobs%20Report%20%20Minorities%20&%20High%20Tech%20Employment.pdf* ("*Minorities and High Tech Employment*").

[114] *See generally id.* (providing a comprehensive analysis of these various impediments and offering an array of recommendations for overcoming them).

[115] *See, e.g.,* Dan Nakaso, *Asian Workers Now Dominate Silicon Valley Tech Jobs,* Nov. 30, 2012, San Jose Mercury News, available at *http://www.mercurynews.com/business/ci__22094415/asian-workers-now-dominate-silicon-valley-tech-jobs* (reporting that, between 2000 and 2010, "African-American and Hispanic tech workers each saw slight decreases: Positions held by African-American tech workers fell from 2.8 percent to 2.3 percent; those held by Hispanic workers dropped from 4.6 percent to 4.2 percent.") This dynamic is not confined to Silicon

Valley. Indeed, it is observable across the Nation's high tech workforce. *See Minorities and High Tech Employment* at p. 6.

[116] *Minorities and High Tech Employment* at p. 22–23 (discussing how factors like isolation and stereotyping contribute to this dynamic).

[117] *See, e.g.,* Eric Lipton and Somini Sengupta, *Latest Product From Tech Firms: An Immigration Bill,* May 5, 2013, N.Y. Times, available at *http://www.nytimes.com/2013/05/05/us/politics/tech-firms-take-lead-in-lobbying-on-immigration.html?ref=todayspaper&__r=1&.*

[118] *See, e.g.,* The White House, Educate to Innovate, *http://www.whitehouse.gov/issues/education/k-12/educate-innovate.*

[119] *Minorities and High Tech Employment* at p. 27–33 (discussing these and other recommendations in depth).

[120] *See, e.g.,* David Honig, *STEM Jobs are the Future, But What Role Will Minorities Play?,* Dec. 14, 2011, Broadband & Social Justice Blog, available at *http://broadbandandsocialjustice.org/2011/12/stem-jobs-are-the-future-but-what-role-will-minorities-play/.*

[121] *See* Scott Mackey, *Wireless Taxes and Fees Continue Growth Trend,* at p. 321, Tax Analysts Special Report, State Tax Notes, Oct. 29, 2012, available at *http://www.ksefocus.com/wordpress-content/uploads/2012/11/mackey-state-tax-notes.pdf.* Nebraska has the highest combined wireless tax burden in the country; Oregon—at 7.67 percent—has the lowest.

[122] *Id.*

[123] *See, e.g., id.* at p. 329.

[124] *See* Nicol Turner-Lee *et al.,* The Social Cost of Wireless Taxation: Wireless Taxation and its Consequences for Minorities and the Poor, at p. 9, Joint Center for Political & Economic Studies (Nov. 2011), available at *http://www.jointcenter.org/sites/default/files/upload/research/files/The%20Social%20Cost%20of%20Wireless%20Taxation.pdf* ("The Social Cost of Wireless Taxation").

[125] *See, e.g.,* Sharon Weston Broome, *Press Statement: Comprehensive Reform of Wireless Taxation Needed Now,* National Organization of Black Elected Legislative Women (2011), available at *http://files.ctia.org/pdf/NOBEL__Nobel__Women__Press__Statement__on__Wireless__Taxation.pdf.*

[126] The FCC is already engaged in many of these activities as part of its comprehensive overhaul of the Universal Service Fund and the intercarrier compensation framework. However, litigation and other roadblocks are impeding the swift resolution of many of these issues.

[127] *See, e.g.,* H.R. 2309—Wireless Tax Fairness Act of 2013, *http://beta.congress.gov/bill/113th-congress/house-bill/2309.*

[128] The Social Cost of Wireless Taxation at p. 11.

[129] *See Preserving the Open Internet,* Report and Order, 25 FCC Rcd 17905, at ¶ 12 (2010) (describing its open Internet rules as "prophylactic") ("Open Internet Order").

The CHAIRMAN. Thank you, Dr. Turner-Lee. We have a lot of participation here today from Senators, so I am going to confine us to 5-minute rounds and run a pretty tight gavel on that. So, if somebody is answering a question we will not interrupt you, but try if you can to adhere to that.

Mr. Simmons, would subjecting broadband services to Title II regulations make it more or less costly for Midco to offer and expand broadband services, and would it make it more or less costly for Midco's subscribers to purchase broadband services?

Mr. SIMMONS. Senator, thank you. I believe it would increase our cost of operation. If we were to adhere or respond to all the requirements of Title II, it would place a great burden on us in just the reporting structures alone. And some of the unintended consequences perhaps buried within all that that may not be obvious to some, but our cost of operation for pole attachments, for instance. We would be now paying a substantially higher fee than we would under the classification as an information service.

And for us in our very rural areas, it is very significant. There are a lot of miles of wide open prairies from small town to small town that we have to interconnect, so I am going to guess that our costs would probably be a whole lot higher than it might be in a more densely populated area. There are some parts of our country where we cannot even go underground. It must be all above ground. I am talking specifically of the Black Hills of South Dakota, for example. Hard for us to tunnel through granite. So it would increase our costs there, and those costs ultimately would be passed onto our customers.

The real burden for us other than increasing costs, which we never want to do unnecessarily to any of our customers, is that we would have to explain to them how their costs were going up with no appreciable increase in value to them. We might get away for a short time by saying it is the government and we cannot do anything about it, but it tends to reduce the level of trust that they might have in us. And we are very, very sensitive to our customers' demands, and we work very hard to satisfy them, not only in the quality of services that we are also provide, but also in the price that we expect them to pay for it. So, Senator, it would have a great impact on our company.

The CHAIRMAN. Thank you. Mr. McDowell, following potential Title II reclassification, and with Section 706 authority at its disposal, what would be the limits of the FCC's authority to regulate broadband Internet service or the entire Internet for that matter?

Commissioner MCDOWELL. Under Title II?

The CHAIRMAN. Under Title II reclassification and Section 706.

Commissioner MCDOWELL. So Section 706, according to the D.C. Circuit a year ago almost exactly would allow the Commission to adopt rules that accomplish all the ostensible goals outlined by Chairman Wheeler and President Obama on November the 10th.

The CHAIRMAN. Mr. Misener, in your testimony, you stated that Amazon, and I quote, "certainly does not support allowing an agency to act beyond its statutory authority." Do you agree with Mr. McDowell, and, if so, do you support Congress establishing limits on the FCC's authority?

Mr. MISENER. Well, certainly it is Congress's prerogative, Senator, to establish those limits, and we would support Congress pursuing that avenue. Of course there is an existing statute under which the FCC may and should operate, and Chairman Wheeler should be applauded for the work he has done with his existing statute. But if there were additional statutory direction given by Congress, we certainly would welcome that.

The CHAIRMAN. As a follow-up to that, the Internet Association, which lobbies on Amazon's behalf, recently sent a letter to the FCC stating that just three of Title II's 48 sections appear adequate to meet open Internet goals, namely Sections 201, 202, and 208. Would you support—as a follow-up to the previous question, Congress prohibiting the FCC from applying the 45 unnecessary sections of Title II to the Internet, including retail rate regulation?

Mr. MISENER. Senator, you raise a terrific point. Title II is not binary. My friend Mr. McDowell has talked about the harms that Title II could create and I share his view. And so, we do believe that Title—sorry—Sections 201, 202, and 208 would be adequate to protect net neutrality, which has been our focus both at Amazon and the Internet Association.

The CHAIRMAN. Mr. Kimmelman, if the FCC intends with its forthcoming rules to forbear from all those parts of Title II that are "less relevant to broadband services," as the President has said in his advocating efforts, would you support Congress statutorily prohibiting the FCC from applying those parts of Title II to broadband services in the future?

Mr. KIMMELMAN. Mr. Chairman, I think it depends exactly on what you are talking about. I think of 48 sections, there are only

a handful that could be relevant as far as I can imagine looking forward or looking at it today. It is more than Mr. Misener's three, but not a lot more.

I think the real question is, is it appropriate at this time in looking at it to just wipe those out completely for the future? If it is something that is a reporting requirement like Mr. Simmons is talking about, it may have nothing to do with what we care about in broadband. But if it matters to promoting build out, if it matters to making the service affordable, if it matters to basic privacy protections, if it matters to promoting more competition so that we get multiple carriers, I would hope you would want to preserve that authority somewhere in the expert agency so they could adjust to technology and market conditions.

The CHAIRMAN. My time has expired. Senator Nelson?

Senator NELSON. Thank you, Mr. Chairman. Ms. Baker, I have a letter from one of your largest member companies, from Sprint. And, Mr. Chairman, I would ask consent that it be entered as part of the record.

The CHAIRMAN. Without objection.

[The information referred to follows:]

SPRINT
January 15, 2015

Hon. THOMAS WHEELER,
Chairman,
Federal Communications Commission,
Washington, DC.

Re: IN THE MATTER OF PROTECTING AND PROMOTING THE OPEN INTERNET, GN Docket No. 14–28.

Dear Chairman Wheeler:

Over the past several weeks, public interest groups, mobile and wireline carriers, industry associations, and government entities have debated heatedly the appropriate legal basis for the authorization of net neutrality rules. The debate has focused on whether data services should be governed by Title II or Section 706 of the Communications Act. Regardless of the legal grounds proposed, Sprint has emphasized repeatedly that net neutrality rules must give mobile carriers the flexibility to manage our networks and to differentiate our services in the market. With that said, Sprint does not believe that a light touch application of Title II, including appropriate forbearance, would harm the continued investment in, and deployment of, mobile broadband services.

When first launched, the mobile market was a licensed duopoly. This system was a failure, resulting in slow deployment, high prices and little innovation. In 1993, Congress revised the Telecommunications Act to allow new carriers, including Sprint, to enter the market. This competition resulted in tremendous investment in the wireless industry, broader deployment, greater innovation, and falling prices. It is absolutely true that this explosion of growth occurred under a light touch regulatory regime. Some net neutrality debaters appear to have forgotten, however, that this light touch regulatory regime emanated from Title II common carriage regulation, including Sections 201, 202 and 208 of the Communications Act.

With the deployment ofiS95 data services in 1999, Sprint was one of the first wireless carriers in the United States to deploy mobile data service on a national scale. Sprint went on to upgrade these data services to IS–2000 lxRTT in 2002, lxEVDO Rev 0 in 2004, and lxEVDO Rev A in 2006. Sprint made these investments despite the fact that the FCC had not yet declared mobile broadband to be an information service. Sprint and other wireless carriers have continued to invest in the advancement of mobile data services with the deployment of LTE networks. So long as the FCC continues to allow wireless carriers to manage our networks and differentiate our products, Sprint will continue to invest in data networks regardless of whether they are regulated by Title II, Section 706, or some other light touch regulatory regime.

Sprint has always believed that competition, not regulation, will provide consumers the best mobile services at the lowest price. We urge the FCC and Congress not to be distracted by debates over Title II but to focus on competition by ensuring that any net neutrality regulations adopted recognize the unique network management challenges faced by mobile carriers and the need to allow mobile carriers the flexibility to design products and services to differentiate ourselves in the market.

Sincerely,

STEPHEN BYE,
Chief Technology Officer.

Cc: Commissioner Clyburn
Commissioner Rosenworcel
Commissioner Pai
Commissioner O'Reilly

Senator NELSON. And I quote from the first paragraph, "Sprint does not believe that a light touch application of Title II, including appropriate forbearance, would harm the continued investment in and deployment of mobile broadband services." How does that square, Ms. Baker, with your testimony?

Commissioner BAKER. Thank you, Senator. So what we know is that the current framework is working. In the past four years, we have invested $121 billion in infrastructure. We will still invest. There is no doubt about that, because if you—in this industry if you miss an innovation cycle, you risk being obsolete. The question is how much.

Mobile broadband has never been under Title II, so it is an unknown. I would bring to your attention what happened in Europe. Europe was the leader in 3G, and then they over regulated. And between 2011 and 2014, in the United States, we had 73 percent more investment in CapX. Our networks are 30 times faster than in Europe, and we have three times more subscribers in LTE, so it is a real world comparison. But it is clear that if there is more regulation, there is less investment.

I would call attention to a second filing that Sprint made last week. The first one received an awful lot of attention. The second was talking about how mobile is different and needs to be regulated differently, and it is both not only the technical components, but also the competitive marketplace of the mobile ecosystem.

Senator NELSON. You do not disagree with the position taken by Sprint in the letter.

Commissioner BAKER. Investment will happen. The question is how much.

Senator NELSON. OK. Well, let me ask you about this. Several senior executives from several of your companies have told Wall Street that reclassification would have no impact on network investment. Can you reconcile those statements?

Commissioner BAKER. Well, mobile broadband has never been under Title II. And when Congress deregulated wireless in 1993, it was very clear in the language that it used. It decided that mobile voice was a CMRS, and it put it in one bucket, and it said it was going to use limited Title II requirements. And it put mobile broadband under PMRS, and it said—Congress explicitly said that it was exempt from Title II requirements. So the FCC cannot just disregard what Congress told them what they had to do and reclassify as a Title II requirement.

Senator NELSON. Mr. Kimmelman, do you want to comment?

Mr. KIMMELMAN. Thank you, Senator Nelson. I respectfully disagree with Ms. Baker's legal analysis. I think Congress left that authority to the FCC, and I think it is within the FCC's authority to do that. And I would just point out, the logic of this is real simple. You all have one of these probably.

If you pick it up and make a phone call, it is under general, nondiscrimination requirements as defined by the law. Now, if you want to go and look for a map, or you are looking for a restaurant, or you are editing a document, is that private service as compared to a commercial service? That is what the FCC is grappling with. We believe they have the authority to do it under the authority that you had given them. And logically, it makes no sense to differentiate those at this point in time.

Commissioner BAKER. And can I respond to that?

Commissioner MCDOWELL. And can I respond to that, too, please?

Commissioner BAKER. The way that Congress described it actually was very specific, and it said if it touched the PSTN, the public network—the telephone network system, then it would, in fact, be new future broadband services. So it is very clear how Congress defined what future mobile services would be. And just because you can watch a broadcast on your telephone does not make a broadcast a broadcaster—a telephone broadcaster just because you can make a payment on a phone.

You do not define it by the services that ride upon it. You define it by what the service is.

Commissioner MCDOWELL. And the FCC agreed in the data roaming order in 2011.

Senator NELSON. So what was wildly successful with regard to the wireless industry, are you saying that that cannot be applied to broadband, the regulatory approach?

Commissioner BAKER. The regulatory wireless——

Senator NELSON. Why could that same model not work for broadband?

Commissioner BAKER. Congress set the regulatory regime. The FCC cannot decide what they want to do with it. The Congress has set out what the regulatory regime is for wireless, and I appreciate that you think it is wildly successful. We do, too, and we just want to make sure that it stays that way. The regulatory split is for mobile voice one way and for new services, such as mobile broadband another way.

Senator NELSON. Mr. Kimmelman?

Mr. KIMMELMAN. What is wildly successful has been the wireless industry overall, which includes the portion that Ms. Baker indicated is subject to broader non-discrimination requirements. So I believe it is a matter of what is logical and what does the FCC have the authority to do. We clearly disagree on the legal issue, but I think as a policy matter, do you want to treat the broadband portion of your wireless service than your just plain old phone calling on the wireless? It does not make sense to me.

Senator NELSON. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Nelson. I have in this order Senators Blunt, Klobuchar, Moran, and then Markey. Senator Blunt?

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

Senator BLUNT. Thank you, Chairman. So on that same line, Mr. McDowell, a number of times in 2003, 2005, and 2007, the FCC said that it did not have the authority to regulate this because it classified broadband as an information service. Is that correct?

Commissioner MCDOWELL. It did not say it did not have the authority in certain technologies. For instance, DSL could—perhaps the Supreme Court said in 2005 in Brand X it could have at that point. But things have changed. So wireless is different. Section 332, as my former colleague, Commissioner Baker, just pointed out, is very clear actually, and it is what Congress did in 1993, I believe.

So Congress has spoken. The FCC cannot legislate on this point, only Congress can. And that is why it is very appropriate for this committee to be considering legislation.

Senator BLUNT. And, Ms. Baker, your point was that since Congress has said broadband is an information service, using it through wireless technology way does not change the definition of the service?

Commissioner BAKER. Correct.

Senator BLUNT. And when Congress said that, was that specifically intended to define whether Title II——

Commissioner BAKER. It was——

Senator BLUNT.—would apply or not?

Commissioner BAKER. Sorry. I am sorry, Senator. It was with the emergence of the wireless industry, and I said the voice looks like voice and has PTSN. And whatever new services, we want to make sure that they flourish and are successful, which I think—I think Congress got it right. Mobile broadband has been extremely successful, and I think we look forward to the next success in a connected life of mobile health, and connected cards, and mobile payments.

Senator BLUNT. In your testimony, did you mention the amount of investment?

Commissioner BAKER. The wireless industry has invested $121 billion over the last years, so I think the system is clearly working. We are the leader in the world by any metric basically almost, and we want—we want to take our leadership in 4G and make sure that we lead in the next generation of networks, 5G.

Senator BLUNT. You served on the FCC. Was there ever a complaint at the time—a formal complaint filed since the adoption of the 2010 open rule?

Commissioner BAKER. No.

Senator BLUNT. And you Mr. McDowell?

Commissioner MCDOWELL. No, there were not. No, ever.

Senator BLUNT. So I know that Senator Nelson said that we should not wear out the idea of a solution in search of a problem, but if there is no complaint, what are we trying to solve here?

Commissioner MCDOWELL. I think we are here, Senator, because the FCC is proposing Title II, and that is so toxic to the Internet ecosphere, not just network operators like wireless companies, or cable companies, or phone companies, but content and application providers that have their own networks, their own fiber, thousands

of miles of fiber and routers, caching content and intelligence close to end users so consumers can get that data, that content more quickly.

They, according to the Supreme Court, which I quoted in my testimony, could be captured by Title II classification. That is what I think they do not understand. And the proponents of net neutrality, as my friend Gene pointed out, they want more than 201 and 202. They want other aspects of Title II in there, and I think that's what this is all about.

So if the ostensible goals, if the real goals as they have been promoted for 10 years, and I was at the Commission for seven of those 10 years, if they really want to protect consumers, then what this committee could do, what Congress could do is restate some existing law, like the Federal Trade Commission Act essentially, and essentially give the FCC some enforcement powers there. But also classifying broadband Internet access as a Title II telecom service takes away the Federal Trade Commission's authority under the common carrier exemption.

So there are a lot of unintended consequences here, and it would be bad, I think, for the entire Internet sector, anyone with fiber, or servers, or wireless connectivity, whether they think they are a tech company or not, could be captured by this.

Senator BLUNT. And, Mr. Kimmelman, you have appeared before the Committee many times, a good friend of the Committee, and always willing to come in and talk to us. But if, as you suggested, things have changed dramatically in the last few years, why would the Congress not deal with that specifically rather than to leave it up to the current FCC, and a future FCC with different commissioners? I assume whatever this FCC does, if it survives the legal challenge, and we all believe there would be one, then the next FCC would have the ability to do just exactly the opposite. Why would we not want to make that a more firm-founded future?

Mr. KIMMELMAN. I think it is an appropriate goal, Senator Blunt, to aspire to that. I have lived through many FCCs that have changed course. I lived through much litigation around the FCC and, in all honesty, around congressional legislation in this area. And a lot of that litigation is around things on the margin or things about a definition, things that are within a range, within a framework. It is not like black or white. And as you say, because it is so fast moving, because it is so dynamic, it is very difficult for Congress to pinpoint precisely not just what needs to happen today, but next year and the following year.

So I think it is totally appropriate for Congress to look at this, and I urge you to do so. But one suggestion I would have is if you want to legislate, maybe we can get away from this discussion of is it Title II, is it Title I, is it Title VI, or 706, and think about with your principles what powers—what goals do you want to establish, what policies do you want to establish, and then what tools do you want experts at an agency to be grappling with on a day-to-day basis. I think if we approached it that way, you would find much less disagreement than what is apparent on some of these discussions.

Senator BLUNT. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Senator Klobuchar?

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

Senator KLOBUCHAR. Thank you very much, Chairman Thune. Congratulations on your new chairmanship, and congratulations to Senator Nelson. Thank you all for being here.

The open nature of the Internet has certainly allowed it to quickly become an essential tool for economic development. We have certainly seen it in my state, and with more than four million comments received by the FCC on the proposed net neutrality rules, it is clear that Americans truly recognize the impact of these decisions.

As you probably know, I chaired the Judiciary Antitrust Committee and now will be the Ranking Member with Senator Lee. And I have a strong interest in ensuring robust competition for all users of the Internet, so I thought I would start with that, my other hat with antitrust, Mr. Kimmelman.

And we have heard some claims that antitrust laws can readily address any effort by Internet providers to use their market power to put any limitations on the open Internet, and I do not think the antitrust laws quite fit to take care of everything. And do you think they are sufficient to address that, and can you expend on your views of the FCC's role in net neutrality versus the FTC's role?

Mr. KIMMELMAN. Thank you, Senator. I think antitrust is essential, but it is not sufficient to deal with issues in this area. Remember antitrust is a very targeted statute. The Sherman Act and the Clayton Acts have you in Congress telling the agencies to prevent a reduction in competition and to protect—prevent efforts to monopolize. It is not about promoting competition. That is what you put in the Communications Act. It is not about preventing all discrimination that is unreasonable. It is about getting at it when it is blocking entry, or when it is cartel type behavior, or when it is actually allowing for a dominant firm to expand its dominance. So it can get at a few things, but not everything, even in the competition realm.

And then beyond competition, as Dr. Turner-Lee says, there are a lot of other values at stake here. This is about opportunities and equity across our society. That is something the antitrust laws only address through trying to promote consumer welfare. It does not address the other attributes. So I think the FCC plays a critical role. Title II is a portion of it, the principles and the rulemaking authority. 706 as a mandate was offering an ability to extend broadband and possibly even expand it, as Dr. Turner-Lee said, to low income customers. I think that could be extremely valuable as we move forward and make it affordable for everybody. So it is the combination of the tools I think that is so critical.

Senator KLOBUCHAR. OK. Anyone else want to comment on that?

Commissioner MCDOWELL. If I could.

Senator KLOBUCHAR. Yes?

Commissioner MCDOWELL. So actually Gene outlined a terrific explanation of antitrust law, but there is also the Federal Communications Commission and consumer protection law, Section 5, and that is also very useful and applicable here.

Senator KLOBUCHAR. Very good. Thank you. Mr. Simmons, thank you for being here today and for the services that Midcontinent provides in Minnesota.

Mr. SIMMONS. Thank you.

Senator KLOBUCHAR. And could you expand on what you hear from your customers when it comes to expectations for a free and open Internet?

Mr. SIMMONS. Senator, thank you. I think, you know, when the debate began, especially the call to arms with the request for information coming from the public, we did, in fact, hear from a goodly number of our customers who were all in favor of regulations, keeping the Internet open, even proposing Title II. When I visited with a number of them, they had actually no idea what Title II was. In fact, Title II equals open Internet. Yes, we are for that. Let us send a letter.

When we started describing what Title II really involves, and, by the way, we could send out a couple hundred pages of documentation and start understanding all the components of that, even after reading the text of all those things, which might, in fact, be imposed upon us, even then unless you have actually experienced what that really means in practicality, it is difficult to understand.

You cannot really imagine what it is like putting together rate and tariff sheets and submissions to the FCC, and never mind state regulation with all this, until you have had to put those sheets together and understand how involved it really was. So after we explained what it was really about and that there might, in fact, be additional costs that would come down on our customers, their favoritism toward Title II diminished rather quickly.

Senator KLOBUCHAR. OK. One last question here. If Congress decides to create a new broadband-focused statute or title, what will happen to the Universal Service Fund if Section 254, which currently governs universal service, is omitted from any such legislation governing broadband? How do you think that affects things like the high cost and e-rate that are just now being re-oriented for broadband?

Mr. KIMMELMAN. Well, Senator, as drafted, I think it would be very difficult to expand and continue what the FCC has been doing to promote investment in broadband in high-cost rural areas. And it would definitely be impossible to allow just a broadband low income service for lifeline. Now, that may not be the intent, but as drafted, that is the way it reads.

Senator KLOBUCHAR. OK. So it is something we have to work on. I am going to just put these questions on the record so I can turn it over to my colleague with the vote. But I do have some questions—I have raised this before—on call completion problems really plaguing rural areas, and a lot of the ISP-to-ISP. And I can put it all in writing so we do not have to talk about it now. Thank you very much, everyone.

The CHAIRMAN. Thank you, Senator Klobuchar. Senator Moran?

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

Senator MORAN. Mr. Chairman, thank you. Mr. Simmons, you probably come as close to a typical carrier in a state like mine as

well in Kansas. And I wanted to hear from you the difficulties you face in deployment of broadband today and how either this legislation or the potential consequences of the FCC decision would affect your ability to deploy broadband, particularly in rural America.

Mr. SIMMONS. Senator, it is difficult for us to be able provide services to all those who really require it or need it. There are some areas in our service area where it is just physically economically unfeasible for a private risk company to answer those particular needs. We are always encouraged with a new program, whether it be stimulus, or whether it be an RUS program, that those dollars would be allocated specifically toward those who are unserved. We have not accomplished that goal quite yet.

In too many cases our markets are over-built with maybe a little bit of new service to some areas out there. And I guess we have come to expect that, which is why even in our small communities we have open competition from other providers who are doing pretty much what we do. But there is a concern within Title II with all of this, and I guess it would raise some questions on the part of the financial community. You know, I know that some who have it, it will not impact their plans for investment, and maybe they are a very large publicly traded company that has easier access to cash than we do, but we have to rely on our relationships with private bankers. We need to go out and borrow money from them. We have borrowed money in order to expand our networks even today.

Our concern is that their willingness to lend money, to take on that risk, is substantial today, but with the uncertainty of all this, it may become even more substantial. They may, in fact——

Senator MORAN. When you say "the uncertainty of all this," "all this" is defined as what?

Mr. SIMMONS. What Title II really means, the applications of Title II. And frankly it has not been helpful to have even the speculation about Title II actually becoming the rules under which we will be regulated. So it does represent a concern. And even our banking partners with all this would take a look at it, and maybe it would cost us more money on the interest rates that are charged today if, in fact, that degree of uncertainty continues. So it is of great concern for us.

Senator MORAN. Thank you. Mr. McDowell or maybe Mr. Misener, another area of interest in addition to rural for me is innovation. How do we make certain that the next entrepreneur with a great opportunity for success because of the Internet is not hindered in the regulatory environment? And it seems to me there are couple of ways you could look at this, that certainty is certainly important, but additional costs related to regulation. I want to make certain that that person who goes to their basement or their garage in the back of their office and has this idea has a better chance of success. And it seems to me clearly how we "regulate the Internet" has a consequence. Mr. McDowell?

Commissioner MCDOWELL. So I will be quick so Paul has time for that, too, because he is a great expert on this and an old friend. But anyway, so I think it is important for folks to understand, the Internet as we know it today, the entire ecosphere, the so-called edge of the core, grew up under existing law, and it has blossomed

beautifully. It is one of the greatest economic creations by human beings ever. So I think that is important for folks to understand.

So why? We need to learn from those lessons because it was relatively unregulated. This came about seven and a half years ago, the mobile Internet, and that has exploded beautifully across the globe. So going forward, I think the Title II cloud creates a lot of questions, as Mr. Simmons pointed out.

But also as Gene Kimmelman has pointed out, there are those who want to bring other aspects of Title II, other than just 201 and 202 there. So once you plant that seed, once you classify information services, the Supreme Court has said the rest of the tech economy is going to come in with it, and that is going to cause all of the doubts that Mr. Simmons just eloquently pointed out.

Mr. MISENER. That was brief. Thank you, Mr. McDowell, and thank you, Senator. I think they are answerable in the same area; that is to say, innovation investment in both cases. I do not think anybody can credibly argue that they need to block consumer access to Internet content in order to invest. They do not need throttle to invest. They do not need to fail to disclose their practices in order to invest.

And so, the reasonable net neutrality kinds of provisions adopted in this discussion draft already are kinds of things that are not going to harm investments. And it is not just credible to say that, you know, the inability to block customer or consumer access to information is necessary for investment.

Senator MORAN. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. All right. We have got the first vote on, so we are going to go—we will go Senator Markey, Senator Heller, probably break, go down and vote, and then we will just have to play it by ear after that. But we will try and get back as quickly as possible to give other members that want to ask questions an opportunity to do so. Senator Markey?

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

Senator MARKEY. Congratulations, Mr. Chairman, Senator Nelson. The dawn of a new era. It is great. Congratulations.

You know, the fact is that we have a device like this, but we had to pass laws to make it possible because, believe me, AT&T, there were two companies, two licenses. It was analog that cost 50 cents a minute. You did not own one of these things in 1994, believe me. You had to change the laws to have the third, fourth, fifth, sixth, seventh company get in. The government had to say let them in. OK. So we did that, the government.

So all these things all come from policies that we created. I was there. I was Chairman over in the House of the Telecommunications Committee. This stuff did not exist. So we need policy. We have got to say how much competition do we want? How much will consumers benefit from it? How much more investment will go in if more companies can get in? That is always the test.

And so, let us just go to 2013. 2013 in America, 62 percent of all venture capital in America in 2013 went to software companies and Internet companies, the new companies, companies whose names you do not know. Sixty-two percent of all venture capital in Amer-

ica. Why? Because they believe that they have access to an open Internet. They are the Google, eBay, Amazons of this era because without the laws in the nineties, you do not have Mr. Misener sitting here. He is not famous.

You have got to open it up. The big companies do not innovate that way. They innovate in the pipeline, but they do not innovate in new products and new services. They just do not do that. So that is our big challenge here, and that is why companies like Dwolla, Etsy, all the coolest companies of today, companies that are the Googles and eBays of today, they want Title II. They want protection. They want to be able to go to the venture capital market and get the capital because they can say, we do not have to worry that we are going to have access to our customers.

That is what this is all about, creating that open, entrepreneurial, chaotic, paranoia-inducing, Darwinian marketplace. That is what we have in America. We have to protect it. We have to protect it, and we have to protect everyone else as well. So you agree, Mr. Kimmelman, that Dwolla, Etsy, all those companies, hundreds of them, are in jeopardy if we do not give them the full Title II protection. Do you agree with that?

Mr. KIMMELMAN. I agree completely. I think they are counting on that, and they are counting on the predictability of there not being discriminatory practices and a meaningful enforcement mechanism. And that is what draws capital to them. That is what makes them invest.

Senator MARKEY. Let us go to universal service. Will the draft before us today guarantee a protection of universal service for all Americans?

Mr. KIMMELMAN. Senator, only if you are looking at old-fashioned telephone service. I think if you are looking for investment in broadband and you are looking for making it more affordable, as drafted it does not reach that.

Senator MARKEY. How about senior citizens' protections? Would that be protected?

Mr. KIMMELMAN. Not for broadband, Senator.

Senator MARKEY. How about guaranteeing that rural America is served? Would that be guaranteed?

Mr. KIMMELMAN. Not for broadband as I read it, Senator Markey.

Senator MARKEY. How about accessibility for the deaf and the blind? I am the author of almost every telecommunications law mandating accessibility for the deaf and the blind in America. And, by the way, all these devices are now accessible because of that. Would that be protected? Could that be advanced?

Mr. KIMMELMAN. No, Senator, only for telephone service, not broadband.

Senator MARKEY. OK, thank you. Now, let us go to privacy on the Internet. Would privacy be protected? Would there be—under this formulation, would the FCC be able to move in order to protect the privacy of Americans?

Mr. KIMMELMAN. Senator, as I read it, the customer proprietary network information protections are all in Title II. They are for telecommunication service, so not broadband unless it is considered a telecommunications service.

Senator MARKEY. Thank you. And so, we have got all of these things that are there that right now everyone is used to, everybody believes is going to be a part of the future. But if we do not move to Title II, we do not get them, and under the draft that we have right now, they are not there. And so, this is a big debate that we have to have in our country, especially when the chief financial officer of Verizon—Verizon says that it will not affect their investment strategy at all if Title II is used. That is Verizon.

But it will affect Dwolla, Etsy, hundreds of smaller companies who are the innovative companies. They are the ones that change. They are the ones that are branded "Made in America." Today we are Google, and Hulu, and YouTube, but there is a whole new generation coming up 10 years from now whose names we are going to know only if we keep it open and they can reach the capital markets, and then reach customers on a non-discriminatory basis.

And so, that is a huge challenge for us here on the Committee, to get it right, Mr. Chairman, to make sure that this free flow of capital that is now going out of the venture capital firms into the software or Internet companies is not inhibited; that we do not create uncertainty for these companies that are really the heartbeat of what it is that young people all across the country are saying that they want. "Network neutrality" is just a fancy word for "non-discrimination." And in the same way that the Civil Rights Act says non-discrimination in schools and counters for people to go and be served, the same thing is true over here. "Network neutrality" is just a fancy word of saying that anybody can get in, anyone can compete, anyone can innovate. And we have to protect that in America because that is what has happened over the last 20 years. Thank you, Mr. Chairman.

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

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

Senator HELLER. Mr. Chairman, thank you for holding this hearing. I appreciate the fact that the first hearing that we have has to do with protecting the Internet from the FCC, from bureaucrats, and I certainly appreciate moving forward on this particular piece of legislation. Hopefully we can come to a consensus. I want to thank all of you for being here. Your testimony has been good and very informative, so I certainly do appreciate all that you are saying.

I want to go back to the previous comments made by my friend across the aisle, and he talked about this phone. I guess my question, Mr. McDowell, would this phone exist if the FCC had regulated the Internet 10 years ago?

Commissioner MCDOWELL. Probably not, but I do want to agree with something that Senator Markey said, which is this innovation——

Senator HELLER. Feel free to respond. Yes, please feel to respond.

Commissioner MCDOWELL.—it came about as a result of laws that were passed years ago, and that the marketplace is burgeoning because of laws passed years ago. If this committee wants to restate that in order to give the FCC enforcement authority

there, then that is the will of Congress. But we have the wonderful Internet we have today because of the existing legal environment.

Senator HELLER. Ms. Baker, do you have any comments?

Commissioner BAKER. I agree. I mean, the innovation has been allowed to explode in the mobile broadband space because Congress explicitly chose a non-regulatory path for it.

Senator HELLER. Now you served on the FCC. Both of you served on the FCC. And in your comments, Mr. McDowell, you talked about litigation. What is your expectation of this going to the courts if the FCC moves forward on their order?

Commissioner MCDOWELL. I think a Title II order will definitely go to court. I think it will be overturned. And, by the way, you know, I am on record. I voted against two other net neutrality orders, in part because I thought nothing was wrong that needed fixing, but also because the FCC just did not have the legal authority to do what it did.

So the Section 332 problems, as Commissioner Baker pointed out, I think are real problems on appeal, but also this trying to classify and yet massively forbear at the same time is going to look arbitrary and capricious, more like picking political friends rather than having any principled regulation.

Senator HELLER. With your experience on the FCC, could you estimate how long it would take for litigation like this to go through?

Commissioner MCDOWELL. Well, the last order from 2010 took 37 months, and there was a lot of uncertainty in the interim.

Senator HELLER. Yes, that is what I was going to ask you, regulatory uncertainty at this point. What impact would that have on the industry, Ms. Baker?

Commissioner BAKER. We have several rural carriers in particular who are very insecure and have already pulled back on some of their investments because they do not know that they can get—they do not know what advanced services they can do because they do not know how much money they are going to have to spend on lawyers, so it is going to have significant slowing. To what extent we do not know. Mobile broadband has never been regulated by Title II, so we do not know.

Senator HELLER. Have you had an opportunity to take a look at the legislative text that the Chairman is proposing?

Commissioner BAKER. Yes, I think it is a very good start. We are very pleased with reasonable network management provision, that it has some technical parameters to it. There are clearly some issues that we need to have more discussion about, but we are very pleased with the fact that—the only way for this industry to have clarity is for Congress to act. The certainty we need happens in this room.

Senator HELLER. So you would argue that it makes more sense——

Commissioner BAKER. Absolutely.

Senator HELLER.—for Congress to act as opposed to going through a regulatory scheme.

Commissioner BAKER. Yes.

Senator HELLER. This is the reason I make this point, that if left up to the FCC alone to act, I do believe this will be challenged in court. Obviously the level of uncertainty that we would see in the

industry, for however many months, whether it is 37 months or beyond, and I think there is a pretty good chance the FCC will not win. So what does it do to the industry? And I would argue that this exercise has been all for nothing.

We have an opportunity, and, you know, I took a look at what the Chairman has done in his particular piece of legislation. Frankly, it is 70 percent of what the other side of the aisle wants—prohibiting blocking, prohibiting throttling, prohibiting paid prioritization, requiring transparency. This is everything the other side wants. And I guess, Mr. Chairman, what I do not understand is if they get 70 percent of what they want, why would they want to risk it? I guess being from Nevada, we know a good bet when we see one, and I think this is a good bet. I really do think this is a good bet, and I just do not understand.

Mr. MISENER. May I, Senator?

Senator HELLER. Yes?

Mr. MISENER. Thank you. You know, I am a long-time proponent of net neutrality. I have been doing this for a dozen years, and I think two things. One is, first of all, we are willing to work with Congress for sure. I do not think that this exclusive of the FCC's process. They have an existing statute that they can work with, and they are working with, and it should be applauded, but that does not preclude us from working together. My testimony was very much designed to work with this committee to develop a strong bill with what you want to accomplish.

But I think a little bit too much credit is being given to the forbearance decisions the Commission made a decade ago. Frankly, the network operators have been working under a period of détente where they have been on their best behavior. They have not been doing the bad things that they want to do. They have not been engaged in the blocking and the paid prioritization principally because they are concerned about FCC coming down or Congress coming down on them. So I would not want to give too much credit to the fact that we have been in this forbearance position for a dozen years, but I am happy to work with you on legislation.

Senator HELLER. And I appreciate that because that is what I want. I want the other side to come with us, work with us, get something done. I just have one more question, Mr. Chairman, if you will?

Mr. Kimmelman, if this FCC order was not—was not prepared and moving forward, based on what the Chairman has introduced with his legislative text, would you vote for it? Would you support it? If the FCC——

Mr. KIMMELMAN. Senator, I wish I had a vote. I think—I think it is commendable. I think by taking away some of the fundamental powers of enforcement, I would still be extremely worried even if the FCC were doing nothing, because even if the FCC is doing nothing, I think, Mr. Misener is absolutely right. There is an air or sense that somewhere between information services and Title II, that this industry has to behave, and it has been doing so. And I think that lack of predictability is an uncertainty that has driven a huge amount of investment while litigation is going on, while there is a lot of problems. I would want to make—and that is with

the understanding the FCC has this residual authority. It is like a hammer that they could use.

So I would want to preserve some kind of a hammer or some kind of a flexibility to make sure that you are forward looking. But I think it is a great start, Mr. Chairman and Senator Heller. I think we can—we can work on things, but there are some very big issues that need to be worked out.

Senator HELLER. Mr. Chairman, thank you. Thanks for proposing this legislation. I want to get both sides to work together so we can solve this problem.

The CHAIRMAN. Thank you, Senator Heller. Great panel, great discussion. When we come back, Senator Booker will be up first, followed by Senator Daines. I appreciate, again, your patience and indulgence, and I do have to brag on my home state guy. *PC Magazine* said that Midcontinent Cable is the fastest ISP in the Nation recently.

So we will adjourn, or at least I should not say "adjourn," but recess temporarily, and hopefully we will be back here in an hourish. Thank you.

[Recess.]

The CHAIRMAN. All right, we are back. And in typical Senate fashion, it is a model of efficiency getting through a series of votes on the floor. We appreciate again so much the patience of everybody who is here, and particularly our panelists. Thank you for hanging around.

Is the Senator from Montana ready to ask questions, or should I——

Senator DAINES. Mr. Chairman, we are ready.

The CHAIRMAN. All right. I would recognize the Senator from Montana, Senator Daines.

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

Senator DAINES. Thank you. I am down over here on the extended part of the table here, but thank you. And thank you, Mr. Chairman, for holding this most important hearing.

I have a little different background than many who come to the U.S. Senate. I had the chance to spend 28 years in the private sector before being elected to Congress a couple of years ago and then coming over to the Senate. Several years ago, I left a job at Procter & Gamble to come home to my home state of Montana and was part of an Internet startup company. In fact, it was just a small company when I joined, and 12 years later we have grown to a thousand employees, one of the larger employers in the state of Montana, and it was a great success story. Here we are in Montana, the land of fly fishing and *A River Runs Through It,* and yet growing a world class Internet company. In fact, it was cloud computing, and back in those days, we did not know what the cloud was. We thought it was something to do with maybe something up in the sky, but it turned into a tremendous success. It capitalized at $1.8 billion. We built a global company that was acquired by Oracle. So I just share that as background kind of where I am coming from as we engage in this most important issue.

And I remember when I joined the company, I asked the CEO before I joined the executive team, I said what is your competitive differentiator? And he said I can run faster than anybody else. It was speed, the ability to innovate and create value faster than anybody else. And we competed globally against companies and competitors all over the world. I am very proud to be an American company that was winning in the technology space.

Well, with that as background and going back to Ms. Baker's comment earlier, and I know that was a long time ago when we were last here before the votes. But you said something that piqued my interest about what happened in Europe with 3G when they were out in front, and then because of overregulation, suddenly they no longer are—have global leadership. Could you maybe expand on that a bit more? And, you know, what bad regulations caused that do you think, and what are some of the watch-outs we should be aware of here as a committee as we think about the right policy moving forward?

Commissioner BAKER. Well, welcome, and thank you for the first question. So I appreciate it, and your background is perfect to understand this. I really think, you know, what happened was the United States got the environment right. We got the de-regulatory climate for wireless. We got the auctions. Meanwhile in Europe, they were the leaders of 3G, and they said, you know, we are going to put in wholesale regulations. We are going to do price regulation. We are going to do mandate roaming. And they did not put any low-band auction out there.

And in the course of that time from 2006 to 2010, we started building a foundation for our 4G networks, which are now the world's leader. And where we basically have the same number of subscribers—we have 5 percent of the world's subscribers—we have almost—we have 50 percent higher CapX and investment than they do, and it is because we got it right and they got it wrong.

And after building their house of regulation, we had people like Nellie Cruz, who, as you recall, was very adamant about regulation. She is now looking at the United States market, and she says we want to be like them. They got it right. We will get it right for 5G. And I think we have places like Japan and South Korea who are like, wow, the United States beat us so badly in 4G that maybe—we are just going to skip to 5G. So it is really about getting the environment right, and, you know, the rest of the world is at our heels, so we need to make sure we continue to get it right here.

Senator DAINES. And I think that is one of my great concerns certainly as someone who has been on the other side, I guess, in the private sector in looking at the famous adage, "We are from Washington, D.C., and we are here to help" in terms of what this could for the—on the upside, but potentially on the downside as it relates to the regulatory environment to hinder value creation, and growth, and global competitiveness.

Dr. TURNER-LEE. May I, Senator, if you do not mind?

Senator DAINES. Yes, please.

Dr. TURNER-LEE. Just from the statistics that I mentioned about the over-indexing of people of color on wireless, I think the point that we are actually seeing in Europe is one that we should take,

you know, with some caution because what we are seeing, particularly with communities of color, is this use of the 4G and expanding networks because most of those families are wireless-only households. So I think, again, to your point, we really have to get this right here because that is actually going to be, I think, the on-ramp for some of these low income and more vulnerable consumers that are actually adopting wireless first before they go into more wire line services.

Senator DAINES. Thank you. Mr. McDowell, what do you think—as you look at regulation, what concerns you in terms of a regulation that would hinder innovation in terms of our high-tech sectors here that could harm what we are trying to do here as a country to maintain global competiveness?

Commissioner MCDOWELL. Well, regulations always have a cost one way or another, and the most common cost, which is the hardest to measure, are the unintended consequences or what innovation did not come to market as a result of that regulation. That is very hard to measure. So I like to turn it around to say, well, what has worked in the Internet ecosphere? A lot of things have worked right, and that is based on the laws that were put into effect. Not Title II, but other laws that were put into effect. And where is the innovation investment going? It is in the least regulated areas.

Senator DAINES. Why does the FCC have the sense of urgency to want to put these regulations in place next month? I am somewhat new to the Hill and wondering what is the sense of urgency here to put these regulations in place without some careful deliberation in the hearings and so forth?

Mr. MISENER. Senator, thank you. As someone who has worked on this issue for 12 years, I do not think there is any urgency at all. It has been a dozen years of debate and no action. I agree completely with Commissioner Baker that we need to get it right with respect to net neutrality, especially as opposed to Europe, because here you have the Internet content providers are American companies. The network operators are American companies. In Europe the network operators are European companies, and the Internet content providers are American companies. And so, if we get net neutrality wrong here, you can bet that we will not have a leg to stand on in Europe.

Senator DAINES. Yes, thank you. Mr. Chairman, I think my time has expired. Thank you.

The CHAIRMAN. Thank you, Senator Daines. Senator Booker?

Senator BOOKER. [Off audio.] So I gave you guys some nice words, but I will skip them now because that is my time.

[Laughter.]

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

Senator BOOKER. This is an issue I am very passionate about, and I am grateful for the commentary of everyone. And I think that we all have a lot of similar ambitions in terms of what the open and free Internet would be. But I would love to tailor my conversations with you, Dr. Turner-Lee, because in your testimony I love where you come from, a lot of the same experience that I do.

And, you know, while government may seem scary to some people, I would not be sitting here today if it was not for the Federal Government protecting my rights. The town I grew up in, it was the Government putting in place certain frameworks to protect a black family that wanted to move in. And so, when it comes to the Goliath, whether it is—industry or what-have-you—the Government is really important.

And I hold here this area of debate, and here in Section 2, there is a big section here. And Chairman Thune is somebody I have a deep respect for and think he has done a courageous thing by putting a bill out, and I appreciate, Chairman, that you say this is the beginning of a conversation. But it basically eviscerates a lot of the key elements that are put in place in Section 202 of Title II that specifically refer to disadvantaged and minority communities.

Now, I know that mobile may be doing a great job in leading the globe, but broadband certainly is not. We are behind our global competitors. And specifically if you look at a map of minority communities, poor communities, those are the ones where private enterprise often does not see the urgency to get there. And so, I was curious, in your testimony when I read it, your written testimony, that you rely in some ways on Section 706 for protections and others, but yet this legislation does not give those protections. Let me give you a couple of examples.

Right now, we are waiting on the FCC to allow two cities with high poverty, high minority—Wilson, North Carolina, which has—is a majority/minority city, blacks and Latinos, and Chattanooga, a city I have long admired, that has a significant minority population. And what these cities said is that we want to give better access to broadband, and we want to have our own municipal broadband. And their states, however, have said—this is a locality that wants to determine its own destiny, but the states have said, no, you cannot. We are passing laws preventing that, which the big Goliaths all support. And so, this is David versus Goliath.

This legislation takes that ability to fight Goliath out where they cannot appeal to the Federal Government. So next month, the FCC is going to get a chance to rule using Section 706 that is specifically eviscerated in the legislation you put forward to allow these two cities to do something that is actually pretty incredible—faster broadband than even the big Goliaths are doing, free open access for minority communities. And so, these are the kinds of protections that to me are essential for us as a Nation to activate the genius and entrepreneurialism of other communities.

The proposed legislation would end the FCC's ability to remove barriers to small businesses and minority-owned businesses. In many ways, these communities have traditionally benefited from the Agency protection in a world where marketplace is often tipped toward the biggest companies and "high value customers." Well, kids in Newark and Camden to me are high value customers, and they stand to lose the most if the Commission's authority is all but stripped by this new law.

So you stated in your testimony that the Committee should consider "a legislative proposal to promote an open Internet, provided it preserves the Commission's ability to protect consumers." And so, I just really want you to be specific because you seem to be advo-

cating for things that are not yet in the proposed legislation that I fully support to make sure that this world is far more equal to those folks that seem to consistently lose out when it comes to opportunity and equality in our country.

Dr. TURNER-LEE. [Off audio.]

Senator BOOKER. You have got to push the button, by the way. [Laughter.]

Dr. TURNER-LEE. Yes, I have got to push the button, right. I have only been here 2 hours, and I have not figured that one out. So, first of all, I want to say congratulations. We follow you on Twitter. We follow you wherever you go. We are so happy that you are in this seat.

Senator BOOKER. Thank you. Thank you very much.

Dr. TURNER-LEE. I want to put that out as a public acknowledgement.

Senator BOOKER. And that is for the record, by the way.

[Laughter.]

Dr. TURNER-LEE. It is for the record. And I also want to say, too, to your point I am glad that we do share the same goals. I have always known that we have, but just by listening to things that you say that broadband adoption is the number one civil rights issue and concern of this time. And I think to what Senator Markey said earlier, it is a new lunch counter debate for many of us in our communities. The 30 million people that are not online, the people that we kind of care about versus the digital elite in our community. It is really important to kind of let them know the value and importance of broadband. So I want to address that.

When the civil rights groups, the ones that we represent, which are more traditional, came forth when the Chairman put out his proposal, it was always with the Section 706 provision with strong protection consumers. So you are correct because Section 706 has actually enabled communities of color to do a lot of things, right? Stop digital redlining. It has helped us with minority media ownership, Universal Service Fund, et cetera. So with respect to the use of 706, in the testimony I do talk about, you know, this idea of still keeping that on the table as some point of legislative debate or discussion as you try to move toward a bipartisan bill.

I mean, part of this discussion and what I think is so wonderful about these hearings is the fact that Congress is talking to one another about this, and those of us that are on the side wanting to do the very things that you are interested in and making sure that there is nobody left behind. You know, we get this chance to say, please do talk to each other because we want to move onto the business of other areas.

With regards to the statement that we put out there, I mean, there were a couple of things that we did put into the written statement as well about digital redlining being a very important piece, that, again, if you eviscerate 706, you will not be able to deal with redlining in a very important way, or universal service reform. And I think that is important to note for this hearing as well. So we ask the Chairman and the Ranking Member to consider that in that conversation of how we actually come together and get past the morass of some of the division on this bill, which I think, again,

for us is a promising discussion for the primary reasons of getting back to the business of adoption, the issues that you care about.

On the muni thing, just the last thing, just to respond to municipal broadband. So we at MMTC really have not taken an opinion on that. We put out a press statement applauding the President for his commitment to universal broadband adoption and deployment, and we see that as part of this broader way to actually expand that. But one of the things, again, digital redlining, we have to also be careful that we are not creating these fiber-hoods and communities where we actually give people permission to build broadband and deploy it, but yet we pass over communities within that neighborhood. And sometimes we as a community have had felt the disproportionate impact of being passed over as a result of that.

Senator BOOKER. Right, and I want to put some things in the record, but just to the last municipal broadband point. Having been a mayor, the best innovation in America, if you want to talk about what is going on in this country in terms of government, it is not going on at the Federal level. It is not even at the State level.

Dr. TURNER-LEE. Muni.

Senator BOOKER. It is at the municipal level. And to eviscerate municipalities' ability to innovate, especially because disproportionately poor minorities live in cities, would be unconscionable and unacceptable to me. And I hope it is something that we can consider in discussions for the legislation that is being considered by the Chairperson.

I want to enter for the record, if the Chairperson will allow, number one, an op-ed I authored with Senator King outlining the importance of strong net neutrality rules. Number two is a letter from the Internet Association expressing concerns with the proposed legislation. And very importantly, number three, letters from civil rights and social justice groups, over a hundred of them, advocating for Title II really specifically because of a lot of the protections, the bedrock protections that are statutorily in Title II that allow like the civil rights legislation, like the voting rights legislation, around minorities and others, that bedrock defense of their rights so that Goliath cannot succeed over the noble Davids out there.

[The information referred to follows:]

BOOKER, KING: DON'T DESTROY THE OPEN INTERNET

By Cory Booker and Angus King

updated 7:53AM EST, Mon December 8, 2014

http://www.cnn.com/2014/12/08/opinion/booker-king-net-neutrality/

Editor's note: Cory Booker, a Democrat, is a United States senator from New Jersey. Angus King, an independent, is a United States senator from Maine. The opinions expressed in this commentary are solely those of the authors.

(CNN)—The Internet is one of the most powerful tools on the planet. Across the globe, millions of people connect every minute of every day to harness its wealth of information, exchange ideas in an open platform and foster the type of innovation and entrepreneurship that spurs economic growth. And today, it's never been more at risk in the United States.

Earlier this year, a *court decision* unlocked the "pandora's box." There are now no enforceable rules to ensure small businesses, nonprofits and individuals can continue to access online content without fear of discriminatory practices or content blocking by Internet service providers who own the information pipelines.

Indeed, without new rules, service providers could create *fast lanes,* impose new fees, and even block certain content and promote other content to bolster their bottom line. This would destroy the open Internet as we know it.

This is not idle speculation. Executives at cable and phone companies have expressed a desire to engage in such activities, and in fact, have already tried to do so. If we permit blocking, discrimination, and tolls, we will undermine the Internet's low-cost level playing field that has transformed our society, created an economic boom, and provided opportunity to so many in the United States and around the world.

In the last few decades, we have seen first-hand how the open Internet has led to a robust startup economy where Americans create content, solve problems and pioneer new technologies that improve the lives of people across the globe. Businesses like Twitter, YouTube, Tumblr, Google, Facebook and more have emerged because they were able to start on an even playing field, where consumers—not Internet service providers—determined their success. Degrading service or forcing businesses to pay-to-play would fundamentally undermine the openness and access on which the Internet has thrived.

To allow the Internet to become a bastion of powerful incumbents and carriers would be a mistake of historic proportions. Instead, it must remain a place where all speakers, creators and innovators can harness its transformative power now and in the future.

Fortunately, we do not need to create new laws or a complex regulatory structure to preserve the Internet as we know it. Instead, the Federal Communications Commission can pass rules that prevent toll booths, content blocking and discrimination by simply reclassifying broadband as a common carrier service under Title II of the Communications Act.

All the FCC would be doing is applying the legal framework that Congress expected it to apply, and that *both Supreme Court Justice Antonin Scalia and President Barack Obama* agree is the correct approach. In other words, the legal tools are there and ready to use.

Some worry that this approach could be overly burdensome on Internet service providers, but the fact is, the FCC can easily apply only the necessary parts of Title II regulation through a process known as forbearance. This flexible approach would allow the FCC to adopt bright-line rules that provide certainty to the market, and would keep the Internet as a powerful, open platform that gives everyone—not just the highest-bidder—the opportunity to freely exchange goods and ideas. Any approach that stops short of reclassifying broadband under Title II will not allow the FCC to adopt the rules we need today to protect customers and businesses, and will result in high social and economic costs.

All other approaches require case-by-case adjudication, leading to never-ending litigation (which, in itself, disproportionately harms small businesses and start-ups), market uncertainty, high costs of regulation and opportunities for regulatory overreach.

Title II has already worked well to strengthen telecommunications in the United States. Under Title II regulation, telephone service has been robust and accessible. Mobile phone service, also a Title II service, continues to thrive and investment has remained steady and more and more individuals turn to mobile as their primary voice service. While many do not realize it, Title II also applies to the broadband services offered to the Nation's large businesses, known as enterprise broadband, and to the many services offered to millions of our rural Americans.

An open Internet is not only essential for the future of America's economic growth, but it is also a ladder for social and economic mobility, allowing families in rural or low-income areas to access educational and social services, participate in our democracy and contribute to the marketplace of ideas. This is why we have been working with our colleagues in Congress to encourage the FCC to protect the open Internet under Title II. Adopting these sensible rules would give the FCC the power to intervene if broadband providers attempt to abuse the principles of the open Internet while also creating market and regulatory certainty.

We are proud to join more than 4 million Americans of all political beliefs, as well as companies in our home states and across the country, who have spoken out in favor of strong open Internet rules and against the creation of fast and slow lanes.

We urge the FCC to act quickly to implement fair rules of the road that protect businesses and consumers and preserve the power of the open Internet.

The future of our democracy and economy depend on it.

INTERNET ASSOCIATION
Washington, DC, January 21, 2015

Hon. JOHN THUNE,
Chairman,
United States Senate,
Committee on Commerce, Science, and Transportation,
254 Russell Senate Office Building,
Washington, DC.

Hon. ROGER WICKER,
Chairman,
Subcommittee on Communications, Technology and the Internet,
United States Senate,
Committee on Commerce, Science, and Transportation,
254 Russell Senate Office Building,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
United States Senate
Committee on Commerce, Science, and Transportation,
254 Russell Senate Office Building,
Washington, DC.

Hon. BRIAN SCHATZ,
Ranking Member,
Subcommittee on Communications, Technology and the Internet,
United States Senate,
Committee on Commerce, Science, and Transportation,
254 Russell Senate Office Building,
Washington, DC.

Dear Chairman Thune, Ranking Member Nelson, Chairman Wicker, and Ranking Member Schatz:

I write on behalf of the Internet Association to share our views on today's legislative hearing to discuss the proposed net neutrality legislation before your Committee. The Internet Association is the unified voice of the Internet economy, representing the interests of leading Internet companies [1] and their global community of users. The Internet Association is dedicated to advancing public policy solutions to strengthen and protect Internet freedom, foster innovation and economic growth, and empower users. As such, we are keenly aware of and interested in any net neutrality related public policy, regardless of its origins and legal foundation.

Since last May, when the Federal Communications Commission first requested public comments on its proposed open Internet rules, the Internet Association has taken a position that is results oriented. By this, we mean that our priority is for the adoption of robust and light touch open Internet rules that protect Internet freedom, foster innovation and economic growth, and empower users. The rules for which we specifically advocated are a ban on blocking, discrimination, and paid prioritization by both wired and wireless broadband Internet access providers. We also have expressed our concern—outside of the traditional last mile net neutrality debate -that these providers can use interconnection as a chokepoint to degrade consumer access and harm online services.

Many of the principles outlined by Chairman Thune are responsive to our concerns in key respects, and we are grateful for the leadership both the House and Senate have shown in crafting them, as well as the outreach to stakeholders throughout this process. With respect to the draft legislation, changes need to be made to ensure the outcomes match these principles so that an open Internet is fully protected. Although this list is not intended to be exhaustive, we have concerns about certain key provisions in the discussion draft—namely discrimination, throttling, specialized services, consumer choice, and reasonable network management practices.

The bill as currently drafted does not expressly ban discrimination. Allowing discrimination unconnected to a payment creates the possibility of discrimination by vertically integrated Internet access providers. Similarly, the current prohibition on throttling in the discussion draft is ambiguous since it prohibits "selective" throttling only when the throttling is "based on source, destination, or content" of the traffic. This leaves open the possibility that an access provider could adopt a policy of generally throttling Internet traffic of a particular "type," such as video traffic.

We also have concerns about the definitions of specialized services, consumer choice, and reasonable network management practices in the discussion draft. These terms as currently drafted could be used as loopholes to avoid the legislation's obli-

[1] The Internet Association's members include Airbnb, Amazon, AOL, Auction.com, eBay, Etsy, Expedia, Facebook, Gilt, Google, Groupon, IAC, LinkedIn, Lyft, Monster Worldwide, Netflix, Practice Fusion, Rackspace, reddit, Salesforce.com, Sidecar, SurveyMonkey, TripAdvisor, Twitter, Uber Technologies, Inc., Yelp, Yahoo!, and Zynga.

gations, leading to the unintended consequence of the exception swallowing the rule. Specialized services are defined expansively and are permitted save where "devised or promoted" to evade the open Internet rules, or where they impinge on the "meaningful availability" of broadband Internet access. Unfortunately, neither term is specifically defined. Similarly, we are concerned that the discussion draft's consumer choice provision could be read to allow broadband Internet access providers to prioritize a service if consent is given through a provision buried in a dense and lengthy consumer service contract. Finally, the discussion draft could allow access providers to hide reasonable network management practices from transparency requirements, and thus, potentially hide discrimination under the guise of reasonable network management.

We look forward to working with the Committee on some key issues of concern for Internet companies—including the issues outlined above-as the Committee's process advances. As we review Congressional open Internet proposals, we will continue to work with stakeholders—including the FCC—to produce enforceable rules. The path forward is not binary, and we have a responsibility to protect the free and open Internet for our members, as well as their community of users, by working with regulators, legislators, and stakeholders to achieve this end.

It is encouraging to see that support for net neutrality rules cross party lines. We must all work together to ensure that the Internet is free and open for users and innovators.

Respectfully,

MICHAEL BECKERMAN,
President and CEO,
Internet Association

January 20, 2015

Hon. JOHN THUNE,
United States Senate SD–511,
Washington, DC.

Hon. BILL NELSON,
716 Senate Hart Office Bldg.,
Washington, DC.

Dear Chairman Thune and Raking Member Nelson:

It has been a year since a Federal court struck down the Federal Communications Commission's (FCC) Open Internet rules.

And currently, there are no rules preventing Internet Service Providers (ISPs) like Comcast, AT&T, and Verizon from interfering with, blocking, censoring, or discriminating against online content and Web traffic.

This is why our groups oppose any effort that would prevent the FCC from adopting strong and enforceable Net Neutrality rules at the agency's upcoming Feb. 26 meeting. We fear that the draft legislation currently under discussion is designed to do just that, and to stall the FCC. We believe instead that it is time for the FCC to take sound action at last to protect our online digital rights.

Over the past year, more than four million commenters have called on the FCC to adopt strong Net Neutrality protections banning unreasonable discrimination online. Millions more have petitioned Congress and the FCC for the same kinds of protections.

Thousands of organizations and businesses have joined that call as well, including an unprecedented number of racial justice and civil rights groups.

The vast majority of these commenters have called on the Commission to reclassify broadband as a Telecommunications Service under Title II of the Communications Act. This would re-establish the agency's authority to enforce nondiscrimination rules and other necessary protections for Internet users.

For our organizations, Net Neutrality is a critical racial justice issue.

The open Internet has made it possible for communities of color to tell our own stories online and speak for ourselves without first seeking permission from corporate gatekeepers. It has ensured that our voices will always be heard and never silenced.

That is why more than 100 civil rights and racial justice groups, including the National Hispanic Media Coalition, 18MillionRising.org, LatinoJustice PRLDEF, the Center for Media Justice, ColorOfChange.org, Black Lives Matter, and Presente.org, have called on the FCC to re-establish its legal authority to protect our online rights. A full list of civil rights and racial justice leaders and organizations that support the FCC moving forward with Title II reclassification and Network Neutrality is available in filings with the FCC that are attached to this correspondence.

ColorOfChange.org, the largest Black online civil rights group in the country, has filed 75,000 comments with the FCC in support of reclassification. And Congres-

sional champions such as Reps. John Lewis, John Conyers, Donna Edwards, Keith Ellison, Raul Grijalva, and Sen. Cory Booker are among the growing chorus calling for Title II protections.

Through the years, our groups have had to fight back against the misleading arguments made by the ISPs that Net Neutrality would widen the digital divide because of the harm it would cause to investment. But the untruthfulness of those arguments was exposed last month at a conference for investors.

At the gathering, the chief executives and chief financial officers for Verizon, Comcast, Charter Communications, and Time Warner Cable all told investors the truth: that Title II would not harm investment.[1] The companies had to tell the truth in this setting since it is against the law to deceive investors. In addition, Sprint undermined the anti-Net Neutrality arguments made by other wireless providers by telling the Commission that Title II rules would not harm investment.[2]

It is time for the FCC to move forward and vote on Net Neutrality rules on Feb. 26. We oppose congressional proposals that would restrict the FCC's legal authority to enforce strong Net Neutrality protections or strip the Commission of the flexibility it needs to preserve nondiscrimination rules in a communications landscape that continues to evolve.

Preserving the FCC's Title II authority is also critical to addressing other broadband-related issues like universal service, competition, interconnection, consumer protection, privacy, and public safety.

For all of these reasons, we oppose any effort to derail the FCC from taking action to use its existing Title II authority, or to prevent the FCC from protecting our online digital rights through strong Net Neutrality rules.

Sincerely,

COLOROFCHANGE.ORG
CENTER FOR MEDIA JUSTICE
FREE PRESS
NATIONAL HISPANIC MEDIA COALITION
PRESENTE.ORG

January 5, 2015

Federal Communications Commission
445 12th Street, SW
20024 Washington, DC
14–28: Protecting and Promoting the Open Internet
10–127:In the Matter of Framework for Broadband Internet Service

Dear Chair Tom Wheeler and Commissioners Clyburn and Rosenworcel,

As a new generation of civil rights organizations and leaders who represent the rural and urban poor, immigrants, and communities of color, we urge you to swiftly adopt enforceable network neutrality rules that prevent discrimination online. Now is the right time to equally protect the digital voice and rights of the Nation's most vulnerable communities—whether they access the Internet from a computer, a phone, or a tablet.

On Monday, November 10, 2014, President Obama urged the Federal Communications Commission to reclassify broadband as a common carrier service under Title II of the Communications Act, coupled with strong, bright-line net neutrality rules. Bright-line rules provide certainty to the market, keep the costs of regulation low, and limit FCC overreach.

We are concerned by press reports that the FCC—instead of standing with the President, policy experts, and almost 4 million people to support strong network neutrality rules—is instead considering dangerous "hybrid" rules that would destroy the open Internet as we know it.

Commissioners, we urge you to stand with the President and adopt a plan to reclassify Internet service providers as common carriers. This would give the Commis-

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[1] Fung, Brian, "Comcast, Charter and Time Warner Cable all say Obama's net neutrality plan shouldn't worry investors," *The Washington Post,* Dec. 16, 2014. *http://fwww.washingtonpost.com jblogsjthe-switchfwp/2014/12/16/comcast-charter-and-time-warner-cable-all-tell-investors-strict-net-neutrality-wouldnt-change-much/.*

[2] Fung, Brian, "Sprint: Tough net neutrality rules would be fine by us," *The Washington Post,* January *16,* 2015: *http://fwww.washingtonpost.comfblogs/the- switchfwp/2015/01/16/sprint-tough-net-neutrality-rules-would-be-fine-by-usf.*

sion the authority it needs to adopt enforceable rules that ban ISPs from discriminating against, or blocking, our content online.

Protecting an open and non-discriminatory Internet is critical for the health and well being of communities of color and low-income families. The fight for an open Internet is not just about broadband access and corporate investment; it is also a fight for real representation for the most vulnerable constituencies in the United States.

The open Internet has given our communities the rare opportunity to ensure our stories are told accurately, in our own voices. From job applications, healthcare, and entrepreneurship to the management of Federal benefits, immigration status and online education—communities of color and low-income families rely on the open Internet to meet our basic needs.

Commissioners, we respectfully, but passionately, urge you to stand with the President and the people to propose the strongest network neutrality rules available. Now is the time to reclassify broadband as a common carrier under Title II, with equal protections for users of fixed and mobile broadband. When it comes to preventing online discrimination and protecting our Internet freedom, there is no room for compromise or delay.

Respectfully,

18 Million Rising
Access Humbolt
Alliance for a Just Society
Alliance of South Asians Taking Action
Allied Media Projects
Alternate ROOTS
Angry Asian Man
API Equality—Northern California
Appalshop
Arts and Democracy Project
Asamblea de Derechos Civiles
Asian Americans Advancing Justice—Asian Law Caucus
Asian Pacific American Network of Oregon
Black Alliance for Just Immigration
Black Excellence Project
Black Lives Matter
Boulder Community Broadcast Association
Brown & Green: South Asians for Climate Justice
Brown Boi Project
Brown Paper Tickets
Center for Media Justice
Center for Rural Strategies
Center for Social Inclusion
Champaign-Urbana Citizens for Peace and Justice
Chinese for Affirmative Action
Color of Change
Common Cause
Common Frequency
Community Justice Project
Community Technology Network
Concerned Citizens for Justice
Council on American-Islamic Relations
CREDO
Demand Progress
Dignity and Power Now
Ella Baker Center for Human Rights
Empowered Pacific Islander Communities
Esperanza Peace and Justice Center
Families for Freedom
Families Rally for Emancipation and Empowerment
Fight for the Future
Free Press
Future of Music Coalition
Global Action Project
Generation Justice
Greenlining Institute
Hispanic Association of Colleges and Universities
Hyphen Magazine
Illinois Campaign for Prison Phone Justice
Latino Rebels
Linebreak Media
Making Contact
Martinez Street Women's Center
May First/People Link
Media Action Center
Media Action Grassroots Network
Media Alliance
Media Literacy Project
Media Mobilizing Project
Million Hoodies Movement for Justice
Minnesota Center for Neighborhood Organizing
Movement Strategy Center
Nation Inside
National Asian Pacific American Women's Forum
National Association of Hispanic Journalists
National Hispanic Media Coalition
National Korean American Service & Education Consortium
National People's Action
New Sanctuary Coalition of NYC
OpenMedia International
Our Time
People's Press Project
Presente
Progressives United
Prometheus Radio Project
Race Forward
Racial Justice Action Center
Radio Bilingue
Roosevelt Institute
Roosevelt Institute—Campus Network
Run For Us
Seeding Change: A Center for Asian American Movement Building

Share New Mexico
South Asian Americans Leading Together
Southwest Organizing Project
St. Paul Neighborhood Network
The Highlander Research and Education Center
The Utility Reform Network (TURN)
The Visibility Project
Truthout.org
United Church of Christ, OC Inc.
United We Dream
Urbana-Champaign Independent Media Center
Voices for Racial Justice
Vote Mob
We the People
Women, Action & the Media!
Women's Institute for Freedom of the Press
Young People's Project
Young Women United
Youth Justice Coalition

CITY AND COUNTY OF SAN FRANCISCO
January 26, 2015

Dear Chairman Wicker and Ranking Member Schatz:

The undersigned mayors are writing to support the strongest possible rules to guarantee Net Neutrality. As you know, the Federal Communications Commission (″FCC″ or ″Commission″) is currently engaged in a proceeding to determine the most effective strategies for ensuring that the Internet remains free and open. It is critical that the FCC act now to implement regulations that protect consumers and innovation. The Commission should implement clear, legally defensible rules that: support transparency so that consumers can evaluate service offerings; prohibit blocking of lawful content; bar discrimination and ban paid prioritization.

We believe that the most effective way to truly protect the open Internet is for the FCC to break with its previous approach and re-classify broadband Internet as a telecommunications service subject to regulation as a common carrier, by reclassifying Internet access as a Title II service. The Commission has, to date, classified broadband Internet service-whether offered via wireline facilities, wireless technologies or power lines-as an ″information service.″ By treating broadband as an information service, the Commission has unclear authority and must construct a new regulatory regime. The Commission could remedy this be relying on Title II where the Commission has clear authority and where it has at its disposal an existing array of tools to protect consumers and competition, including service quality, rates, discrimination, disclosure of information requirements. Once Internet service has been classified as a Title II service, the FCC would have the ability to forbear from elements of the Title II regime that are unnecessary or archaic, if they do not serve to protect consumers or serve the public interest.

This approach would enable the FCC to require sufficient transparency for consumers to make informed choices and accurately assess the services they are being provided. Currently, the lack of clear, accurate information results in confusion with respect to key service features, like download and upload speeds, pricing and usage restrictions. This has contributed to widespread consumer dissatisfaction with broadband providers. These practices also place considerable burdens on local agencies, which must use their own resources to help consumers resolve challenges.

The risk that content and content-provider based blocking and other discriminatory practices pose to Net Neutrality has been a source of great public concern. Rules prohibiting the blocking of lawful content, services and applications are particularly important for the public schools and libraries that serve our residents. These institutions serve critically important educational functions for young people and adults. In addition, because they provide Internet access in the context of meaningful education, training, employment and other programs, they are essential vehicles for meeting adoption goals.

It is critically important that our residents-among them many students, parents, educators and others who are only able to connect to broadband at schools or libraries-are able to freely access lawful content without being confronted with delays that threaten adoption. In addition, it is vital that the content our residents, businesses and others create is freely accessible online. With this in mind, we urge the Commission, upon re-classifying broadband as a telecommunications service, to adopt the strongest possible rules against blocking, prioritization and other discriminatory practices.

We urge you to vigorously promote a free and open Internet by supporting the reclassification of broadband as a telecommunications service under Title II, promul-

gating effective transparency rules and adopting the strongest possible protections against blocking, prioritization and other discriminatory practices.

Sincerely,

EDWIN LEE,
Mayor,
San Francisco, CA.

BILL DE BLASIO,
Mayor,
New York, NY.

December 10, 2014

Senate Majority Leader Harry Reid
Senate Minority Leader Mitch McConnell
Speaker of the House John Boehner
House Minority Leader Nancy Pelosi
United States Congress

The Honorable Tom Wheeler
The Honorable Mignon Clyburn
The Honorable Jessica Rosenworcel
The Honorable Ajit Pai
The Honorable Michael O'Rielly
Federal Communications Commission
445 12th Street, SW
Washington, DC

Dear Majority Leader Reid; Minority Leader McConnell; Speaker Boehner; Minority Leader Pelosi; Chairman Wheeler; and Commissioners Clyburn, Rosenworcel, Pai, and O'Rielly:

We write, representing a wide range of technology companies, to express our strong opposition to proposals to classify broadband as a "Title II" service. Based on our experience and business expertise, we believe that our companies and our employees—like the consumer, businesses, and public institutions who depend on ever-improving broadband networks—would be hurt by the reduced capital spend in broadband networks that would occur if broadband is classified under Title II. Such a dramatic reversal in policy is unnecessary to ensure an open Internet.

For almost twenty years, national leadership, on a bipartisan basis, has nurtured the broadband Internet with a wise, effective, and restrained policy approach that

supported the free flow of data, services, and ideas online while creating a climate that supported private investment in broadband networks. The result has been a technological, economic, and social miracle that has boosted economic productivity and enriched lives, and created in America a symbiotic Internet economy that's the envy of the world.

Our companies are proud to have played a role in that miracle, and we look forward to a long future providing the devices, components, and services that fuel the modern Internet. But this depends on a continued national commitment to building and deploying ever more capable and faster networks—something Title II puts at risk.

While many experts have noted the damage Title II could do to network investment, the harm would cascade out far beyond the provision of broadband service because the Internet is now so entwined with our entire economy. As the White House explained last year, "[the] build-out of broadband infrastructure itself is a major driver of American investment and job creation. . .even more significant are the ways that connectivity is transforming a range of industries, from education to entertainment to agriculture to travel." [1]

Reversing course now by shifting to Title II means that instead of billions of broadband investment driving other sectors of the economy forward, any reduction in this spending will stifle growth across the entire economy.

This is not idle speculation or fear mongering. And as some have already warned, Title II is going to lead to a slowdown, if not a hold, in broadband build out, because if you don't know that you can recover on your investment, you won't make it. One study estimates that capital investment by certain broadband providers could be between $28.1 and $45.4 billion lower than expected over the next five years if wireline broadband reclassification occurs.[2] If even half of the ISPs decide to pull back investment to this degree, the impact on the tech equipment sector will be immediate and severe, and the impact would be even greater if wireless broadband is reclassified.

The investment shortfall would then flow downstream, landing first and squarely on technology companies like ours, and then working its way through the economy overall. Just a few years removed from the worst recession in memory, that's a risk no policymaker should accept, let alone promote.

On behalf of all Americans who depend upon the broadband Internet that has flourished under the current approach, we urge you to reject backward looking demands for Title II classification, and remain faithful to the policy approach that has served the Nation well.

Sincerely,

ACS Solutions
Actiontec Electronics, Inc.
ActiveVideo Networks
ADTRAN
Affirmed Networks
Alcatel-Lucent ARRIS
Asurion
Berry Test Sets
BlackArrow
Blonder Tongue
Broadcom
BTECH Inc
Casa-Systems
CBM of America
Ciena
Cisco
Commscope
Compass-EOS
Concurrent Computer
Corning
dLink
Drake
Enhanced Telecommunications, Inc.
Entropic
Ericsson
FiberControl
Finisar Corp
Gainspeed, Inc.
Go! Foton Corp
Harmonic
Humax Digital
IBM
Imagine Communications
Independent Technologies Inc.
Intel
Juniper Networks
KPG
MetroTel Corp.
Minerva Networks, Inc.
Netcracker Technology

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[1] Office of Science and Technology Policy & The National Economic Council, Four Years of Broadband Growth (June 2013), *http://www.whitehouse.gov/sites/default/files/broadband_report_final.pdf.*

[2] USTelecom ex parte, FCC Docket 14–28 (Nov. 19, 2014) (submitting a study, "The Impact of Title II Regulation of Internet Providers on Their Capital Investments by Kevin A. Hassett and Robert J. Shapiro), *http://ustelecom.org/sites/default/files/documents/ExParte_Title II_Study_11.19.14_pb.pdf.* The companies for which capital investment is estimated represent approximately half of industry capital spending.

Nokia Solutions and Networks
Optical Zonu Corp.
Pace
Panasonic Corporation of North America
Penthera Partners
Preformed Line Products, Inc.
Prysmian Communications Cable & Systems USA
Qualcomm
RGB Communications L.L.C.
Rovi
Sandvine
Sheyenne Dakota, Inc.
SNC Mfg. Co., Inc.
Sumitomo Electric Lightwave
Synacor
This Technology
Vermeer Corp.
Walker and Associates
Wintel

CC: Secretary of Commerce Penny Pritzker
White House Director of the National Economic Council Jeffrey Zients
White House Chairman of the Council of Economic Advisers Jason Furman

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December 10, 2014

Hon. HARRY REID,
Senate Majority Leader,
Washington, DC.

Hon. NANCY PELOSI,
House Minority Leader,
Washington, DC.

Hon. JOHN BOEHNER,
Speaker of the House,
Washington, DC.

Hon. TOM WHEELER,
Federal Communications Commission,
Washington, DC.

Hon. MITCH MCCONNELL,
Senate Republican Leader ,
Washington, DC.

Dear Majority Leader Reid; Republican Leader McConnell; Speaker Boehner; Minority Leader Pelosi; and Chairman Wheeler:

As members of the National Association of Manufacturers, the largest manufacturing association in the United States, representing 14,000 small, medium and large manufacturers in every industrial sector and in all 50 states, we have strong concerns with proposals to regulate the Internet, which could have a negative impact on manufacturers' ability to innovate and broaden economic growth.

Manufacturers vigorously support an open Internet. The robust telecommunications infrastructure that has been deployed over the past 20 years has transformed the way our companies operate and has contributed significantly to the growth of the manufacturing sector in the United States. Indeed, our shop floors are some of the most highly sophisticated and connected environments in the world. Leveraging the open Internet has led to groundbreaking technological innovations in our products and processes.

While the regulatory environment in place has encouraged this investment and innovation, current proposals to regulate the Internet with early 20th Century–era laws severely threaten continued growth. Our country cannot afford to derail this innovation with a burdensome regulatory scheme that will cut off incentives to invest in the networks our companies use.

Therefore, we urge you to oppose any efforts to unnecessarily regulate the open Internet. Unnecessary regulation will lead to a slowdown in innovation, chill investment in future technologies and stall much needed economic growth.

Sincerely,

AAM
ABB Inc.
ACE Clearwater
AGA Marvel
American Architectural Manufacturers Association
American Time & Signal Co., Inc.
Arcadia Chair Company
Associated Industries of Florida
Association for Manufacturing Excellence
Automatic Spring Products Corporation
Baker Boy
Ball Corporation
Belden Brick Company
Bergkamp Inc.
Bernier Cast Metals Inc.
Betts Company
Bison Gear & Engineering Corp.
Blackhawk Molding Co., Inc.
BTE Technologies
Cal Sheets LLC
California Manufacturers & Technology Association
Carolina Color Corporation
Cello-Wrap Printing Co., Inc.
Click Bond, Inc.
Cooper Standard Automotive
Corn Refiners Association
Custom Deco LLC
deVan Sealants, Inc.
DTE, Inc.

Emerson
Fabricators and Manufacturers Association, International
Federal Broach Holdings LLC
Fiberglass Coatings Inc.
French Oll Mill Machinery Co.
Glier's Meats Inc.
Heritage Plastics
Hess Pumice Products, Inc.
Highland Machine Co
Hudson Extrusions, Inc.
INDA, The Association of the Nonwoven Fabrics Industry
International Dairy Foods Association
Irex Corporation
Jackson Area Manufacturers Association
James Machine Works LLC.
Kaivac, Inc.
Kansas Chamber Koller Enterprises, Inc.
Marlin Steel Wire Products
Materion Technical Materials
McGregor Metalworking Companies
Memry Corporation
Metal Treating Institute
Miltec UV Corporation
Mississippi Manufacturers Association
Missouri Association of Manufacturers
Modine Manufacturing Company
Montana Chamber of Commerce
Narragansett Improvement Co
National Association of Manufacturers
National Council for Advanced Manufacturing
National Shooting Sports Foundation
Neenah Enterprises, Inc.
Nevada Manufacturers Association
North Carolina Chamber
Northeast PA Manufacturers and Employers Association
Oceanaire, Inc.
Osmose Holdings, Inc.
Painter Tool Inc.
Pennsylvania Manufacturers' Association
Perlick Corp
Power Technology Inc.
PRAB
Rekluse Motor Sports
Reshoring Institute
Resilient Floor Covering Institute
Rhode Island Manufacturers Association
RoMan Manufacturing Inc.
Sandmeyer Steel Company
SASCO Chemical Group, Inc.
Sioux Corporation
SKF USA Inc. SSAB
Stanley Black & Decker, Inc.
State Chamber of Oklahoma
Staub Manufacturing Solutions
Syncro Corporation
Techmer PM, LLC
Tenneco Inc.
Texas Association of Business
The Manufacturing Consortium
The Ohio Manufacturers' Association
TMP Technologies Inc.
Trippe Manufacturing Company
United Equipment Accessories, Inc.
USG Corporation
Valley Industrial Association
Ventahood, Ltd.
Vermeer Corporation
WEIDMANN Electrical Technology, Inc.
WilliamsRDM, Inc.
Worksman Cycles

Cc: Members of the House Energy and Commerce Committee
Members of the Senate Commerce, Science, and Transportation Committee
The Honorable Mignon Clyburn
The Honorable Jessica Rosenworcel
The Honorable Ajit Pai
The Honorable Michael O'Rielly
The Honorable Penny Pritzker, U.S. Secretary of Commerce
Mr. Jeffrey Zients, Director of the National Economic Council and Assistant to the President for Economic Policy
Dr. Jason Furman, Chairman of the Council of Economic Advisers

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January 20, 2015

Senator JOHN THUNE,
Chairman,
Senate Commerce Committee,
Washington, DC.

Senator BILL NELSON,
Ranking Member,
Senate Commerce Committee,
Washington, DC.

Congressman FRED UPTON,
Chairman,
House Energy and Commerce Committee,
Washington, DC.

Congressman FRANK PALLONE
Ranking Member,
House Energy and Commerce Committee,
Washington, DC.

Dear Mssrs. Chairmen and Ranking Members:

Congress, not three unelected officials, should decide the future of the Internet.

The Federal Communications Commission (FCC) has twice tried to regulate the Internet in the name of "Net Neutrality"—and twice failed in court. Lawmakers of both parties have proposed legislation that would avoid the need for the FCC to try again—yet FCC Chairman Tom Wheeler seems intent on issuing new rules. Worse,

he plans to break with two decades of bipartisan consensus that the Internet should not be subject to 1930s public utility regulation.

We worry about the unintended consequences of *any* form of regulation—but also recognize that legislation appears to be the only way to stop the FCC from trying to impose Title II of the Communications Act on the Internet and thus prevent years of ensuing litigation. To prevent a slippery slope towards broader regulation of the Internet, any legislative compromise must tightly constrain the FCC's authority and discretion. At a minimum, that means three things:

1. Congress must bar the FCC from imposing Title II on the Internet. Title II was developed for the telephone monopoly of the 1930s; it is utterly inappropriate for the dynamic Internet ecosystem. Invoking Title II threatens both to impose billions of dollars of taxes and fees on consumers, undermine broadband investment, and drag "edge" companies into a regulatory morass.
2. Congress must clarify that it did not intend the 1996 Telecom Act to give the FCC a blank check to regulate the Internet. In its *Verizon* decision, the D.C. Circuit mistakenly upheld the FCC's 2010 re-interpretation of Section 706 of that Act as allowing it to regulate any form of "communications" in any way the agency claims would promote broadband deployment or adoption—not just broadband companies or net neutrality.
3. If Congress gives the FCC clear rules and the power to enforce them, the Commission will not need the power to write additional rules. Congress, not the FCC, should decide whether additional rules become necessary. (Case-by-case enforcement is how the FCC's 2010 Open Internet Order and its 2014 proposed rules would have worked anyway.)

We urge you to proceed with dispatch, but also with the utmost caution and through regular order in the normal legislative process. Only Congress can craft a solution that is appropriately narrow, avoids endless legal challenges, and puts this divisive issue behind us. Only then can we move on to many long-overdue reforms—such as opening up more spectrum for mobile broadband, clearing actual regulatory barriers to broadband deployment and competition, and updating the Communications Act for the Digital Age.

Sincerely,

ORGANIZATIONS

- *TechFreedom*
- *Americans for Tax Reform*
- *Americans for Prosperity*
- *Center for Individual Freedom*
- *Competitive Enterprise Institute*
- *Council for Citizens Against Government Waste*
- *Information Technology and Innovation Foundation*
- *Institute for Liberty*
- *Institute for Policy Innovation*
- *International Center for Law & Economics*
- *Lincoln Labs*
- *Taxpayers Protection Alliance*

INDIVIDUALS *(Organizations listed here are for identification only)*

- *Daniel Berninger,* founder, VCXC
- *Fred Campbell,* Executive Director, Center for Boundless Innovation in Technology
- *Bartlett D Cleland,* Madery Bridge
- *Scott Cleland,* Chairman NetCompetition
- *Alton E. Drew,* Managing Director, Alton Drew Consulting LLC
- *Hance Haney,* Program Director, Technology and Democracy Project
- *Gene Hoffman,* Co-founder, eMusic & Vindicia
- *J. Bradley Jansen,* Director, Center for Financial Privacy & Human Rights
- *Roslyn Layton,* Visiting Fellow, American Enterprise Institute
- *Stan Liebowitz,* Ashbel Smith Professor of Economics, University of Texas, Dallas
- *Katie McAuliffe,* Executive Director, Digital Liberty
- *Seton Motley,* President, Less Government
- *Glen O. Robinson,* Former FCC Commissioner (1974–76) and David and Mary Harrison Distinguished Professor of Law Emeritus, University of Virginia
- *Paul H. Rubin,* Dobbs Professor of Economics, Emory University
- *Mike Wendy,* President, MediaFreedom.org

Dear Chairman Wheeler:

Last month, President Obama issued a statement urging the FCC to reclassify consumer broadband service under Title II of the Communications Act. We are writing on behalf of Business Roundtable's membership to express opposition to using Title II of the 1934 Communications Act as the principal basis for FCC action to maintain an open Internet.

Business Roundtable CEOs believe that government intervention in the economy is occasionally necessary to achieve societal goals. However we also believe that such intervention must be done in a way that promotes economic growth and job creation. For this reason, our membership strongly advocates for smart regulation and believes in the following principles:

- Regulation must be justified by a compelling public need, such as demonstrated market failure.
- Regulatory decisions should be based on the best available information, not speculation.
- Regulatory choices should maximize certainty and minimize burdens, so as to promote investment, innovation, and competitiveness.

Business Roundtable is opposed to applying last century's regulatory tools to our rapidly-evolving Internet. We believe that it is also unwarranted given the lack of demonstrated market failure to maintain an open Internet. You will find in the attachment further background on Business Roundtable's position on this issue and thoughts on a reasonable path forward.

Thank you for considering our views, and we look forward to working with you on a path forward for this issue that meets the principles of smart regulation.

Sincerely,

JOHN ENGLER.

BUSINESS ROUNTABLE
January 20, 2015

BUSINESS ROUNDTABLE POSITION ON REGULATION OF CONSUMER BROADBAND SERVICE UNDER TITLE II OF THE COMMUNICATIONS ACT

Regulation remains a top concern of America's business leaders. According to the most recent Business Roundtable (BRT) CEO Economic Outlook Survey, nearly 40 percent of our members listed regulations as the greatest cost pressure facing their businesses—making regulation the top cost pressure for the third year in a row.[i] Moreover, nearly half of CEOs cited regulatory issues as a top factor holding back the pace of U.S. investment spending.[ii] This is why BRT is a strong advocate of smart regulation that promotes economic growth and job creation, while achieving societal goals.

This fundamental principle of smart regulation has also long and widely been recognized, for example in executive orders: w[iii]

- Regulation should be justified by a compelling public need, such as demonstrated market failure.
- Regulatory decisions should be based on the best available information, not speculation.
- Regulatory choices should maximize certainty and minimize burdens, so as to promote investment, innovation and competitiveness.

Last month, President Obama issued a statement urging the FCC to reclassify consumer broadband service under Title II of the Communications Act.[iv] Doing so would violate the principles of smart regulation for the reasons outlined below:

- Private markets have not failed; to the contrary, the basic elements of an open Internet have evolved and persisted voluntarily within the Internet ecosystem.

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[i] Business Roundtable, *CEO Economic Outlook Survey Q4 2014* (December 2014), available at *http://businessroundtable.org/resources/ceo-survey/2014-Q4.*

[ii] *Id.*

[iii] *See, e.g.,* E.O. 13563, "Improving Regulation and Regulatory Review," 76 Fed. Reg. 3821 (Jan. 18, 2011); E.O. 13579, "Regulation and Independent Regulatory Agencies," 76 Fed. Reg. 41587 (July 14, 2011).

[iv] *http://www.whitehouse.gov/the-press-office/2014/11/10/statement-president-net-neutrality.*

- Arguments to reclassify consumer broadband service under Title II are based primarily on speculation, not empirical data and historical experience.
- Title II would substantially burden consumer broadband service and create profound uncertainty for Internet service providers (ISPs). Innovation, investment, and consumers would all suffer.

The last point bears further emphasis. Consumer broadband currently operates in an environment in which all participants are free to innovate in response to changes in consumer demand, technology, or other market features. Under Title II, virtually any action by an ISP that potentially affects consumer broadband service would require FCC approval—a time-consuming, costly and unpredictable process.

Reclassification under Title II will result in increased consumer fees at the federal, state and local levels. According to a recent analysis conducted by economists Robert Litan and Hal Singer of the Progressive Policy Institute, reclassification under Title II could result in $17 billion in new consumer fees, including $15 billion in state and local fees and $2 billion in fees for the Federal Universal Service Fund.[v] This $17 billion in additional fees equates to approximately $67 per year per wireline broadband connection and $72 per year per wireless broadband connection.[vi] To put these figures in context, consider that the average wireline broadband connection currently costs consumers roughly $537 per year and the average wireless broadband connection currently costs consumers $585 per year.[vii] In short, if broadband services are reclassified and regulated under Title II, the average consumer's annual Internet bill could increase by more than 12 percent due to new fees at the federal, state and local levels. In addition to higher consumer costs, reclassification under Title II would contribute to heightened market uncertainty. High levels of uncertainty are harmful to capital spending in any industry, but the long-lived investments made by telecommunications firms should be especially sensitive to it. This would greatly hamper ISPs' ability to innovate, and could potentially reduce innovation throughout the broader economy and place the United States at a competitive disadvantage vis-à-vis other countries in the allocation of global capital.

Finally, reclassification under Title II is also likely to reduce ISPs' extraordinary level of capital investment in faster and more widely-available broadband services. For instance, according to Hassett and Shapiro (2014), applying Title II regulation to ISPs is projected to reduce total capital investment in the telecommunications industry by $28-$45 billion over a five-year period—a decline of approximately 13–21 percent compared to the status quo.[1] Importantly, even if the FCC can successfully exercise its powers to forebear from applying certain aspects of Title II in the near term (which is not a foregone conclusion), the prospect that future administrations or Commissions will reverse course, could have a chilling effect on industry investment.

Ironically, in the call to regulate ISPs under Title II is that there is already broad agreement regarding the principles outlined in the FCC's current Open Internet proposal:

- Transparency on the part of ISPs regarding the policies that govern their networks;
- No blocking of legal content; and
- No commercially unreasonable discrimination, including favoring traffic from affiliated entities.[2]

Further, it is not at all clear that Title II would actually authorize the FCC to impose the kinds of bright-line prohibitions that the President seeks.

BRT believes that there are smarter ways to implement these principles, as an example under Section 706 of the Telecommunications Act of 1996 or with new, more targeted legislation. We remain firmly opposed to attempting to do so by reclassifying consumer broadband service under Title II because it will not fuel the American economy but, rather, burden it.

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[v] Robert Litan and Hal Singer, *Outdated Regulation Will Make Consumers Pay More for Broadband* (December 2014), available at *http://www.progressivepolicy.org/wp-content/uploads/2014/12/2014.12-Litan-Singer__Outdated-Regulations-Will-Make-Consumers-Pay-More-for-Broadband.pdf.*

[vi] *Id.*

[vii] *Id.*

[1] Kevin A. Hassett and Robert Shapiro, *The Impact of Title II Regulation of Internet Providers on Their Capital Investments* (November 2014), available at *http://www.sonecon.com/docs/studies/Impact__of__Title__II__Reg__on__Investment-Hassett-Shapiro-Nov-14–2014.pdf.*

[2] *http://www.fcc.gov/guides/open-internet.*

For further information, please contact Liz Gasster of Business Roundtable at (202) 496–3274 or *lgasster@brt.org*.

About Business Roundtable

Business Roundtable's CEO members lead companies with $7.2 trillion in annual revenues and nearly 16 million employees. BRT member companies comprise more than a quarter of the total market capitalization of U.S. stock markets and invest $190 billion annually in research and development—equal to 70 percent of U.S. private R&D spending. Our companies pay more than $230 billion in dividends to shareholders and generate more than $470 billion in sales for small and medium-sized businesses annually. BRT companies also make more than $3 billion a year in charitable contributions.

January 22, 2015

Senator JOHN THUNE,
Chair,
Committee on Commerce, Science, and Transportation,
Washington, DC.

Senator BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune & Ranking Member Nelson:

We appreciate the Committee interest in Net Neutrality and commend the Committee for holding yesterday's hearing on "Protecting the Internet and Consumers Through Congressional Action." The undersigned groups represent the interests of higher education and libraries, which rely on an open Internet to provide vital educational and research services to students, the public and the Federal Government itself. We joined together last year to release a set of Principles for an Open Internet that we believe could be useful to the Committee.

As the Committee considers legislation on this topic, we urge you to incorporate the views of the library and higher education communities. We have attached our initial comments to the Federal Communications Commission from last July, including our Principles, which explain in detail how an open Internet is essential to ensuring that our higher education and library systems and university-based research remain the finest in the world. The comments also provide a model for reforms to ensure an open Internet for all.

Please contact us with any questions or concerns. We look forward to working with the Committee on these important issues.

Sincerely,

KEVIN MAHER
American Library Association.

KRISTA COX,
Association of Research Libraries.

JARRET CUMMINGS,
EDUCAUSE.

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

In the Matter of	)	
	)	
Protecting and Promoting	)	GN Docket No. 14–28
the Open Internet	)	
	)	

Comments of

American Association of State Colleges and Universities

American Council on Education

American Library Association

Association of American Universities

Association of College & Research Libraries

Association of Public and Land-grant Universities

Association of Research Libraries

Chief Officers of State Library Agencies

Council of Independent Colleges

EDUCAUSE

And

Modern Language Association

JULY 18, 2014

Executive Summary

Libraries and institutions of higher education depend upon an open Internet to carry out their missions and to serve their communities. Our organizations are extremely concerned that broadband Internet access providers that offer services to the general public (*i.e.,* public broadband Internet access providers) currently have the opportunity and financial incentive to block, degrade or discriminate against certain content, services and applications. We thus support strong, enforceable policies and rules to protect and promote an open Internet.

The specific proposals in the Notice of Proposed Rulemaking (NPRM) fall short of what is necessary to ensure that libraries, institutions of higher education and the public at large will have access to an open Internet. It proposes different rules for fixed and mobile broadband access when there is no technological reason to do so. Furthermore, the proposed rules appear to endorse individually-negotiated contracts that could grant some users expedited transmission and prioritized content, thereby relegating non-prioritized users to a "slow lane."

In these comments, we suggest ways to strengthen the proposed rules and ensure that they preserve an open Internet for libraries, higher education and the communities we serve. For instance,

- the proposed open Internet rules should explicitly apply to public broadband Internet access service provided to libraries, institutions of higher education and other public interest organizations;
- the rules should prohibit "paid prioritization;"
- the proposed rules should be technology-neutral and should apply equally to fixed and mobile services;

- the Federal Communications Commission (FCC) should adopt a re-defined "no-blocking" rule that bars public broadband Internet access providers from interfering with the consumer's choice of content, applications, or services;
- the FCC should strengthen the disclosure rules; and
- the proposed ombudsman should be charged with protecting the interests of libraries and higher education institutions and other public interest organizations, in addition to consumers and small businesses.

Regarding the scope of the proposed rules, the FCC should clarify that its rules only apply to those network providers that offer service to the general public and do not apply to private networks that do not serve the general public or to end user Wi-Fi provided by coffee shops, libraries and colleges and universities.

The FCC has all necessary authority to implement open Internet rules sufficient to protect and promote the openness of the Internet. Title II reclassification would provide valuable certainty to the marketplace and place public broadband Internet access service on an equal regulatory footing with other communications services. In the alternative, we agree with the FCC that enforceable rules could be created under its Section 706 authority. We have serious reservations, however, about the viability of the proposed "commercially reasonable" standard. If the FCC chooses to implement open Internet rules under Section 706, it should craft a different standard that reflects the unique character of the Internet as an open platform for innovation, freedom of speech, research and learning, which we suggest could be called an "Internet reasonable" standard.

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I. Introduction

The American Association of State Colleges and Universities (AASCU), the American Council on Education (ACE), American Library Association (ALA), the Association of American Universities (AAU), the Association of College & Research Libraries (ACRL), the Association of Public and Land-grant Universities (APLU), the Association of Research Libraries (ARL), the Chief Officers of State Library Agencies (COSLA), Council of Independent Colleges (CIC), EDUCAUSE and the Modern Language Association (MLA)[1] welcome the opportunity to submit these comments in response to the Notice of Proposed Rulemaking (NPRM) in this proceeding[2] to protect and promote the open Internet.[3]

Our nation's libraries and institutions of higher education are leaders in creating, fostering, using, extending and maximizing the potential of the Internet for research, education and the public good. Libraries and institutions of higher education[4] depend upon an open Internet to fulfill their missions and serve their communities.

Our organizations are thus extremely concerned with the current void in policies to protect the openness of the Internet. As a result of the D.C. Circuit Court of Appeals decision in *Verizon* v. *FCC,*[5] there are currently no rules or policies in effect to guard against blocking or discriminatory behavior by broadband Internet access providers. Broadband providers that serve the general public (which we refer to herein as "public broadband Internet access providers") currently have the financial incentive and the opportunity to sell higher priority access to certain content providers and discriminate against other providers who do not have the resources to pay for enhanced access. Allowing public broadband providers to degrade or discriminate against library or higher education content jeopardizes our institutions' ability to fulfill our public interest missions and educational goals.

Our organizations strongly urge the FCC to adopt enforceable rules that ensure an open Internet. We believe that the FCC has all necessary authority to establish such rules. Title II provides valuable certainty to the marketplace and places public broadband Internet access service on an equal regulatory footing with other communications services. If Title II reclassification is not feasible, however, the FCC should craft enforceable rules using its authority under Section 706. We have serious reservations, however, about the viability of the "commercially reasonable" standard proposed by the Commission. As we explain in more detail below, the FCC should adopt a standard that reflects the unique character of the Internet as a platform for innovation, free speech, research and education, which we suggest could be called the "Internet reasonable" standard.

Our comments proceed as follows:

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[1] Brief descriptions of each of these organizations are contained at the end of the Appendix.

[2] FCC 14–61, released May 15, 2014.

[3] Many of the signatories to these comments representing institutions of higher education and libraries published our key Net Neutrality Principles for protecting and promoting the open Internet on July 10, 2014 (attached as Appendix A). We recommend these Principles as a framework for resolving many of the issues in this proceeding. These comments offer more detailed suggestions regarding some of the specific questions raised in the NPRM.

[4] While our comments reflect the views of the libraries and higher education organizations, we note that governmental organizations, K–12 education, community-based organizations and other similar organizations whose missions are to serve the public interest benefit from an open Internet as well.

[5] *Verizon* v. *FCC,* 740 F.3d 623 (D.C. Cir. 2014)("*Verizon*").

- First, these comments will explain why protecting and promoting an open Internet is so vitally important to the missions of institutions of higher education and libraries and to the students, teachers, researchers, library patrons and the communities that these institutions serve.
- Second, these comments will discuss some of the specific proposals raised in the NPRM and will suggest alternate approaches to some of the key issues that are necessary to protect and promote an open Internet for entities that serve the public interest, such as libraries and institutions of higher education.
- Third, these comments will discuss the legal basis for the FCC's actions to protect and promote the open Internet in the wake of the Court of Appeals decision. In particular, we will discuss the merits of Title II reclassification, as well as an "Internet reasonable" standard under Section 706.

II. The FCC Should Specifically Recognize the Importance of an Open Internet for Research, Education, the Free Flow of Information, and Other Public Interest Benefits Provided by Institutions of Higher Education and Libraries

High-capacity broadband is the key infrastructure that libraries, community colleges, public and private colleges and universities, and many other institutions need to carry out their public interest missions. These institutions rely on open Internet access both to retrieve and contribute content on the World Wide Web. In fact, the public interest missions of libraries and institutions of higher education are highly intertwined with the Internet. The democratic nature of the Internet as a neutral platform for carrying information and research to the general public is strongly aligned with the public interest missions of libraries and higher education.

Unfortunately, the NPRM does not give sufficient recognition to the value of the Internet for education, learning, research and other public services. While the NPRM properly describes the importance of the Internet for innovation and commerce, the educational and public interest benefits of an open Internet are just as important.

This section of these comments provides an overview of the Internet-based services and content that libraries and institutions of higher education provide to their communities and explains why the FCC should incorporate our institutions' perspective into its open Internet rules.

A. From Its Inception in University Laboratories, the Internet Was Created In a Higher Education Culture that Values Openness, Research, Learning and Freedom of Expression, and the FCC Should Seek to Preserve These Foundational Characteristics of the Internet

The initial protocols for the Internet were developed by institutions of higher education, and universities were the first to deploy private high-speed data networks that formed the test-bed for what later became the public Internet.[6] The Internet arose out of the same university mindset that promotes the open exchange of information, intellectual discourse, research, free speech, technological creativity, innovation and learning. This essential character of the Internet as an open platform should be preserved by the FCC. Incorporating these principles into treatment of Internet access is especially important in today's age when Internet access is provided by commercial companies. Internet openness is an essential driver of the "virtuous circle" that both the FCC and the Federal court have recognized as the engine for Internet development. The unimpeded flow of knowledge, information, and interaction across the Internet enables the circle of innovation, user demand, and subsequent broadband expansion that have generated the dramatic social, cultural, and economic benefits acknowledged by the Commission, the courts, and the Nation as a whole.

B. Libraries and Higher Education Bring the Benefits of the Internet to Segments of the Population that May Not Be Served by the Commercial Sector

An open Internet is especially important for libraries to serve the needs of the most vulnerable segments of our population, including those in rural areas, unemployed and low-income consumers, and elderly and disabled persons. Public libraries specialize in providing Internet access to *all* people, especially the roughly one-third of people who do not have broadband access at home. Local public libraries offer the

[6] There are several papers that document the role of university professionals in creating the protocols that developed into what we know as the Internet today. One brief summary of these efforts is available at *http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet.*

only no-fee public Internet access in over 60 percent of all communities.[7] The general public depends upon the availability of open, affordable Internet access from their local libraries to complete school homework assignments, locate e-government services, research family histories, find health information, learn from job-training videos and apply for jobs, download streaming media, upload and share their own digital content, and more. The nation as a whole benefits when libraries and their patrons have access to open, high-speed, online information and services. Two-thirds of public libraries report they would like to increase their broadband speeds, largely driven by community demand for high-speed wired and Wi-Fi Internet access and the services enabled by this library broadband infrastructure.[8]

Similarly, colleges and universities make Internet access available to their entire student bodies, faculty, researchers and administrators. Higher education institutions make the Internet accessible and plentiful so that it provides a foundation for Internet-based learning and experimentation. College students who may not have broadband at home are able to develop a familiarity with the Internet on campus that they can take with them to their jobs, their families and their lives after college. Furthermore, the majority of college students live off-campus, which means that students rely on the availability of the public Internet for access to (increasingly media-rich) courses and learning resources, academic and student support, faculty and peer collaboration, and more.

This is particularly the case for the rapidly growing population of students in distance learning or hybrid[9] courses, where all or a significant portion of the learning process takes place away from campus. Distance learning and hybrid courses increase higher education access, making it possible for adult learners and other students to pursue their academic goals when a traditional, campus-based academic experience might make that infeasible. However, such courses and programs also make those students' learning experience highly dependent on high-bandwidth Internet access. Online courses rely more and more on multi-media resources, adaptive learning applications, and dynamic simulations for interactivity, engagement, and subsequent learning success. Just as degradation of Internet transmission speed can make an online video or video game for personal entertainment unwatchable or unplayable, such degradation could easily frustrate a learning experience utilizing online video, simulations, and so forth, with dire implications for the student, family, community, and our country, writ large.

C. Higher Education and Libraries Are at the Forefront of Internet Innovation

Libraries and higher education institutions have been leaders in developing innovative uses of Internet bandwidth and new learning methodologies from the Internet's inception. Today, higher education institutions use the public Internet to advance learning (both in class and at a distance, including innovations such as massive open online courses, or MOOCs), research (especially around "big data"), Digital Humanities[10] and scholarly collaboration. Higher education specializes in developing innovative online learning services, such as multimedia instructional resources, dynamic simulations, and cloud computing capabilities.

Libraries have been among the most innovative Internet users and generators of online content. Virtually every library across the country now provides broadband services to its patrons at no charge, and 98 percent of public libraries provide wireless (Wi-Fi) access as well. Library patrons are constantly using the Internet to take advantage of educational services, remote medical services, job-training courses, distance learning classes, access to e-government services, computer and technology training, and more. Furthermore, librarians specialize in collecting and hosting robust databases of information, digitizing unique community artifacts and records, engaging community conversations through social media, developing innovative media, and preserving the free flow of information and research over the public Internet for all people.

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[7] See, *http://www.plinternetsurvey.org/analysis/public-libraries-and-community-access.*

[8] Institute of Museum and Library Services Public Hearing: "Libraries and Broadband: Urgency and Impact". See transcript at *http://www.imls.gov/about/broadband__hearing.aspx.*

[9] In "hybrid courses," students learn in the classroom for part of the course time while learning online for other portions of the course time. For example, a hybrid course might have students attending class on campus once a week while learning via online modalities for the remainder of the course time that week.

[10] For a brief introduction into the new field of Digital Humanities, please see "A Guide to Digital Humanities" provided by Northwestern University, available at *http://sites.library.northwestern.edu/dh/.*

Below are some specific examples of projects and services that highlight our institutions' value in providing access to information and the importance of the open Internet in disseminating such information.[11]

- The National Library of Medicine (NLM), the world's largest medical library, provides a vast amount of information-based services, ranging from video tutorials to downloads of large genomic datasets. NLM provides valuable information and data to the public amounting to trillions of bytes each day disseminated to millions of users. Without rules to protect the open Internet, NLM's ability to provide access to this important information would be jeopardized.
- Columbia University created the 9/11 Oral History Project, focusing on the aftermath of the destruction of the World Trade Center. The Project includes over 900 recorded hours on digital media. More than half of the Columbia collection is open and available to the public, and the entire archive will eventually be available for study and research. This content is currently used in New York K–12 public schools.
- After receiving over 2,500 boxes of records and documents and 12,000 promotional photographs from the New York World's Fair of 1939 and 1940, the New York Public Library (NYPL) digitized the content and makes it available online. It provided the material in a free app that was later named one of Apple's "Top Education Apps" of 2011 and is used in New York K–12 public schools.
- The Ann Arbor Public Library has produced and shared close to 150 podcasts featuring interviews from a local historian discussing the Underground Railroad, to a fifth-grader talking about library programs for kids her age, to Top Chef Steph. The library also hosts the Ann Arbor Film Festival Archive, among dozens of local history digital collections.
- The Iowa City Public Library encourages interest and awareness of local musicians with a digital collection of more than 100 albums by artists playing everything from electronica to children's music. The collection includes out-of-print music and live shows.
- The North American Network of Science Labs Online (NANSLO) is an alliance of cutting-edge science laboratories that provide students enrolled in higher education science courses with opportunities to conduct their lab experiments on state-of-the-art science equipment over the Internet. From any computer, students can log into one of the labs' web interfaces and manipulate the controls on a microscope or other scientific equipment, participate in conversations with lab partners, ask for assistance from a knowledgeable lab technician in real time, and collect data and images for their science assignments. NANSLO makes it possible for students who cannot go to campus for a lab course because of their rural location or family and work obligations to still pursue a science degree.
- Scholars in the digital humanities from around the country are integrating historical documents and data sources with audio, video, and interactive simulations to provide students and the general public with online access to immersive learning experiences. For example, the University of Richmond's Digital Scholarship Lab has developed "Hidden Patterns of the Civil War," a collection of interrelated projects that use digital tools and digital media to provide interactive representations of Civil War era social, cultural, political, and economic developments. As another example, the University of California, Los Angeles Center for Digital Humanities maintains the Digital Karnak Project, which provides students, faculty, and the public with an online, interactive, three-dimensional virtual reality model of the ancient Egyptian temple site of Karnak accompanied by original videos, maps, and essays.
- nanoHUB serves as an online platform for nanotechnology research, education, and collaboration. The site hosts hundreds of online simulation programs for nanoscale phenomena. It also provides online presentations, courses, learning modules, podcasts, animations, teaching materials, and more. In addition, the site offers researchers a venue to explore, collaborate, and publish content, as well. Through nanoHUB–U, undergraduate and graduate students in engineering and applied sciences can access both instructor-led and self-paced courses incorporating online video and simulations, allowing them to obtain an essential grounding in the field.

[11] Additional examples of library and higher education uses of the open Internet are available here: *http://www.arl.org/storage/documents/publications/lt-pubint-nn13dec10.pdf.*

D. The Final Order in this Proceeding Should Recognize the Value of the Internet for Research, Learning, Education and Freedom of Speech

In principle, the higher education and library communities strongly value and support the open Internet as a fundamental cornerstone for preserving our democracy and enhancing freedom of speech in the information age. In practice, the education and library communities need an open, accessible Internet for "nuts and bolts" services—distance learning, telemedicine, access to e-government services, and many other essential community services. Educators and librarians are continuously developing new digital content, e-learning services and other teaching tools that depend on unfettered access to the Internet.

As mentioned earlier, the NPRM does not give sufficient attention to the Internet's importance to education, research and free speech. We urge the FCC to incorporate the needs of libraries and institutions of higher education into its rationale justifying its open Internet policies. In addition, we also provide some specific policy suggestions below.

III. The FCC Should Design Strong Open Internet Rules to Preserve the Unique and Vitally Important Character of the Internet to Promote Research, Learning, Education and the Free Flow of Information

Our organizations suggest that the FCC make the following changes to its proposed rules to reflect the needs and interests of higher education and libraries.

A. The Scope of the Rules Should Cover Broadband Providers that Serve the Public and Institutions that Serve the Public Interest, Including Higher Education and Libraries

The NPRM proposes to retain the same definitions and scope of the FCC's rules as were adopted in the *2010 Open Internet Order.*[12] The definitions in the FCC's *2010 Open Internet Order,* however, do not clearly include all the entities that should be included. The definitions should include *all* libraries, higher education and other public interest organizations explicitly.[13]

The *2010 Open Internet Order* applied the agency's open Internet rules only to "mass market" services, which it defined as:

> a service marketed and sold on a standardized basis to residential customers, small businesses, and other end-user customers such as schools and libraries, including services purchased with support of the E-rate program.[14]

This definition needs to be clarified to ensure that the term "other end-user customers" *clearly* includes institutions of higher education and other institutions that purchase standardized broadband Internet access service.[15] Certainly, institutions of higher education are not "residential customers" or "small businesses." There is some uncertainty about whether institutions of higher education (and their libraries) are included in the term "schools" because the term is sometimes interpreted as applying only to K–12 schools. The FCC should explicitly state that all libraries, colleges, universities and other public interest institutions that purchase standardized broadband Internet access service from public broadband providers[16] are included in the term "other end-user customers, such as schools and libraries."

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[12] Preserving the Open Internet, GN Docket No. 09–191, WC Docket No. 07–52, Report and Order, 25 FCC Rcd 17905 (*Open Internet Order*).

[13] In the proceedings leading up to the FCC's *2010 Open Internet Order,* ALA, ARL and EDUCAUSE filed multiple comments to ensure that the needs of libraries, higher education and other public interest institutions were included in the FCC's policies. (See, *e.g., Ex parte* letter from ALA, ARL and EDUCAUSE in General Docket No. 09–191 and WC Docket No. 07–52, December 13, 2010.) While we were gratified that the FCC changed the definition of "end user" to include "schools and libraries", this language does not reflect the needs of all libraries, higher education and other public interest institutions in an open Internet, as we discuss in more detail below.

[14] NPRM, para. 54.

[15] Note that the Online Competition and Consumer Choice Act introduced by Sen. Leahy (S. 2476) and Rep. Matsui (H.R. 4880) on June 17, 2014 both include the word "institution" in the definition of both "end user" and "edge provider," which recognizes libraries and higher education institutions' dual role as consumers and content providers.

[16] As we explain further below, the proposed rules should only apply to those broadband providers that serve the general public, which we describe as "public broadband Internet access services providers" or "public broadband providers." The word "public" is in this context is intended to have a meaning similar to the definition of "telecommunications service," which is defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.")

B. The Commission Should Prohibit Paid Prioritization

We are especially concerned that public broadband Internet access providers now have the opportunity and financial incentive to provide favorable Internet service to certain edge providers or customers, thereby disadvantaging non-profit or public interest entities such as colleges, universities and libraries. For instance, public broadband providers could sell faster or prioritized transmission to certain entities ("paid prioritization"). Many institutions that serve the public interest, such as libraries, colleges and universities, may not be able to afford to pay extra fees simply for the transmission of their content and could find their Internet traffic relegated to chokepoints (the "slow lane") while prioritized traffic zips through to its destination. Paid prioritization inevitably favors those who have the resources to pay for expedited transmission and disadvantages those entities—such as libraries and higher education—whose missions and resource constraints preclude them from paying these additional fees.

Further, it is likely that those who *are* able to pay for preferential treatment will pass along their costs to their consumers and/or subscribers. In some cases, libraries and other public institutions may be among these subscribers who would then be forced to pay more for services they may broker on behalf of their patrons. Public libraries, for instance, subscribe to digital media services such as Hoopla, OverDrive, and Zinio, to provide access to video, audiobooks, e-books, and e-magazine titles.

Finally, prioritizing some traffic over others would undermine one of the Internet's fundamental underlying principles—network operators are expected to use "best efforts" to deliver information to the end user. And from a broader perspective, traffic prioritization creates artificial motivations and constraints on the use of the Internet, damaging the web of relationships and interactions that define the value of the Internet for both end users and edge providers.

C. The Scope of the Rules Should Clearly State that the Open Internet Rules Apply to Public Broadband Providers and Not to Private Networks or End Users

The FCC should also clarify the scope of the rules to ensure that they are not applied to private networks or end users. The *2010 Open Internet Order* correctly found that the open Internet rules should not apply to premise operators, such as individual consumers' home Wi-Fi connections or bookstores or coffee shops that provide wireless services to their patrons. (This provision is sometimes misleadingly called the "coffee shop exception.") While the Commission was correct to find that these end user activities should not be subject to open Internet rules, this list of services is not exhaustive. For instance, almost all libraries offer Wi-Fi connections to their patrons, and these end user Wi-Fi services should not be regulated as if they were public broadband providers. Also, many colleges and universities have their own private end-user networks (both on-campus and off-campus[17]) that are not available to the general public. The FCC should clarify that all private, end-user networks fall within the "coffee shop" exception and should not be subject to open Internet regulation.

There is no precedent or expectation that private networks or end users, whether large or small, should be subject to regulation; doing so in this proceeding would burden consumers such as libraries and institutions of higher education and discourage the purchase and use of broadband Internet access services. There is substantial precedent in the law for treating private networks differently from networks available to the public.[18]

We believe that the NPRM intends to exclude private networks and end user activities from regulation, but we urge the FCC in its final rules to expand the list of end users as set forth above and to be absolutely clear that such private networks and end users (such as households, coffee shops, higher education institutions, or

[17] Some colleges maintain several different campuses and maintain private networks connecting these campuses. These networks are analogous to intra-corporate networks that connect branch offices of a multi-location business. Such networks serve the internal communications and broadband needs of their owners and should not be subject to these rules.

[18] See, *e.g.,* Section 103 of the Communications Assistance for Law Enforcement Act (CALEA), which specifically excludes "equipment, facilities, or services that support the transport or switching of communications for private networks or for the sole purpose of interconnecting telecommunications carriers." 47 U.S.C. §1002(b)(2)(B). See also, "Common Carrier Regulation of Telecommunications Contracts and the Private Carrier Alternative," by Pitsch and Bresnahan, Federal Communications Law Journal, Vol. 48, Issue Three, June 1, 1996 (which reviews the FCC's history of treating several activities as "private," including satellite transponders, private land mobile radio services, and enhanced services, in part because they are not offered to the general public.)

libraries) should be free to decide how they use the broadband services they obtain from public broadband Internet access service providers.

D. The Rules Should Be Technology-Neutral

The *2010 Open Internet Order* created separate rules for fixed and mobile services. The arguments for distinguishing between fixed and mobile service were not well founded in 2010 and are even less defensible today. Consumers and edge providers use fixed and mobile services interchangeably, often switching from one device to another to surf the web, send and receive e-mail, post to Twitter accounts, use applications, download e-books, view lectures and listen to podcasts. The proliferation of 4G mobile networks makes it increasingly easy to upload and download data using mobile devices. Students, library patrons, faculty and researchers are increasingly dependent on using mobile devices. Mobile services will become even more prevalent in the future with the advent of 5G technologies [19] and as more spectrum is made available for commercial mobile services through the upcoming incentive auctions. We urge the FCC to think ahead to the enormous growth of mobile technologies and craft policies that anticipate the future. Broadband Internet policies should be independent of the connection technology (wired, wireless, satellite, fiber-optic, etc.) and open Internet rules should apply no matter which technology is used to access the Internet.

E. The FCC Should Clarify the Disclosure Rules to Ensure that Information about Data Caps and Bandwidth Speeds are Displayed Prominently and Clearly to Consumers and Edge Providers

The NPRM proposes to enhance the transparency rules to give consumers, edge providers, the Internet community and policy-makers greater information about broadband Internet access providers' services and network management practices. Our organizations support these proposals. Consumers have a right to know the scope and quality of the services that they are purchasing, especially in light of the hundreds of complaints received by the Commission that the advertised bandwidth offerings may exceed the actual amount of provided bandwidth. Furthermore, public broadband providers are continually changing their network equipment, routing tables, and management practices, so any disclosures should be updated regularly. Requiring public broadband providers to make available the information about the actual scope and quality of the broadband services will allow regulators to hold providers accountable for their services and make sure that their actual services align with how providers describe them to end users of all types, including colleges, universities, and libraries.

Furthermore, the Commission should make sure that public broadband providers display this information in a standardized format so that consumers can compare different providers' services. While the NPRM cites examples of disclosure requirements from the food, drug, credit card, appliance and mortgage industries, another useful analogy may be the disclosures required when purchasing an automobile. Just as car dealers must display basic information regarding the automobile (including miles per gallon, warranties, financing terms, and other features and functions), a public broadband Internet service provider should be required to disclose the bandwidth, latency, data caps, warranties, payment terms, termination penalties, and so forth.[20]

F. The FCC Must Establish a Firm "No Blocking" Policy for Both Mobile and Fixed Broadband Providers, and the Policy Should Focus on the End User Perspective

The NPRM proposes

> to adopt the text of the no-blocking rule that the Commission adopted in 2010, with a clarification that it does not preclude broadband providers from negotiating individualized, differentiated arrangements with similarly situated edge providers (subject to the separate commercial reasonableness rule or its equivalent). So long as broadband providers do not degrade lawful content or service to below a minimum level of access, they would not run afoul of the proposed rule. We also seek comment below on how to define that minimum level of service. Alternatively, we seek comment on whether we should adopt a no-blocking rule that does not allow for priority agreements with edge providers and how

[19] "EU and South Korea to Develop 5G Mobile Network", Financial Times, June 16, 2014, available at http://tinyurl.com/mhmgkkt. ("For consumers, the EU suggests 5G mobile device users will be able to download a one-hour high-definition film in six seconds.")

[20] The disclosure requirements should track the performance measurements in the FCC's "Measuring Broadband America" reports. See, *http://www.fcc.gov/measuring-broadband-america.*

we would do so consistent with sources of legal authority other than section 706, including Title II. [footnotes omitted]

In our view, the FCC must establish a no-blocking rule that is clear to public broadband Internet access providers, consumers and edge providers and that has a firm basis in legal authority. It is a bedrock principle of Internet openness that broadband providers should not be permitted to block consumers' access to lawful websites, applications or services. We support the FCC's effort to re-instate the no-blocking rule (though without tying it to the "commercially reasonable" standard, as we explain in more detail below).[21]

While we are pleased that the FCC proposes to re-instate the no-blocking rule vacated on appeal, we suggest that the FCC may need to redefine the nature of the service being offered in order to be consistent with the *Verizon* decision. The NPRM proposes to include a definition of a "minimum level of access" or a "minimum level of service", but doing so may be the exact opposite of the *Verizon* court's recommendation. [22] Rather than defining a minimum level of service, our reading of the court's decision is that FCC should take a broader view of the definition of the service that is being provided ("access to their subscribers generally")—a definition that would encompass both individually negotiated levels of service and a lower level "boundary" (not a mandated minimum).

Admittedly, there is ambiguity in the court's language, and it is not entirely clear in the *Verizon* court's discussion of this topic whether the relevant "service" is service to the end user/subscriber or to the edge provider. The FCC's proposed definition of "mass market" suggests that the relevant service is the service provided to the end user/subscriber, but the court's language implies that the relevant service is provided to the edge providers. In the context of the "no-blocking" rule, we suggest that the most relevant service is the service provided to the end user/subscriber. The service being provided is to connect the end user/subscriber to the Internet "cloud." For this purpose, there is no need to define a "minimum level of access or service" being "provided" to the edge provider. It is sufficient to say that a broadband provider may not block access to any lawful website, application or service chosen by the end user/subscriber, subject to reasonable network management.[23]

The no-blocking rule, as defined by the choice of the end user/subscriber, does not run afoul of the statutory provision that bars broadband providers from being regulated as common carriers. Defined in that way, this type of "no-blocking rule" does not run the risk that a court would find it to be similar to a common carrier-like obligation to serve the public indiscriminately. Rather, a no-blocking rule defined as carrying out the will of the consumer simply says that, once a public broadband Internet access provider connects an end user/subscriber to the Internet "cloud", it cannot take affirmative steps to block a certain lawful website, application or service that the consumer chooses to access from that "cloud". Rather than directing each public broadband provider to serve each individual website, application or service, such a no-blocking rule would simply say that the provider cannot block those edge providers connected to the Internet cloud from serving the requests the providers' subscribers have made of them.

To clarify the "no-blocking" rule and to avoid the risk of being overturned on appeal, the Commission should insert the end user's perspective into the "no-blocking rule", so that it would read as follows:

> *A person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not block* ***an end user from accessing*** *lawful content, applications, services, or non-harmful devices, subject to reasonable network management.*

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[21] A rule that requires public broadband Internet access providers not to block access to lawful websites, applications and services does not on its own treat the provider as a common carrier. Broadband providers may still have the opportunity to negotiate individual arrangements or provide additional services to certain edge providers. A no-blocking policy simply directs the provider to allow access to the websites, applications or services *requested by the consumer.*

[22] The key sentence from the *Verizon* decision is as follows: "Thus, if the relevant service that broadband providers furnish is access to their subscribers generally, as opposed to access to their subscribers at the specific minimum speed necessary to satisfy the anti-blocking rules, then these rules, while perhaps establishing a lower limit on the forms that broadband providers' arrangements with edge providers could take, might nonetheless leave sufficient 'room for individualized bargaining and discrimination in terms' so as not to run afoul of the statutory prohibitions on common carrier treatment." *Cellco,* 700 F.3d at 548.

[23] Defining the no-blocking rule in this manner, as a service provided to the end user/subscriber, also helps to justify the "no-blocking" rule separately from the rule concerning the treatment of edge providers, discussed below.

Note that, unlike the *2010 Open Internet Order,* the "no-blocking" rules should be applied equally to both fixed and mobile services.[24] The 2010 "no-blocking" rule for mobile devices was far weaker than the no-blocking rule for fixed services. The rule for fixed service prohibited blocking of "lawful content, applications, services, or non-harmful devices". The rule for mobile devices only applied to lawful websites and applications that compete with the providers' voice or video offerings. In other words, mobile providers were allowed to block services, non-harmful devices, and some applications as well (those that do not compete with their voice and video offerings).

The policy of differentiating between fixed and mobile technologies cannot stand up to scrutiny. As mentioned above, the technologies for mobile services are developing rapidly, and speeds of 4G mobile devices are already faster than the lowest level of fixed broadband service when the FCC first adopted its open Internet policies in 2005. Mobile services are expected to carry ten and hundred megabit levels in the near future. Furthermore, even if one were to accept the theory that mobile networks have greater technical constraints than fixed (with which we disagree), the no-blocking rule should be reasonably related to these technical differences. Instead, the no-blocking rule for mobile devices arbitrarily allows blocking of non-competing applications or services but not websites, with no showing that applications or services are more data-intensive or more difficult to manage than websites.[25] This directly inhibits consumer choice and competition, and undermines the FCC's stated policies that led it to require number portability from one device to another.

G. The Commission's Enforcement Ombudsperson Should Be Authorized to Act as a Watchdog for Libraries and Higher Education

The NPRM proposes "the creation of an ombudsperson to act as a watchdog to represent the interests of consumers, start-ups and small businesses."[26] We agree that creating an ombudsperson could help enforce the open Internet policies. We simply request that the ombudsperson be vested with the responsibility to advocate for the interests of libraries, colleges and universities in addition to consumers, start-ups and small businesses. Because libraries, colleges and universities have limited budgets with which to serve collectively millions of people, they are in an especially vulnerable position if public broadband providers block or degrade their traffic. Including libraries and higher education in the charter of the ombudsperson's responsibilities will help to send a message to these providers to take our institutions' concerns seriously.

IV. The Commission Has All Necessary Authority to Implement Open Internet Rules Sufficient to Preserve the Character of the Internet as an Open Platform for Education, Research and Free Speech

A. Re-Classifying Public Broadband Internet Access Service as a Title II Common Carriage Service Offers a Strong, Certain Path to Preserving an Open Internet

Re-classification of public broadband Internet access service[27] as a Title II "common carrier" service would allow the FCC to craft a set of policies and procedures that effectively ensures the broader public interest goals of an open Internet are met, while providing the FCC with the flexibility to adapt and tailor its regulations to fit the market. Treating providers of broadband services offered to the general public as Title II common carriers will provide valuable certainty to the marketplace and will place public broadband Internet access service on an equal regulatory footing with other communications services. Re-classifying public broadband Internet access service is a legally sustainable approach[28] that would ensure that relevant providers will not be able to engage in "unreasonable discrimination" against or in favor of any particular content, application or service.

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[24] As the NPRM notes, the *2010 Open Internet Order* rule barred *fixed* providers from blocking "lawful content, applications, services, or non-harmful devices subject to reasonable network management. It prohibited *mobile* providers from blocking "consumers from accessing lawful websites," as well as "applications that compete with the provider's voice or video telephony services," subject to "reasonable network management."[footnotes omitted]. See NPRM, para. 21.

[25] In fact, the *2010 Open Internet Order* found that the accessing lawful websites generated much *more* traffic than services or applications, which indicates that applications and services create less congestion and there is no need for mobile broadband providers to be able to block these services. See *2010 Open Internet Order,* paras. 97–106.

[26] NPRM, paras. 8 and 10. We also note that our institutions are not mentioned in Chairman Wheeler's statement when discussing the role of the ombudsperson.

[27] See Footnote 16 for an explanation of "public" in this context.

[28] *National Cable & Telecommunications Association et al.,* v. *Brand X Internet Services et al.,* 545 U.S. 967 (2005).

B. Section 706 Offers an Effective Path to Preserving an Open Internet If Based on an "Internet Reasonable" Standard

While Title II re-classification has the benefits noted above, in the alternative, we urge the FCC to craft legally-sustainable rules to protect and promote Internet openness using the Section 706 authority that was upheld by the U.S. Court of Appeals in the *Verizon* decision. The court of appeals provided some specific guidance as to how to structure open Internet rules under section 706 that could be legally sustainable, and the NPRM indicates that the FCC intends to follow this path. But the NPRM then proposes to adopt a "commercially reasonable" standard that is not required by section 706 or the *Verizon* court. The "commercially reasonable" standard could undermine the open Internet policies that the FCC seeks to establish.

To replace the "non-discrimination" rule that was invalidated by the *Verizon* court, the NPRM "tentatively conclude[s] that the Commission should adopt a revised rule that, consistent with the court's decision, may permit broadband providers to engage in individualized practices, while prohibiting those broadband provider practices that threaten to harm Internet openness." To explain this standard, the NPRM goes further to suggest that it should include a) "an enforceable legal standard of conduct barring broadband provider practices that threaten to undermine Internet openness," b) clearly established factors to give guidance about what would undermine Internet openness, and c) "encouragement of individualized negotiation."[29] The NPRM recognizes that "[s]ound public policy requires that Internet openness be the touchstone of a new legal standard."[30]

The NPRM then proposes a rule to require broadband providers to offer service that is "commercially reasonable," which raises many concerns. The NPRM states that the FCC:

> would prohibit as commercially unreasonable those broadband providers' practices that, based on the totality of the circumstances, threaten to harm Internet openness and all that it protects. At the same time, it could permit broadband providers to serve customers and carry traffic on an individually negotiated basis.

While we understand that any standard under Section 706 must allow some degree of individual negotiation to avoid treating broadband providers as "common carriers", we have strong concerns that a generic "commercially reasonable" standard would give too much leeway to such providers to undermine the open Internet goal. For instance, a "commercially reasonable" approach could be interpreted to allow any broadband and edge provider to reach a contract to provide "paid prioritization". If the two companies reach an agreement that they mutually believe to be in their commercial interests, it might be found "commercially reasonable" even if it has the effect of degrading the Internet service used by other parties (such as higher education institutions and libraries) sharing the same network.[31] Furthermore, a "commercially reasonable" standard may not provide assurance that the Internet will remain open for non-profit (non-commercial) entities who serve a public interest mission, such as colleges, universities, and libraries.

We believe that the Commission should craft a different standard under section 706 that is more directly related to the unique and open character of the Internet. Such a standard should provide a baseline level of openness protections, while permitting but setting boundaries around the scope of individual negotiation. This new standard should be derived from the culture and character of the Internet itself so that the essential operating principles which created and sustain the "virtuous circle" of Internet growth and development are preserved into the future. Rather than borrow an existing standard from another area of law or activity (as suggested in paragraph 119), it would be far better for the Commission to craft a flexible standard that reflects how the Internet was initially designed and inherently functions. Rather than a generic "commercially reasonable" standard, the proper standard should be grounded in what is "Internet reasonable."

The proposed "Internet reasonable" standard would recognize that the Internet itself is fundamentally an ecosystem that supports a myriad of personal, institutional, community, and commercial relationships and interests. As with any other ecosystem, if the conditions that foster those relationships and interests are negatively impacted, the system as a whole is subject to collapse. The virtuous circle the

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[29] NPRM, para. 111.

[30] NPRM, para. 116.

[31] Stated differently, a broadband provider and an edge provider voluntarily agree to enter a contract that prioritizes the edge provider's traffic, it will be difficult for the FCC to find such an arrangement "commercially unreasonable" if it is in the commercial best interests of both parties.

FCC identified and the court endorsed is a function of a healthy ecosystem—preserving the system's capacity for healthy growth and evolution means preserving the essential conditions that catalyzed its development in the first place.

There are several key features of the Internet that can be incorporated into an "Internet reasonable" standard. In evaluating whether an action by a public broadband Internet access provider is "Internet reasonable", the FCC could assess whether or not the action violates these rebuttable presumptions:

1. "Innovation without Permission": This phrase (often articulated by one of the "fathers" of the Internet, Vint Cerf) captures the notion that end users and edge providers should not have to obtain the permission of a public broadband provider to use the Internet. Any action taken by a public broadband provider to require its "approval" to carry certain lawful content, applications or services should be presumed to be in violation of what is "Internet reasonable."
2. "Paid Prioritization": The Internet is built on a democratic model that allows any individual, library, college, start-up business, or huge commercial conglomerate to obtain access to each other's content, services or applications without actions by the public broadband provider to prioritize some traffic over others. Any action by a public broadband provider to sell or provide enhanced transmission to some content or service providers over others should be presumed to violate what is "Internet reasonable."[32] Prioritizing some traffic over others would fundamentally alter the Internet as a whole by creating artificial motivations and constraints on its use, damaging the web of relationships and interactions that define the value of the Internet for both end users and edge providers.
3. "Open Platform": The Internet is unique because it uses a decentralized, open architecture that has few barriers to entry. Any action by a public broadband provider to undermine the open architecture of the Internet should be presumed to violate what is "Internet reasonable," due to its inevitable adverse impact on the capacity of the Internet to maintain and advance the virtuous circle of innovation. [33]
4. "Degradation": It should be presumed that public broadband providers should refrain from taking any action to favor one party if it would degrade the level of service provided to other parties. But this is not all. The networks that carry Internet traffic are undergoing continual change. Internet demand is following an exponential growth curve. If the Internet transmission speed available to a given user or edge provider does not keep pace with this growth, then the user or edge provider may effectively experience a degraded level of service as compared to those whose transmission speeds maintain or exceed that pace. Any action by a public broadband provider that would discourage it from investing in greater bandwidth to the non-prioritized party should also be presumed to violate the "Internet reasonable" standard.

The factors above are not hard and fast barriers—they establish rebuttable presumptions that the broadband providers could overcome if they can demonstrate a public interest benefit. If a public broadband provider's action violates these presumptions, it would have the burden of proving that its action was nevertheless in the public interest. For instance, a public broadband provider might be able to justify an individually negotiated agreement for prioritized transmission of telemedicine services, of emergency or public safety communications, or other services that are particularly necessary in the public interest. The provider might be able to explain that it uses "Quality of Service" (QOS) to enhance some traffic in a manner that does not degrade the traffic of other users. The provider may also have the opportunity to justify its action if the network is congested, particularly if the adjudicatory body finds that the congestion is not due to the provider's own failure to invest.

By articulating these and perhaps other factors ahead of time, the FCC could fashion an approach using an "Internet reasonable" standard that would incorporate

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[32] Of course, broadband providers may continue to charge consumers and content, application and service providers for their broadband connections to the Internet, and may receive greater compensation for greater bandwidth capacity chosen by the consumer or content, application or service provider. This principle limits the broadband provider's ability to prioritize certain traffic over other traffic after the initial connection is purchased.

[33] This concept is also similar to the "broad form" of the "end-to-end" design of the Internet, as articulated in *Internet Architecture and Innovation,* by Barbara van Schewick, MIT Press, 2010, available at https://netarchitecture.org.

the flexibility that the *Verizon* court found wanting in the prior rules,[34] while also providing as much guidance as possible to consumers, edge providers, libraries, colleges and universities, and the Internet ecosystem as a whole.

V. Conclusion

In conclusion, libraries and institutions of higher education are greatly concerned that public broadband Internet access providers currently have the financial incentive and the opportunity to block, degrade or prioritize the Internet transmission of some at the expense of others. These practices, if permitted, could have severe adverse impacts on online education, research, learning and free speech. We urge the FCC to incorporate the needs of higher education and libraries into its open Internet rules, including by making the following changes:

a. The FCC should clarify that the proposed open Internet rules apply to public broadband Internet access providers that serve libraries, institutions of higher education and other public interest organizations;

b. "paid prioritization" should be prohibited;

c. the proposed rules should be technology-neutral and should apply equally to fixed and mobile services;

d. the FCC should adopt a re-defined "no-blocking" rule that bars public broadband Internet access providers from interfering with the consumer's choice of content, applications, or services;

e. the FCC should strengthen the disclosure rules;

f. the proposed ombudsman should be charged with protecting the interests of libraries and higher education institutions and other public interest organizations, in addition to consumers and small businesses;

g. the FCC should continue to recognize that libraries and institutions of higher education operate private networks or engage in end user activities that are not subject to open Internet rules; and

h. the FCC should preserve the unique capacities of the Internet as an open platform by exercising its well-established sources of authority to implement open

[34] "Moreover, unlike the data roaming rule in *Cellco*—which spelled out 'sixteen different factors plus a catchall. . .that the Commission must take into account in evaluating whether a proffered roaming agreement is commercially reasonable,' thus building into the standard 'considerable flexibility,' *Cellco,* 700 F.3d at 548—the *Open Internet Order* makes no attempt to ensure that this reasonableness standard remains flexible." *Verizon* slip op. p. 59.

Internet rules, based on Title II reclassification or an "Internet reasonable" standard under Section 706.

Respectfully Submitted,

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APPENDIX A

The following Net Neutrality Principles were previously filed in this docket on Thursday, July 10, 2014

NET NEUTRALITY PRINCIPLES

Provided by

American Association of Community Colleges, American Association of State Colleges and Universities, American Council on Education, American Library Association, Association of American Universities, Association of Public and Land-grant Universities, Association of Research Libraries, Chief Officers of State Library Agencies, EDUCAUSE, Modern Language Association, National Association of Independent Colleges and Universities

The above organizations firmly believe that preserving an open Internet is essential to our Nation's freedom of speech, educational achievement, and economic growth. The Internet now serves as a primary, open platform for information exchange, intellectual discourse, civic engagement, creativity, research, innovation, teaching, and learning. We are deeply concerned that public broadband providers have financial incentives to interfere with the openness of the Internet and may act on these incentives in ways that could be harmful to the Internet content and services provided by libraries and educational institutions. Preserving the unimpeded flow of information over the public Internet and ensuring equitable access for all people is critical to our Nation's social, cultural, educational, and economic well-being.

Our organizations have joined together to provide the following background information and to set forth the key principles (below) that we believe the Federal Communications Commission (FCC) should adopt as it reconsiders its "net neutrality" policies in response to the recent court decision. We invite others to join us.

Background: The FCC opened a new proceeding on "net neutrality" in May 2014 (Docket No. 14–28). This proceeding is in response to a January 2014 ruling by the U.S. Court of Appeals—D.C. Circuit that overturned two of the FCC's key "net neutrality" rules but affirmed the FCC's authority under Section 706 of the Telecommunications Act to regulate broadband access to the Internet. The new FCC proceeding will explore what "net neutrality" policies it can and should adopt in the wake of the court's ruling.

The above organizations support the FCC's adoption of "net neutrality" policies to ensure that the Internet remains open to free speech, research, education and innovation. We believe that Internet Service Providers (ISPs) should operate their networks in a neutral manner without interfering with the transmission, services, applications, or content of Internet communications. Internet users often assume (and may take for granted) that the Internet is inherently an open and unbiased platform, but there is no law or regulation in effect today that requires ISPs to be neutral. ISPs can act as gatekeepers—they can give enhanced or favorable transmission to some Internet traffic, block access to certain websites or applications, or otherwise discriminate against certain Internet services for their own commercial reasons, or for any reason at all.

The above organizations are especially concerned that ISPs have financial incentives to provide favorable Internet service to certain commercial Internet companies or customers, thereby disadvantaging nonprofit or public entities such as colleges, universities and libraries. For instance, ISPs could sell faster or prioritized transmission to certain entities ("paid prioritization"), or they could degrade Internet applications that compete with the ISPs' own services. Libraries and higher education institutions that cannot afford to pay extra fees could be relegated to the "slow lane" on the Internet.

To be clear, the above organizations do not object to paying for higher-capacity connections to the Internet; once connected, however, users should not have to pay additional fees to receive prioritized transmission and their Internet messages or services should not be blocked or degraded. Such discrimination or degradation could jeopardize education, research, learning, and the unimpeded flow of information.

For these reasons, the above organizations believe that the FCC should adopt enforceable policies based on the following principles to protect the openness of the Internet:

Net Neutrality Principles

• *Ensure Neutrality on All Public Networks:* Neutrality is an essential characteristic of public broadband Internet access. The principles that follow must apply to all broadband providers and Internet Service Providers (ISPs) who provide service to the general public, regardless of underlying transmission technology (*e.g.,* wireline or wireless) and regardless of local market conditions.

• *Prohibit Blocking:* ISPs and public broadband providers should not be permitted to block access to legal websites, resources, applications, or Internet-based services.

• *Protect Against Unreasonable Discrimination:* Every person in the United States should be able to access legal content, applications, and services over the Internet, without "unreasonable discrimination" by the owners and operators of public broadband networks and ISPs. This will ensure that ISPs do not give favorable transmission to their affiliated content providers or discriminate against particular Internet services based on the identity of the user, the content of the information, or the type of service being provided. "Unreasonable discrimination" is the standard in Title II of the Communications Act; the FCC has generally applied this standard to instances in which providers treat similar customers in significantly different ways.

• *Prohibit Paid Prioritization:* Public broadband providers and ISPs should not be permitted to sell prioritized transmission to certain content, applications, and service providers over other Internet traffic sharing the same network facilities. Prioritizing certain Internet traffic inherently disadvantages other content, applications, and service providers—including those from higher education and libraries that serve vital public interests.

• *Prevent Degradation:* Public broadband providers and ISPs should not be permitted to degrade the transmission of Internet content, applications, or service providers, either intentionally or by failing to invest in adequate broadband capacity to accommodate reasonable traffic growth.

• *Enable Reasonable Network Management:* Public broadband network operators and ISPs should be able to engage in reasonable network management to address issues such as congestion, viruses, and spam as long as such actions are consistent with these principles. Policies and procedures should ensure that legal network traffic is managed in a content-neutral manner.

• *Provide Transparency:* Public broadband network operators and ISPs should disclose network management practices publicly and in a manner that 1) allows users as well as content, application, and service providers to make informed choices; and 2) allows policy-makers to determine whether the practices are consistent with these network neutrality principles. This rule does not require disclosure of essential proprietary information or information that jeopardizes network security.

• *Continue Capacity-Based Pricing of Broadband Internet Access Connections:* Public broadband providers and ISPs may continue to charge consumers and content, application, and service providers for their broadband connections to the Internet, and may receive greater compensation for greater capacity chosen by the consumer or content, application, and service provider.

• *Adopt Enforceable Policies:* Policies and rules to enforce these principles should be clearly stated and transparent. Any public broadband provider or ISP that is found to have violated these policies or rules should be subject to penalties, after being adjudicated on a case-by-case basis.

• *Accommodate Public Safety:* Reasonable accommodations to these principles can be made based on evidence that such accommodations are necessary for public safety, health, law enforcement, national security, or emergency situations.

• *Maintain the Status Quo on Private Networks:* Owners and operators of private networks that are not openly available to the general public should continue to operate according to the long-standing principle and practice that private networks are not subject to regulation. End users (such as households, companies, coffee shops, schools, or libraries) should be free to decide how they use the broadband services they obtain from network operators and ISPs.

APPENDIX B

About the American Association of Community Colleges (AACC)

The American Association of Community Colleges (AACC) is the primary advocacy organization for the Nation's community colleges. The association represents more than 1,100 two-year, associate degree–granting institutions and more than 13 million students. AACC promotes community colleges through five strategic action areas: recognition and advocacy for community colleges; student access, learning,

and success; community college leadership development; economic and workforce development; and global and intercultural education.

About the American Association of State Colleges and Universities (AASCU)

AASCU is a Washington, DC–based higher education association of more than 400 public colleges, universities, and systems whose members share a learning-and teaching-centered culture, a historic commitment to underserved student populations, and a dedication to research and creativity that advances their regions' economic progress and cultural development.

About the American Council on Education (ACE)

Founded in 1918, ACE is the major coordinating body for all the Nation's higher education institutions, representing more than 1,600 college and university presidents, and more than 200 related associations, nationwide. It provides leadership on key higher education issues and influences public policy through advocacy. For more information, please visit *www.acenet.edu* or follow ACE on Twitter *@ACEducation.*

About the American Library Association (ALA)

The American Library Association is the oldest and largest library association in the world, with approximately 57,000 members in academic, public, school, government, and special libraries. The mission of the American Library Association is to provide leadership for the development, promotion, and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all.

About the Association of American Universities (AAU)

The Association of American Universities is an association of 60 U.S. and two Canadian research universities organized to develop and implement effective national and institutional policies supporting research and scholarship, graduate and professional education, undergraduate education, and public service in research universities.

About the Association of College and Research Libraries (ACRL)

The Association of College and Research Libraries (ACRL), a division of the American Library Association, is a professional association of academic librarians and other interested individuals. It is dedicated to enhancing the ability of academic library and information professionals to serve the information needs of the higher education community and to improve learning, teaching, and research.

About the Association of Public and Land-grant Universities (APLU)

The Association of Public and Land-grant Universities (APLU) is a research, policy, and advocacy organization representing 234 public research universities, land-grant institutions, state university systems, and affiliated organizations. Founded in 1887, APLU is North America's oldest higher education association with member institutions in all 50 U.S. states, the District of Columbia, four U.S. territories, Canada, and Mexico. Annually, APLU member campuses enroll 4.7 million undergraduates and 1.3 million graduate students, award 1.1 million degrees, employ 1.3 million faculty and staff, and conduct $41 billion in university-based research.

About the Association of Research Libraries (ARL)

The Association of Research Libraries (ARL) is a nonprofit organization of 125 research libraries in the U.S. and Canada. ARL's mission is to influence the changing environment of scholarly communication and the public policies that affect research libraries and the diverse communities they serve. ARL pursues this mission by advancing the goals of its member research libraries, providing leadership in public and information policy to the scholarly and higher education communities, fostering the exchange of ideas and expertise, facilitating the emergence of new roles for research libraries, and shaping a future environment that leverages its interests with those of allied organizations. ARL is on the web at *http://www.arl.org/*.

About the Chief Officers of State Library Agencies (COSLA)

COSLA is an independent organization of the chief officers of state and territorial agencies designated as the state library administrative agency and responsible for statewide library development. Its purpose is to provide leadership on issues of common concern and national interest; to further state library agency relationships with Federal Government and national organizations; and to initiate cooperative action for the improvement of library services to the people of the United States. For more information, visit *www.cosla.org.*

About the Council of Independent Colleges (CIC)

CIC is the major national service organization for all small and mid-sized, independent, liberal arts colleges and universities in the U.S. CIC focuses on providing services to campus leaders through seminars, workshops, and programs that assist institutions in improving educational offerings, administrative and financial performance, and institutional visibility.

About EDUCAUSE

EDUCAUSE is a nonprofit association whose mission is to advance higher education through the use of information technology. EDUCAUSE supports those who lead, manage, and use information technology in higher education through a comprehensive range of resources and activities, including analysis, advocacy, community building, professional development, and knowledge creation. The current membership comprises more than 2,400 colleges, universities, and related organizations, including nearly 350 corporations, with over 68,000 active members. (*www.educause.edu*)

About the Modern Language Association (MLA)

The Modern Language Association promotes the study and teaching of languages and literatures through its programs, publications, annual convention, and advocacy work. The MLA exists to support the intellectual and professional lives of its members; it provides opportunities for members to share their scholarly work and teaching experiences with colleagues, discuss trends in the academy, and advocate for humanities education and workplace equity. The MLA aims to advance the many areas of the humanities in which its members currently work, including literature, language, writing studies, screen arts, digital humanities, pedagogy, and library studies. The MLA facilitates scholarly inquiry in and across periods, geographical sites, genres, languages, and those disciplines in higher education that focus on questions about communication, aesthetic production and reception, translation, and interpretation.

About the National Association of Independent Colleges and Universities (NAICU)

NAICU serves as the unified national voice of independent higher education. With more than 1,000 member institutions and associations, NAICU reflects the diversity of private, nonprofit higher education in the United States. They include traditional liberal arts colleges, major research universities, church-and faith-related institutions, historically black colleges, Hispanic-serving institutions, single-sex colleges, art institutions, two-year colleges, and schools of law, medicine, engineering, business, and other professions.

Dr. TURNER-LEE. And, Senator, we are not on that letter because we actually are against Title II, but we do believe in the same things.

Senator BOOKER. Right. Well, I hope whatever we do does not trample——

Dr. TURNER-LEE. That is right.

Senator BOOKER.—over the rights of minorities, poor, rural, and others that are so important to the success of America.

The CHAIRMAN. And we think you are very discerning, Dr. Turner-Lee, in that respect. Thank you, Senator Booker. Senator Blumenthal?

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

Senator BLUMENTHAL. Thank you, Mr. Chairman, and thank you for having this hearing and for your legislative proposal, which I think is certainly an effort to bring us together on this issue. And I know we may have differences within this room, but I think all of us share the goal of protecting consumers, which are your customers. And we may differ about the best way to do it.

For me as a former Attorney General, as a law enforcer, this hearing has a certain "Alice in Wonderland" quality because nor-

mally the folks in favor of flexibility are saying do not legislate, and the folks in favor of bright line rules are saying put it in the statute. And here we have the claim that legislation will somehow lead to more flexibility and discretion, which I think may be not only counterintuitive, but counter factual.

And my concern is that we are removing potentially authority that would prevent the FCC from confronting disparities in access among consumers of different incomes or in different geographic areas, stopping anti-competitive behavior in an increasingly consolidating market, and protecting consumer privacy. And precisely the types of disparities and problems that the Communications Act sought to prevent. So as technology hurtles forward, I hope that we can go back to the principles of the act, the six foundational principles of the Communications Act, and make sure that we preserve the discretion and authority of the FCC to protect consumers.

With that in mind, in a way, Mr. Misener and Mr. Kimmelman, I note a number of similarities between your respective testimonies, and particularly you both note the importance of preserving interpretive rulemaking authority for the FCC, and I would like to ask both of you to expand on this. Mr. Misener, this proposal seems to provide a fair amount of certainty for the major broadband companies, but not all that many others. Without granting the FCC the ability to define the key terms and respond to a quickly evolving marketplace, do businesses that rely on the Internet not face a fair amount of uncertainty?

Mr. MISENER. Thank you, Senator. When American companies are choosing whether to invest in a particular country around the world, one of the very first things they examine is the legal regime. They want the certainty of the transparency, the reliability, the stability of that legal regime. We seek the same thing here. We want that certainty to know whether and to what extent we may be offering services to our customers without interference from broadband Internet access providers in between. And if we get that certainty, then we will be able to deploy more investment.

There is a tension that came up earlier in the hearing today, Senator. The tension was between the level of authority and the fear of overreach, OK? That has to do with existing statute. We come in squarely in between saying we believe the Commission has sufficient authority and does not need to overreach. But in the context of this legislation, the brilliance of it is to establish really strong, what I have called, excellent principles, but with a cap, a ceiling on top. And if we are able to work within this framework of deciding what principles are there, but also tell the agency not to overreach, that seems like the best way to balance this and provide the certainty to companies like mine that need it.

Senator BLUMENTHAL. Mr. Kimmelman, it seems like the lack of clarity surrounding some key aspects of this proposal would likely provide incentives for litigation, and the lack of certainty will lead the parties to court. Just as an example, I am not sure I understand exactly what falls inside or outside the definition of a "specialized service." So let me ask you, what hope does an individual consumer have against the legal and lobbying sway and, in fact, overwhelming power of some of the bigger players here if there is that lack of clarity?

Mr. KIMMELMAN. Thank you, Senator. I think you are absolutely right. I think it is very hard for consumers after the fact. I think Mr. Misener said this well before. If something is happening to their service, they have no idea where in the network the problem is. They have no idea who to blame or who is responsible, and so it is very hard to come in after the fact and file a complaint when you are not even sure who is responsible, and the other side has massive resources.

I actually agree with Mr. Misener's approach. I would say, though, that from my perception of what is going on at the FCC, that it would be best to sit back and wait and see the details because I believe they will within their responsibility, as Mr. Misener indicated, move forward prudently and appropriately to address all of the principles that the Chairman has put out in this draft. I do not think it will be an overreach. I would be stunned if it were.

And I think at that point it would be appropriate for the Committee to look at that and see is there something that is left that needs to be adjusted. I think the FCC has gotten the message loud and clear to be careful and prudent in how it applies its current authority.

Senator BLUMENTHAL. So you are saying, in effect, that legislation at this point may be a solution in search of a problem before we know whether there is overreach.

Mr. KIMMELMAN. Senator, I would not want to go that far. I think it is always appropriate for the Senate to consider what the appropriate policies are. But I, again, just urge caution and prudence here to wait and see what some of the details are before moving too far.

Senator BLUMENTHAL. And let me draw a different analogy then. What you are suggesting is a yellow blinking light instead of a red or a green.

Mr. KIMMELMAN. Yes, thank you.

Senator BLUMENTHAL. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Blumenthal. And just as a point here, the special services definition in the draft is drawn from the FCC's 2010 rules, former Chairman Waxman's 2010 legislative proposal, and the President's recent statements, which all recognize development of specialized services as a pro-innovation policy.

The Senator from West Virginia, Senator Manchin.

STATEMENT OF HON. JOE MANCHIN,
U.S. SENATOR FROM WEST VIRGINIA

Senator MANCHIN. Thank you very much, Mr. Chairman. Thank you for this hearing. Sorry we have been running to all different committees today, but I want to thank all of you.

I come from the rural state of West Virginia, which is a small rural state, like a lot of rural states in America. On Saturdays during football season, West Virginia University football stadium is our largest city. It holds about 66,000 people, and that is our largest city, so that gives you an idea of what we are dealing with.

And a small rural state like mine, pure deregulation does not have really a good track record. It did not work with the phone companies. It did not work with the utility companies. It did not work with the airlines. And we do not—if you tell a person do not

worry, we are going to give you better service, we have had past experience where we do not believe that. So I guess we are a little bit like Missouri, the "Show Me State."

What has worked in West Virginia is the public/private partnership model like the Universal Service Fund where private companies get a little help, a little incentive, to make investments and expand into our rural areas where you normally would not normally go because of markets. We understand that. This year we had over 90,000 West Virginians who will get broadband service because of USF programs.

What concerns me, and tell me—somebody tell me if it is real—Mr. Kimmelman, maybe you know—that the FCC has told me that the bill will undercut the ability to continue these programs if we pass this bill. And if you could explain that in your opinion, I would appreciate it, sir.

Mr. KIMMELMAN. Thank you, Senator Manchin. I do believe it is a program because that program originally started for telecommunication service. And to subsidize rural America to make sure in high-cost areas that we all had connectivity.

Senator MANCHIN. Right.

Mr. KIMMELMAN. So it is related to the definition of telecommunication service.

The FCC has now tried to use its powers under 706 to extend broadband and offer incentives for investment in broadband in rural America. It is U Section 254 in conjunction with 706. Way too much in the weeds, Senator, but the point is that those are powers that in the draft as it currently exists could be eviscerated.

And so, while that—it would still be there for telephone service. For extending broadband, it is a big question mark.

Commissioner MCDOWELL. If I could just comment on that, I was a Commissioner at the FCC when we reformed the Interpersonal Service Distribution Program in the fall of 2011—October 2011. And actually we reformed it to support broadband, and it was actually—now it is a broadband subsidy rather than an old-fashioned phone subsidy.

This bill, in my legal opinion, does not undermine. I know that probably Chairman Thune from South Dakota, a net recipient, would not support or draft a bill if it undermined universal service. What it will perhaps do is cabin off the ability of the FCC to tax broadband Internet access and raise consumers' rates therefore.

But in terms of the distribution side, that order should stand. And I do not see any language in this bill that would harm the distribution of universal service.

Senator MANCHIN. Would we be able to have the FCC here so we can find out who is telling the truth?

The CHAIRMAN. Well, that is——

Senator MANCHIN. Or whose opinion is accurate, let us put that—I am sorry.

The CHAIRMAN. You can grab six of them over there, Joe.

Senator MANCHIN. OK, very quickly because my time is running out and I need to ask Mr. Misener something.

Dr. TURNER-LEE. [Off audio.] I agree with Mr. McDowell as well as Gene in terms of being just really careful that the authority is not granted to protect universal service, but there is also the cre-

ative way that a provision could be put into the legislation that could actually enforce it as well. So I think that is another way to actually look at it.

So without throwing the baby out with the bathwater, I think we could also look at a provision that goes into the draft legislation that could actually protect the Universal Service Fund.

Senator MANCHIN. Ms. Misener, in 1996 you were a startup company, right—Amazon?

Mr. MISENER. Yes, sir.

Senator MANCHIN. OK. If you—you know, we are trying to strike the balance between the free market and consumer protections, and I think it has been said can we not create a regulatory regime with innovation stifled because the Federal Government cannot keep up with the speed of the business. However, as you know, regulators need to have oversight to ensure a level playing field, right, and fair competition among entrepreneurs big and small.

What changes, if any, would be needed in the bill to ensure that today's startups are able to compete on a level playing field? How would this have affected you?

Mr. MISENER. Thank you, Senator. We always think in terms of our customers, and their access to us, and the kinds of services that we want to be able to provide to them. And so, it is the choice of consumers that matters most. Startups will do fine so long as consumers can reach them. If somehow consumers, however, are cut off from them, the startups will not succeed, but the consumer will be denied the choice.

If we have net neutrality provisions, the reasonable, not overreaching, ones that actually protect that consumer choice, the startups will be fine. The innovators will be able to provide their services without permission from broadband network operators to the consumers who have the choice.

Senator MANCHIN. Mr. Chairman, if I could submit the rest of my questions to the Committee.

The CHAIRMAN. I thank the Senator from West Virginia. Senator Schatz?

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

Senator SCHATZ. Thank you, Mr. Chairman. I am looking forward to working with you and Ranking Member Nelson and my Subcommittee Chair, Senator Wicker. We all agree that an open Internet has to function in today's society, and that is why I think it is important for us to work together to consider the best path forward to protect net neutrality.

As we consider our options, we have got to aim and accomplish and balance three objectives, in my opinion: to provide maximum protection to consumers, to provide maximum flexibility to promote innovation and the Internet economy, while also enabling continued investment in the state-of-the-art broadband infrastructure. Congress always has the prerogative to legislate, but we also have to recognize the advantages of an expert agency. And especially in the area of the Internet, the FCC needs to have flexible forward-looking authority to protect consumers and an innovative Internet.

I am afraid the draft legislative proposal would make it nearly impossible for the FCC to deal with future problems or opportunities as they come up. The point here is that when it comes to telecommunications and the Internet, Congress is best suited to establish broad policies, but the particulars ought to be left to the expert agencies. So while I intend to keep an open mind on possible legislation, I do have deep reservations about intervening in the FCC's ongoing rulemaking.

I believe this flexibility is really critical, and I have a question perhaps for all the panel depending on time, but I will start with Mr. Kimmelman. I am concerned this draft legislation does not preserve the authority in the FCC that it needs. My question is simply, is there a way to modify this legislation that holds net neutrality harmless, but also allows the FCC to evolve and promulgate rules and respond to circumstances that are going to be very difficult to anticipate from this committee?

Mr. KIMMELMAN. Yes, thank you, Senator Schatz. There certainly is. I mean, it is up to Congress how to draft it. I think this is a matter of getting past all the titles and the characterizations and getting at the functions. Flexibility requires giving the FCC tools, giving them, as you say, principles, guidance, direction, and parameters for action, and then giving them the flexibility to work with it. That has traditionally been rulemaking authority. Congress can obviously call it whatever it wants, but the attributes need to be there in order for that flexibility to exist.

Senator SCHATZ. Thank you. Mr. Misener?

Mr. MISENER. Thank you, Senator. You know, some of the arguments against the FCC's actions actually are sort of arguments against having an FCC in the first place. And if there were not an agency there now, part of the discussion might be should we create a specialized agency? That is obviously counter factual. Yes, the agency is 80 years old, but that is also a good thing. It has been around for a long time. It works on a lot of things. It is a big, large agency. It does some good things.

I cannot imagine net neutrality being lower than number, say, three or four on the list of things that the FCC is working on. So if we have got a regulatory agency specialized in telecommunications, they ought to be working on net neutrality above so many other things that they already work on.

Senator SCHATZ. Go ahead, Mr. McDowell.

Commissioner MCDOWELL. Senator, I just—very quickly, which is the Federal Trade Commission has jurisdiction here. Section 5 of the Federal Trade Commission Act protects consumers in all sorts of complex tech industries. It could be Internet search. It could be computer software, disk operating systems, things of that nature. And actually what Title II would do would be take away the authority from the FTC under something called "the common carrier exemption," which is in the statute, and put it only in the hands of the FCC.

And so, actually I think your own logic shows that you probably do not want Title II legislation. You want to have perhaps similar type consumer protection and enforcement only type protections. The FTC has worked quite well as an enforcement-only non-rulemaking body for over a hundred years, not just 80 years. So if the

length of time of an agency is the measure of its success, then I guess the FTC is more successful than the FCC.

Senator SCHATZ. Ms. Baker?

Commissioner BAKER. I agree with Rob. I think that people understand regulators regulate. The last example that we could see was when the FCC thinks that what they are going to do and what the consumers actually think that they are doing is the apps community. When the FCC enacted text 9–1–1, it affected the apps community.

I think bringing everybody under Title II is not the way to go. I think the legislation is the first option so that we can have great security as to what the future brings, and the FCC—the much more legal path forward for all consumers is 706.

Senator SCHATZ. Right. I will just wrap up. My time has expired. But it seems to me that the arguments you are making against the FCC's actions are really particular to the FCC proposed rules, but it is not as though it is necessary in order to legislate to take away all future authority and flexibility from the FCC. So that is the balance that, you know, I am trying to explore here. It is possible that we will not be able to achieve that balance. It is possible that the FCC moves forward with its rules and we cannot come to a consensus. But I want to allow for the possibility that there is a space for legislation and allowing the FCC to continue to do its work. Thank you, Mr. Chairman.

[The prepared statement of Senator Schatz follows:]

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

Mr. Chairman. I am looking forward to working with you, Ranking Member Nelson, and my Subcommittee Chair, Senator Wicker. We all agree that an open Internet has become crucial for everyone to function in today's society. That is why it is important for us to work together to consider the best path forward to protect net neutrality.

As we consider our options, we must aim to accomplish and balance three objectives:

- provide maximum protection to consumers,
- provide maximum flexibility to promote innovation and the Internet economy while also
- enabling continued investment in a state of the art broadband infrastructure.

Most importantly, net neutrality protections must ensure that the FCC has the ongoing authority to protect consumers. To be effective, these rules must contain at least four essential elements:

- they must prohibit fast lanes,
- they must not block lawful content,
- they must prohibit throttling while allowing for reasonable network management, and
- they must increase transparency.

So, I look forward to hearing from our witnesses on the Chairman's draft legislation and on the FCC's ongoing rulemaking and the best way to achieve each of these objectives.

Congress always has the prerogative to legislate, but we also must recognize the advantages of an empowered expert agency. Particularly in an area as dynamic as the Internet, the FCC should have flexible, forward-looking authority. I fear that the draft legislative proposal would make it nearly impossible for the FCC to deal with future problems or opportunities as they come up.

The point here is that when it comes to telecommunications and the Internet, Congress is best suited to establish broad policies but the particulars ought to be left to the expert agency.

So, while I intend to keep an open mind on possible legislation, I have deep reservations about intervening in the FCC's ongoing rulemaking.

I look forward to working with Chairman Thune, Ranking Member Nelson and Subcommittee Chairman Wicker to ensure that net neutrality protections first and foremost protect consumers while enabling our companies to continue to invest, innovate and succeed.

The CHAIRMAN. Thank you, Senator Schatz. Senator Peters, you are up.

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

Senator PETERS. Thank you. Thank you, Mr. Chairman. And I would certainly like to thank you, Chairman Thune, and Ranking Member Nelson, for convening this hearing and for your work. And certainly appreciate your work, Senator Thune, as well as my home state colleague or former colleague, Congressman Upton, for your work on this bill as we go forward. I certainly am a believer that, as everybody, I think, on this committee, that affordable high-speed Internet is an issue that we are all hearing about back in our districts, and understand it is extremely important that it is open, it is available.

And I certainly appreciated Senator Markey's earlier comments talking about if you are looking at trying to develop business and small business in particular, that is what I hear when I am home. I was in an incubator in Detroit just a few weeks ago, and all of those companies are coming up with incredible ideas. And I might say, if I may put a little plug in for Detroit here when people kind of have a view of Detroit. If you go into this incubator and close your eyes and open your eyes up when you walk, you think you are in Silicon Valley, not in Detroit, Michigan. But you are in Detroit, Michigan, so there is a lot of exciting things happening, and it is a result of the Internet and the open architecture that is there that we want to make sure is there going forward.

Now, whether that means using Title II, whether it means legislation, whether it means doing a combination of the two, I am certainly open to that as well, and look forward to a further discussion of these issues. But I have a couple of things that I just wanted to ask the panel broadly about the future because I think every one of you said at various time that this is a constantly evolving area, that we have got to stay on top of it. So we want to make sure that we have a framework that is flexible.

So my first question is, as you know the Communications Act was last overhauled back in 1996, and I would be curious to hear all of your opinions. Do you see the draft legislation that we are discussing here today as a stop gap measure meant to endure for just a year or two while we are working on this new act, or do you think this could be a long-term framework for broadband regulation for years to come? If we could just maybe with Ms. Baker.

Commissioner BAKER. I support the—I support this as something that if we have an issue of net neutrality that needs to be addressed, and I think this is a great start to addressing net neutrality. I think that there could be a Com Act rewrite that would also occur to address greater issue. I think when Senator Markey was talking about the digital issues with disabilities, he did a great

job on CCBA, enacting targeted legislation for disabilities going forward in the IP world, and it is has made a world of difference. I think that this is a great foundation. I think it will endure, but I think that there could be part of the Com Act that could also be reexamined since 1996 was a long time ago.

Mr. KIMMELMAN. Senator Peters, it is a great question. I think that from watching this industry for more than 30 years and participating here, this is your one shot at the apple. I do not see Congress coming back to this over and over again. It never has. I cannot imagine it ever will. And in this environment it is quite difficult. So I would say if you are going to legislate, set policy and think about everything you need to do, and think about doing no harm as well.

And I think that in trying to address a direct issue related to net neutrality and a lot of principles that all of us agree on, there are a number of things that are left out. There are a number of things that may do harm. And I think you ought to be really careful about that because this will endure. I cannot imagine that we are doing multiple bills through Congress this year.

Commissioner MCDOWELL. So I have known Gene a long time, and surprisingly we agree on more things than people realize. So we believe that, I think, any future legislation should focus on consumer protection, and I also agree with do no harm.

I think to answer the question directly, the answer is yes. Actually you can have this bill and you can have a comprehensive rewrite, but you do not have to do it all at the same time. You could do this bill first, and then later it gets incorporated into a comprehensive rewrite. And I think a comprehensive rewrite is needed to tear down those siloes that are technology-centric. They were created in 1934.

And then let us look at it through the lens of consumers, and consumers do not really care how they get their information so long as they are getting it and they are able to generate it.

Mr. MISENER. Senator, I think it is most important to get it right because we do not know whether it is going to endure or not. We do not know whether it is going to be subsumed into a new act or overtaken by a new act, but we have to get it right.

Mr. SIMMONS. Senator, from our standpoint, we think this is a reasonable framework. At least it is something that is not an attempt to reconfigure something old into something required new. I had an acquaintance who offered some prairie logic, and he told me that it makes absolutely no sense to try to figure out how—what part of the crescent wrench we need to use in order to pound a nail. What we really need to do is to provide somebody with a hammer.

And I think in this situation we need to provide the right tools to the FCC for them to do their job. I do not believe they have the right tools now. Our debate is about trying to configure the tools that might be available into something that could be useful when, in fact, we need to be able to develop the right tools, and I believe this legislation is a reasonable framework to do just that.

Dr. TURNER-LEE. So I agree with most of what was said on the panel, and I will offer some other thoughts, Senator, and it is a great question with the Com Act. So I think this juncture that we are in is to address this net neutrality debate and the legal gym-

nastics that we have been in for a long time. We need to give the FCC something that can withstand in the courts, and I think we should take that seriously, and stop putting all these issues into the bucket, and do a comprehensive Telecom Act rewrite.

I think the modernization of that act is so critical to so many other parts of the ecosystem that we would be fooling ourselves if we think that we cannot go back to that and revisit what that 1934 act looks like. Even the last update on spectrum policy in 1996—the ecosystem has changed dramatically.

So I would just suggest that if this process can go forward with the draft legislation, that this is seen as a provision in that larger bill that we cannot take back. And so, I think the seriousness of getting past this is important, but I do not think we need to come back for this again because that is what we are trying to stop by having this conversation.

Senator PETERS. All right, thank you.

The CHAIRMAN. Thank you, and I would echo what has been said. We would love to do an update. It's time to do an update. It's time to modernize the Act, but that is a debate for another day. Right now, we are focused specifically on this issue, and it is an issue that I think needs to be dealt with and addressed and provided some certainty.

My understanding is Senator Booker has one more question, is that correct?

Senator BOOKER. Yes.

The CHAIRMAN. I think Senator Nelson has one more question, and Senator Cantwell has been willing to defer to Senator Booker. So if you would like to proceed.

Senator BOOKER. I just want to, Dr. Turner—I just want to—Dr. Turner-Lee, excuse me. I just want to ask one more question because I actually think, again, we agree that these issues urgently need to be addressed, but I just do not understand your cure for them. And the reason why over a hundred civil rights organizations have signed onto that letter is because the Court specifically said that the only way you could regulate the bad behavior is by making them common carriers under Title II.

And I just want to ask from you, you rely on Section 706. You say in your testimony that one approach would be to use the consumer friendly complaint process modeled on the probable cause paradigm in Title 7 of the Civil Rights Act of 1964. Now, having dealt with the world of EEOC complaints, having had one parent that was dealing with that professionally, a lot of people find that process wholly inadequate to deal with bias, racism, and other types of discrimination.

In fact, when you are asking in terms of this world of technology poor communities, communities of color to have the sophistication with which to file complaints when they are not engineers and they are not the like, they often do not have them. I bring your attention to even some of my colleagues last year who put forth a minority paper criticizing this very process by which to stop discrimination. Their report was entitled "EEOC"—using the process you say, putting the onus on the consumer to make the complaint. Their paper was entitled, "EEOC an Agency on the Wrong Track: Litiga-

tion Failures, Misfoucused Priorities, and Lack of Transparency Raise Concerns About an Important Anti-Discrimination Agency."

So I would just ask you to respond that if we really are about the goal of making sure that minorities, poor communities, disadvantaged communities, marginalized communities who right now are not even being served by the juggernauts and the behemoths in this area, why do you think this is an adequate cure when it is not in the civil rights world. And that is why, again, over a hundred civil rights organizations have stepped forward and said Title II is the way to go because the Court has specifically said that is the only way that the FCC has the authority with which to stop discriminatory practices.

Dr. TURNER-LEE. So this is an interesting one. I would love to follow this up after this, too, and keep talking to you about it because I think it is a healthy dialogue.

So one of the reasons, and people have asked us why we actually chose not to go with an imposition of Title II framework is primarily, again, because if you look at modern 1934 monopolistic practices and why the Com Act was designed to sort of break up the bill, that had a lot to do with the fact that telephone service was more ubiquitous in our communities. I mean, your grandmother, my grandmother, we all had phones, we all had had phone numbers. It was easy to talk and hear. Now, we are seeing broadband as so transformative that it is beyond just a static communications protocols, but it is things for our communities that matter the most, like telemedicine, distance learning, and all those other things.

The fear of a Title II regime that allows that innovation to stop in our communities when we have such a broadband adoption gap is something that we should take very seriously. Yes, we want to put in protections. I totally agree with you, Senator—humbly agree with you—that we need to find ways to level the playing field so that more people can participate. But if we put in a regulatory regime against the regime that has actually allowed our folks to get more engaged in this ecosystem, to solve community problems, I think we are making a big mistake.

And we need to really—as a researcher we need to look at that. Those places that have not built out may never get built out. They may get passed over because it is no longer going to be companies making money in other places to invest. It may be something else. So I think we need to look at those kinds of issues.

Senator BOOKER. And just to interrupt. I am smiling because there is a regulatory regime in place to enforce the law right now to make sure that there is more broadband penetration, to make sure that localities, like Wilson, North Carolina, do their job. And what you are recommending here is to strip the Federal Government of that authority and shift the onus and the burden on the very disadvantaged poor populations, to put the burden on them to try to fight for their rights through a process that has proven anemic even in the civil rights community.

Dr. TURNER-LEE. Well, on the case of the EEO—so I will tell you why we actually chose that, outside of my boss being a fan of the EEOC. And those that know David Honick know that this is something that he has done as a civil rights lawyer for years. We tried

to figure out a process where you just could not put 706 by itself. We felt as civil rights groups on this side of the argument that if we were going to propose 706, we could not do it without a way of enforcing and showing that there should be stronger consumer protections.

EEO for all of its flaws has still been the go-to place for anybody to actually bring forth any kind of complaint or litigation without fear of reprisal or having somebody, you know, losing their job. It has been a place we have been able to carefully archive what those injustices have been so that other people can come and actually take advantage of the lessons that are learned without having to get an attorney. It also has been a place where we were actually able to help consumers not have to wait for a very long time to figure out if their resolution is going to resolve.

We have talked to the Commission about this proposal. We have talked to enforcement. We have done our due diligence, Senator, in all honesty about this because we think if you are going to go a 706 route, you have to have a strong consumer protection. What our fear is if we say that we are going to take Title II and we decide to forbear all of those things, what is the risk of a new commission coming in and reversing that decision? What is the risk of going into litigation on that that takes the attention away from universal service reform, broadband deployment adoption, all the things you care about just because we are back in a quagmire with the FCC where we are not talking about our issues.

I think those are serious concerns, and I respect many of the groups that are on that letter because we work with them on issues related to voting rights and other things. But we really have to think carefully and be cautious about the steps that we make because we have a $30 million person adoption problem in this country that is not narrowing even among——

Senator BOOKER. And my time has expired. I want to be respectful of my colleagues. I will just finish by saying that the beautiful statements in the beginning of your statement to me do not hold with your cure. And in a Nation where there is a tragic digital divide and where the Internet is essential for poor children, for kids in rural neighborhoods, essential for families, and the situation as it is not acceptable to you or me. To take the teeth away from the only mechanism to enforce some vision in this country that we can catch up with competitors in the globe and have broadband penetration, have equal access, equal opportunity.

The only hope often marginalized, disadvantaged communities have to stand up to the big Goliaths in the industry is often, as we have seen in civil rights and voting rights, the Federal Government. Thank you.

Dr. TURNER-LEE. Hopefully we can get together, Senator, and keep talking.

Senator BOOKER. OK.

The CHAIRMAN. I fully encourage that.

[Laughter.]

The CHAIRMAN. It is a fascinating discussion, and I am very hopeful that you win that argument.

[Laughter.]

The CHAIRMAN. But I do think this points out that there are a lot of questions, and I think the point that Dr. Turner-Lee is getting to is the legal uncertainty and the potential for a future commission. You create these rules, and you will be in court all the time on all ranges of them. Congress ought to be heard on this. Let us set some rules that apply to the modern age, not to the age that existed in 1934. Thank you, Senator Booker. Senator Cantwell?

STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. Well, thank you, Mr. Chairman, and sorry I have been on the floor for most of the day and helping to manage for our side of the aisle the legislation on the Keystone pipeline. But this is an issue of great concern to me and to my constituents in the state of Washington. So I wish I was able to be here in person, but the great thing about the Internet is that I will be able to watch this hearing, and see what everybody said, and review it.

And that is exactly the point. I am here to fight for an open Internet and to make sure that I have that right, and that I am not going to be artificially slowed down, or throttled, or pay extra because somebody, like an ISP—a Verizon or an AT&T or a Comcast—has decided to now bundle C-SPAN service with something else and make me pay more, or just simply think that what we do in Congress is pretty dull and boring, and so it is OK to slow it down anyway, and maybe not give us as quick access.

So I have heard loud and clear from my constituents about this issue, and the innovation economy in the Pacific Northwest is not going to be quiet about this issue, I can guarantee you. It is the lifeblood of our economy, and they are going to be concerned about anything that does not set about the right rules for transparency and openness to the Internet.

I learned recently this week that Starbucks has 15 million active users in its iPhone app, is doing more than five million transactions weekly, OK? So take one company who prides itself on how fast it can process coffee every morning, and they know you do not really want to have a long line because as soon as you start having a long line, then customers are going to go out the door.

But now just think, a transaction that is slowed down even 5 seconds on that little app because people are coming in and just taking the product, and thinking, and saying, OK, I am getting my coffee. Now, all of a sudden you slow that down by just 5 seconds or you say you are going to make those people pay more, you are artificially increasing the price of product. So my constituents wanted us—while I know we debate a lot about movies and, you know, certain types of content, my constituents wanted me to bring the message that this affects all of commerce. And they also believe that it has a chilling effect on investment because if you do not get a rate of return on the investment, if you are basically saying I am going to maybe you give you slower service in the future, then are you going to invest in your customers, or are you going to try to, you know, fight this challenge of having slower access.

So I know you, Mr. Chairman, are earnest in trying to move this forward and to try to have this discussion. But I would ask the American public, you know, if you really are confident about the

bundled services that you are getting now and you think that is really clear and transparent, then, you know, yes, you might like this. But otherwise, I would say to you that everything from data plans to exactly the prohibition on the FCC here would be problematic for the very principles that you are trying to protect in the bill.

And while it is good to say on the one hand, you know, we do not want throttling, we want transparency, you know, we want all of these things, to me there are three concerns. First, it does not fix the fast lane problem because there is a big exemption big enough to drive a truck through, and that is right from my constituents, and I am happy to provide names and people. So, yes, the bill calls for transparency—no blocking, no throttling—but hidden in the middle of the bill are provisions that permit cable companies and telcos to create fast lanes for vaguely defined specialized services. So this leaves the innovators without the kind of guarantee to harness the full power of the Internet.

Second, has to do with the fact that it fails to address the middle mile Internet interconnection issue and strips the FCC of any power to address it in the future. And finally, it jettisons the FCC's existing authority under 706 and takes all the flexibility and discretion away from the FCC which has to be the policeman on the beat. We do not want this bill to pass and be frozen in time. This is exactly the way the rules are. We need somebody that is going to continue to make sure that innovation happens and that we move forward.

So I guess my question is because I see my time is almost up is, Mr. Kimmelman, do you have a concern—I see in your comments here about the protections—a long list of protections you are saying should be there for consumers. Do you have concerns that these—I just see these commercials all the time on TV, the telcos arguing about this data plan and that data plan, and do not be fooled by this data plan because it does not include this. Do you think that without transparency here we are going to be in the same debate on data plans only as it relates to now this broadband service?

Mr. KIMMELMAN. Yes, Senator Cantwell. I agree with all your points. I think that the draft bill addresses a number of the important issues that need to be addressed, but it does strip the FCC of forward-looking flexibility or interpretive flexibility as to how to understand these going forward.

So a fast lane of speed may be illegal under this, but I do worry about a data cap for certain usage, dropped bits, which is really your example, the Starbucks example. It may not be a faster lane, a faster speed, but some people's bits get dropped, others do not. Why? Does an affiliate of an Internet service provider get preferred treatment, faster treatment, better treatment, better quality of service? Those are all issues that need to be addressed.

I do believe just to—on the specialized service I do want to come back because the Chairman pointed out something very important. This is not new language. This is language that has appeared elsewhere. I think the tricky part for you if you are legislating is to understand, well, the FCC might do something with a specialized service definition, and a number of us might dispute exactly what the words are. Under the current regime, we would then have the

flexibility to come back and fight that out next week, next month, six months from now as applied and interpreted.

So if Congress steps in and wants to make a definition like this, I would just urge you to be very careful about exactly what words you pick and what flexibility you give the FCC to move forward and understand how that is being used. Mr. Misener had some examples before of how it could be used anti-competitively. That would be a legitimate concern. We want an agency to have the authority to look at that.

Senator CANTWELL. Mr. Chairman, I know you are trying to move legislation, and I respect that. To me, these are very tricky things, and while you can say you have a 65-mile an hour speed limit on a highway, but if no one is there enforcing it, pretty soon people are going to drive a lot faster. And the question is who is going to call the rules of the road here once we pass this legislation?

If you just think about it, who would have thought that many consumers would be, you know, buying with an app, and yet that is a very short period of time. So it is hard to say what is going to come next. It is very important that we—to me, I want to see what the FCC does, and I hope they will protect—truly protect net neutrality and protect an open Internet. I thank the Chair.

The CHAIRMAN. I thank the Senator from Washington. And the one thing I can assure you they will do is use a 1934 law to do it. There has got to be a better way, guys. Senator Nelson, you had one more question I think.

Senator NELSON. And, Senator Cantwell, congratulations on your Seahawks. That was one of the more exciting times.

Mr. Chairman, I would like to have consent to put into the record a letter to you and to me from the National Association of Realtors asking that our discussions not hold up the FCC's deliberations.

The CHAIRMAN. Without objection.

[The information referred to follows:]

NATIONAL ASSOCIATION OF REALTORS®
Washington, DC, January 20, 2015

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

On behalf of 1.1 million members of the NATIONAL ASSOCIATION OF REALTORS® (NAR), I write in advance of your hearing entitled: "Protecting the Internet and Consumers through Congressional Action" to express NAR's belief that open Internet rules are necessary to protect our members, who are primarily independent contractors and small businesses, as well as their clients. NAR is encouraged to see lawmakers acknowledge the need for action to protect the open Internet. NAR, together with other Main Street businesses, has been making this case for many years. However, the legislative process should not hold up the rulemaking currently underway at the FCC.

Recent statements from FCC Chairman Wheeler indicating that the FCC is moving toward strong, legally sustainable open Internet rules are encouraging. NAR supports open Internet rules that will protect American businesses and consumers by preventing Internet Service Providers (ISPs) from blocking, throttling, or discriminating against Internet traffic and prohibit paid prioritization arrangements. As you know, the FCC has a complete public record on this issue and should con-

tinue its work to vote on an Open Internet Order at its February meeting as planned.

The Internet has been a driving force for innovation for decades, and our members, their customers, and local communities are benefiting from this innovation every day. The economic growth and job creation fueled by the open Internet is unprecedented in American economic history. This growth has been fostered by the Federal Communications Commission (FCC) under both Republican and Democrat administrations for over a decade.

Our members, who identify themselves as REALTORS®, represent a wide variety of real estate industry professionals. REALTORS® have been early adopters of technology, and are industry innovators who understand that consumers today are seeking real estate information and services that are fast, convenient and comprehensive. Increasingly, technology innovations are driving the delivery of real estate services and the future of the real estate sales businesses.

Streaming video, Voice over Internet Protocol, and mobile applications are commonly used in our businesses today. In the future, new technologies, like virtual reality and telepresence among others, will be available that will no doubt require open Internet access unencumbered by technical or financial discrimination.

The benefits of broadband Internet for innovation and economic development are unparalleled. But the Nation will lose those tremendous benefits if the Internet does not remain an open platform, where Americans can innovate without permission and with low barriers to launching small businesses and creating jobs. Given this reality, it is important that this Committee work with the FCC to enact and preserve open Internet policies that promote competition between Internet application and service providers. NAR is ready to work with you on this important issue.

Sincerely,

CHRIS POLYCHRON,
2015 President,
National Association of REALTORS®

cc: Members of the Senate Commerce, Science & Transportation Committee

Senator NELSON. Mr. Kimmelman, the bill that is under discussion does not contain a general non-discrimination provision, nor does it provide regulatory discretion to the FCC to make such determinations. What do you think about that?

Mr. KIMMELMAN. Senator Nelson, that is a major concern to us because, again, it may look very small, but this has been the overarching principle to get at fundamental concerns about unreasonable discrimination on networks as they evolve, services as they change. And so, I would hope that is not too big an ask to reconsider that issue as the legislation goes forward.

Senator NELSON. Thank you.

The CHAIRMAN. Thank you, Senator Nelson. I will just ask a couple of quick questions here, too. Mr. Misener, in your prepared testimony, you suggested that "The Internet is fundamentally different both in technical design and practical operation from other major media, including newspapers, radio broadcasting, satellite TV, and cable." That is a quote from your statement. Is the Internet also different in technical design and practical operation from the copper wire public switch telephone network that Title II was written specifically to address?

Mr. MISENER. Of course.

The CHAIRMAN. And so, why would we not want to come up with a new regime? Why would we take something that was designed in the era of copper wire public switch telephone networks and try and apply it to the Internet age?

Mr. MISENER. Because that's all the agency has to work with right now.

The CHAIRMAN. And is that not an argument for why Congress ought to give them some direction?

Mr. MISENER. I am not arguing against that, Senator. Mr. Chairman, I support exploring this. I also—I have a very results-oriented perspective for this, and this is coming from our customers. They want their net neutrality. They know about the issue very strongly. They feel passionately about it. They deserve to have these net neutrality protections. And I am a lot less concerned, and I know they are not concerned at all about how those protections are given to them.

If somehow they lose their net neutrality, they will know that they lost it, and they will look to us, the people involved in this policy discussion, and say we have failed. But if instead they keep it, we will have succeeded no matter what avenue we take. And so, I am looking forward to working with you and your committee on your very common sense approach.

The CHAIRMAN. Let me just ask a quick question because there were some concerns raised before and concerns raised today that the draft would threaten the FCC's ability to enforce rules on issues like universal service, accessibility, 9–1–1, and rural call completion. Our view is that the draft bill does not affect the ability of the FCC to address these issues because it has ample ancillary authority to deal with them.

So that said, are the concerns that Amazon has with the discussion draft related to the FCC's ability to address issues like rural call completion or universal service?

Mr. MISENER. No, Mr. Chairman. With respect to getting consumers and businesses the certainty that they need to invest in purchase——

The CHAIRMAN. So what Amazon is not, you aren't saying, that you believe that the FCC needs to reclassify until Title II to deal with 9–1–1 or accessibility issues.

Mr. MISENER. We do not have an opinion on that, Mr. Chairman. We have not studied this as well as others have. We have been laser-focused on net neutrality and ensuring that the choice that inherent in the Internet is maintained for the future. And we are largely ambivalent on how that choice is maintained.

The CHAIRMAN. Mr. McDowell?

Commissioner MCDOWELL. Mr. Chairman, the FCC has looked at Voice over Internet Protocol and applied a lot of these types of requirements on voice over and international protocol even though it is an information service that does not fall under Title II. That has been upheld by the appellate courts. In addition, with universal service, as I said earlier, in October 2011, we re-purposed the subsidy program to support, by the way, all of the things that Senator Booker so eloquently pointed out as well as support for rural services. But broadband information services, we did that. That was challenged before the 10th Circuit very vehemently in one of the most aggressive, complex pieces of litigation I have ever seen in my career, and we won.

And keep in mind, this was the first bipartisan entitlement reform since 1996. There were Democrats and myself on the FCC, and we all agreed that that was the way to go. And that was upheld by the courts. So, no, the bill as drafted in front of me today

does not threaten those things. There is terrific appellate history here and precedent at the FCC to support all of those things you mentioned.

Mr. KIMMELMAN. Mr. Chairman, may I just offer that I generally agree with my friend, Mr. McDowell. He has agreed with me at times, and I agree with him on this, except for his conclusion there for the following reason. Every time—the courts have looked askance at the FCC's use of ancillary authority, scrutinized it very carefully. And there is some inconsistency in how they have applied that. If Congress legislates, the question will be how are you thinking about that ancillary authority. How do you want it applied, because it is a new law. So if you intend for it to apply as it has in telecom in the past, I would very much suggest that you write that into the proposed language.

The CHAIRMAN. All right. Senator Nelson, anything else for the good of the order? Senator Blumenthal?

Senator BLUMENTHAL. Thank you, Mr. Chairman. Just a couple of questions. Again, I welcome your—all of your willingness to work with the Committee on the proposal before, which, as you have said, raises questions, but may offer some potential—a lot of potential. And I think there are questions that need to be answered, and in my own mind the best approach may be to wait until we see what the FCC does. And I have taken a position on what I think it should do. Others may agree or disagree, but the likelihood of our acting before the FCC I think is small anyway.

But let me ask you, Mr. Misener, if, and I'm picking his company simply without any aspersion or disparagement. It is a great company. If Comcast decided to cap the amount of data a consumer is allowed to use each month, and it exempted any streaming video of its own affiliated NBC content from that tap, could the FCC under this proposal stop that practice?

Mr. MISENER. Under the discussion draft, I am afraid not, and largely because the things underneath that ceiling which are terrific ideas to protect net neutrality—I keep saying it is a good list—the Commission has largely taken out of ensuring that those are actually implemented. And I think businesses like ours really are looking for the kind of certainty that only an agency which is into the details can provide it. It is great for Congress to have high-level instruction to the agency as the appropriate role, but companies like mine and many others are going to be looking to the agency for the detail and certainty of regulation that is designed to implement Congress' goals.

Senator BLUMENTHAL. I certainly would welcome other responses.

Commissioner MCDOWELL. Thank you.

Senator BLUMENTHAL. But I do not want to take too much time.

Commissioner MCDOWELL. I will be as quick as I possibly can, which is hard. But anyway——

Senator BLUMENTHAL. I would be happy to stay, but, you know, I do not want——

Commissioner MCDOWELL. Your specific example, Comcast is living under merger conditions that would prohibit that. But second of all, even if they were not, there is Section 5 of the Federal Trade Commission Act. There is also common law at the State and Fed-

eral level. I think there would be an avalanche of plaintiffs—you know, class action lawsuits to prevent that from happening.

Senator BLUMENTHAL. But that really begs the question——

Commissioner MCDOWELL. If it was anti-competitive.

Senator BLUMENTHAL.—the FCC is supposed to protect consumers so they do not have to——

Commissioner MCDOWELL. Right, but there is the Federal Trade Commission to protect them. There are State consumer advocates to protect them. There are State Attorneys General, of which you were one, there to protect them. There is lots of overlapping law here. The notion that there is no law here protecting consumers is a myth. It is an absolute myth.

Senator BLUMENTHAL. And I hate——

Mr. MISENER. But so much of what Mr. McDowell talks about is——

Senator BLUMENTHAL. I am sorry. Could you repeat your point, Mr. Misener?

Mr. MISENER. I am sorry, Senator. What Mr. McDowell keeps going back to is FTC involvement in this, and if the FTC were a rulemaking authority that actually promulgated rules that companies like mine could look at, and examine, and get the certainty from, that is one thing. But ex-post regulation is not helpful in developing certainty.

Commissioner MCDOWELL. It has worked thus far.

Senator BLUMENTHAL. Did you have a comment, Mr. Kimmelman?

Mr. KIMMELMAN. I was effectively going to say the same thing as Mr. Misener. The after the fact competition analysis at the FTC, whether it is antitrust or looking at unfair practices is extremely lengthy, subject to a lot of the same litigation he is criticizing with the FCC, has very seldom been practiced. And it has survived as a sleepy little agency because it has not done a whole lot in this space, and it does not have rulemaking authority.

So I agree with Mr. Misener. I do not believe most of the companies represented at this table, and maybe many of the senators would want to give them rulemaking authority, but that is just a guess.

Senator BLUMENTHAL. And I would just say, you know, since you have alluded to my own experience, and I know you know an immense amount about this area, to say, well, the Attorneys General can do it sounds good, but the attorneys general are so limited in resources. And as with any law and any rule, it is dead letter unless there is effective enforcement. And the burdens of enforcement are much more substantial in reality—in practical reality than they may seem on theory or on paper, a fact that I know you well understand from your own experience.

Let me just conclude with this quick question to Mr. Kimmelman. The broadband companies—or any of you who want to address it. The broadband companies seem to receive a lot of assistance, a lot of public assistance—spectrum, public rights-of-way, billions of dollars in universal service funds, large open-ended liability protection, sometimes to my great chagrin from litigation in the Communications Decency Act.

So the question on my mind is, why should the public—us, all of us—provide all of these very substantive benefits, but insist on only very limited consumer protections?

Mr. KIMMELMAN. Well, Senator, I don't think you should. I think that those are wonderful benefits. They also raise a lot of capital on the market, and I fully respect that. I think it is very critical for our market economy. But they do get government benefits, and there should be obligations. I think the question is what is the right amount. What is the right balance there?

And I think there is a lot in the Communications Act that can basically oblige them to do things that you think are reasonable in return for those public benefits. I would hope we would preserve those.

Senator BLUMENTHAL. And I would certainly welcome other comments as long—I thank the Chairman for his indulgence.

Dr. TURNER-LEE. And I will be quick, Senator. I think that is why, going back to the earlier question about the Communications Act rewrite or the Modernization Communications Act, I think relooking at the public interest standard right now, which has been very Morpheus in terms of what is acceptable, what is not acceptable, what are the give and takes that we have today is a serious discussion to have. And, again, I think that is why we cannot take that off the table as something that is very important to this country to actually go back and update that. But we have to get past this quagmire right now. But your point is well taken, and I think it is one that should be taken up at that time.

Commissioner BAKER. And I would just like to say that just start where—end where I started, which is wireless is different, and we are differently technically. When you talk about data caps, when you talk about spectrum constraint, when you talk about throttling, I would say we have to optimize the networks for our users' experience so that everyone can have the best experience. And when you talk about spectrum, we have paid billions of dollars for it to the Federal Government, and continue to pay billions of dollars to the Federal Government, a $45 billion auction going on right now.

So as we move forward in these discussions, I just want to put the asterisk in your mind that wireless is different from a technical competitive legal way. We need to make sure that we can differentiate it in the rules.

Mr. SIMMONS. Senator——

Senator BLUMENTHAL. Well, I—go ahead.

Mr. SIMMONS. I am sorry. Senator, if I could, as a cable operator, broadband operator, we do not get free right-of-way with all that. We pay for the right-of-way in our franchise fees. We also do not receive any subsidies, unlike a number of our competitors. We are not eligible for stimulus activity in all of that. Our networks are built purely with private risk capital, and we rely on the satisfaction of customers, frankly, for our only means of survival. So I just wanted to share that point for the question.

Senator BLUMENTHAL. I appreciate it. That is a very good point, and I really do appreciate your coming all the way from South Dakota to be with us today.

Mr. SIMMONS. Oh, thank you.

Senator BLUMENTHAL. I hear it is a long ways away.

The CHAIRMAN. That is another issue for this committee.

[Laughter.]

Senator BLUMENTHAL. But I want to, again, thank the Chairman and especially all of you. I apologize for the wait that you had, but this hearing has been very, very valuable, and you have been very helpful. Thank you.

The CHAIRMAN. Yes. And I would just say, too, and just the final question, I guess, have any of you seen what the FCC is going to do?

Commissioner BAKER. No.

The CHAIRMAN. OK.

Commissioner MCDOWELL. Absolutely not. I am still under my ethics ban, just for the record.

[Laughter.]

The CHAIRMAN. All right. Anybody expect to?

Commissioner BAKER. No, nothing.

The CHAIRMAN. All right. And I just say that because I think this process is so much more open. I mean, I put out a draft, you are all shooting at it. That is fine.

[Laughter.]

The CHAIRMAN. That is the way the process works, but that is why I think there is so much in terms of getting public involvement. And this has been a great hearing, and you have been a great panel. Thank you for your great answers to the questions. It has been very informative. And a lot of good questions from our Senators on both sides. It is an important issue, and it is really important that we get it right. So thank you for your patience, and with that, this hearing is adjourned. And I thank my Ranking Member for his patience.

[Whereupon, at 6:20 p.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 thank Chairman Thune for calling this hearing today. It is great to be back here with you in the Commerce Committee.

I am ready to work with the Chairman, Ranking Member Nelson, and my colleagues here on the many issues under this committee's jurisdiction. Internet and innovation policies are at the top of that list.

Tackling the digital divide is critical for promoting economic opportunity, healthcare access, and education. Yet the Nation that invented the Internet lags behind other countries when it comes to broadband speeds. Unfortunately, my home state of New Mexico ranks 47th among states when it comes to the availability of download speeds greater than 3 megabits per second. According to 2013 data from the National Broadband Map, one out of four New Mexicans does not even have access to faster Internet speeds of 25 megabits per second. So I want to work to encourage investment in broadband networks where it is needed the most, and that is often in rural areas and on Tribal lands.

But coming from a state where many are people are already stuck in the Internet slow lane illustrates for me what net neutrality is all about: no one should be a second-class citizen online. I've heard from hundreds of New Mexicans who want to ensure the Internet remains an open and fair forum for all. One constituent wrote to me about his opposition to Internet "toll lanes":

> "[It is] essential to my job as a [film] location scout to have quick access to information about local businesses, schools, neighborhoods, and city governments within New Mexico. . . . I need to access an always-changing variety of websites. Slowing access to the majority of the web, while giving preferential treatment to certain selected sites would affect my ability to work in a competitive field."

Here is another reaction. Jared Tarbell co-founded the e-commerce site Etsy, and then he returned home to Albuquerque to start a new venture called Levitated. During a recent visit to this cutting edge workspace, he explained to me how important it is for entrepreneurs like him to keep the Internet fair and open.

As I travel throughout New Mexico, I want to see Internet-based companies—such as a data center located on the Navajo Nation—have the same access to customers as Amazon and Netflix enjoy. That is how we can truly help bring the benefits of broadband to all.

So I am encouraged by the Chairman Thune's draft legislation to protect the Open Internet. This is a positive step in the right direction. I do not think this draft bill should delay the FCC from taking action. Yet I am very encouraged that after, years of partisan debate, we appear to be closer than ever to consensus on the issue of net neutrality.

Again, I look forward to today's hearing and working with my colleagues here on this and other important issues before the Committee.

Thank you.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO HON. MEREDITH ATTWELL BAKER

Question 1. The use of wireless broadband and Internet connected devices has provided a firestorm of economic growth and innovation that was previously unimagined, and wireless traffic is projected to grow exponentially in the years ahead. Because of this, last year I unveiled a wireless innovation agenda and introduced legislation to free up additional spectrum for commercial use, both licensed and unlicensed. I strongly believe that Congress should enact policies that ensure that the U.S. continues to lead the world in wireless innovation and technology.

Ms. Baker, can you tell me how this legislative effort, to preserve an open Internet, would affect the wireless industry's ability to grow our economy and provide innovative wireless technology to consumers versus the effect of the efforts being led by the FCC and the President to reclassify broadband service under Title II?

Answer. We appreciate and fully support your wireless innovation agenda. The wireless industry currently faces significant regulatory uncertainty and the risk of future litigation and further uncertainty is very high. If the FCC chose to reclassify mobile broadband from Title I to the arcane Title II utility rules, it would treat our world-leading mobile broadband networks the same as our roads, our electrical grids, and our water supply. The mobile industry changed more in the last six months than those industries in the last 60 years, and none of these industries have anywhere near the innovation or competition that is in the U.S. wireless industry. Legislation is the best path forward to preserve an open Internet and provide the certainty necessary for mobile broadband providers to continue investing billions, creating jobs, and bringing innovative products to consumers.

Question 2. It seems competition on the basis of network strength, made possible by efficient network management and investment, is a key differentiator in the U.S. market, with carriers constantly offering new and innovative data plans and technologies to attract consumers.

Are you concerned that an unintended consequence of new rules out of the FCC could prevent carriers from being able to differentiate themselves and make the wireless industry less competitive, ultimately harming the very consumers that rules are supposed to protect?

Answer. Yes. As I highlighted in my testimony, wireless is different. Mobile broadband providers face many unique technical challenges and as your question indicates carriers compete based on their network strength, among other things. These challenges include limited spectrum resources, varying numbers of users at any one time, differing handsets with differing capabilities, differing spectrum bands and differing technology platforms, and each user's constantly changing channel conditions, to name a few. These challenges demand far more complex network management than fixed broadband requires and mobile providers must retain flexibility to develop innovative services plans and offerings in order to attract consumers. If these differences are not recognized, it actually puts wireless at a competitive disadvantage, not only with each other but with fixed broadband services. There is more bandwidth in a single strand of fiber than in all of the spectrum allocated for commercial mobile services and mobile broadband providers cannot simply "build their way out" of capacity constraints. The significant amount of competition for mobile broadband services leads today to over 700 different service plans and competitive options. We agree that the risk of a "one-size-fits-all" mobile Internet under Title II would harm consumers that benefit from significant competitive differentiation and innovation today. To see the impact of monopoly-style regulation on wireless, we can look to Europe, which is far behind 4G LTE deployment compared the U.S. Under a more heavy-handed regulatory regime, EU capital investment has unsurprisingly tracked far lower compared to U.S. investment levels, with U.S. wireless capex running 73 percent higher than that in five EU countries with similar population from 2011–14. The positive results of that U.S. investment: mobile networks with speeds 30 percent faster than Europe, while serving three times more LTE subscribers.

Question 3. We have heard industry suggest that should the FCC follow through with a ruling on Net Neutrality it would create a significant burden for making continued investment in your networks. Yet, critics of that claim point to the recent AWS–3 auction, which surpassed $40 billion, as an indication that the wireless industry is well suited to continue making investments in infrastructure. Can you respond to those critics?

Answer. In the last ten years, the wireless industry has invested over $260 billion in next generation networks. That degree of investment will be put at risk if the FCC reclassifies mobile broadband under Title II. While a number of factors affect investment decisions, the AWS–3 auction result demonstrates a few basic facts: six years is too long to wait between spectrum auctions and mobile broadband providers need more spectrum and fast. Furthermore, the AWS–3 auction demonstrates what happens when the FCC makes available spectrum on an exclusive and substantially cleared basis. Investment flows to such lightly-regulated environments, and consumers are the ultimate beneficiary. Further, if the Commission proceeds down the Title II path, the wireless industry would look to the Court of Appeals and Congress for a remedy, and given the clarity of Section 332, and years of FCC and judicial precedent, we have every confidence we would prevail in such an effort and the ultimate regulatory framework will encourage future innovation and investment.

Question 4. It has become clear that the United States is seen around the world as a leader in wireless. When other countries' regulators are looking to the U.S. to try and emulate our success, what is the most important thing we should or shouldn't do in order to maintain our position of global leadership in wireless?

Answer. As you correctly observe, when the U.S. is leading, the wrong thing to do is radically change the regulatory regime for wireless services. The U.S. leads the world in wireless investment and cutting-edge LTE networks and subscribers because of the light regulatory touch that has been applied to the wireless industry by Congress and the FCC. To maintain the U.S. position as the global leader in wireless innovation and deployment, the United States should continue to apply a mobile-specific regulatory touch to wireless services and providers. The reclassification of mobile broadband services as telecommunications services and the application of Title II to wireless broadband services would risk our abdication of leadership and enable other countries to surpass the U.S. in wireless investment and innovation. We urge the government to focus on allocating more spectrum for commercial use and modernizing the Communications Act.

Question 5. Can you briefly describe the litigation vulnerabilities that would come from Title II reclassification?

Answer. The litigation risks are significant and would result in substantial regulatory uncertainty for multiple years, which would ultimately harm U.S. consumers. The greatest vulnerability from Title II reclassification emanates from the fact that Congress under Section 332 prohibits the FCC from imposing common carrier obligations on mobile broadband services because such services are neither commercial mobile radio services nor the functional equivalent thereof. In addition, mobile broadband services, just like all broadband services, are integrated information services that do include a separate telecommunications service component. The FCC properly classified mobile broadband services as information services in 2007, and any attempt to reclassify mobile broadband services as telecommunications services would have to survive the heightened scrutiny required by the Supreme Court in *FCC* v. *Fox Television Stations, Inc.* 556 U.S. 502 (2009) because reclassification would have to rest upon factual findings that contradict those reached in 2007, and the information service classification decision in 2007 engendered reliance interests, namely that the wireless industry has invested tens of billions of dollars in reliance on the FCC's 2007 decision.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO HON. MEREDITH ATTWELL BAKER

Question 1. Ms. Baker—In 2010, the FCC chose a light-touch mobile-specific approach to Open Internet rules. This allowed Americans to benefit with record-setting investment and innovation throughout the entire mobile ecosystem. Since then, applications have increased by 347 percent, data traffic has increased 732 percent, and video traffic has increased 733 percent. Do you think Chairman Thune's draft legislation sufficiently takes the differences of wireless technologies into account so as not to disrupt the incredible growth we are seeing in your industry and that consumers have come to expect and demand? What might be the consequences on consumers if we don't give flexibility to wireless operators to manage their networks?

Answer. Congressional action is the best path to preserve an open Internet and enable mobile broadband providers to continue investing billions, creating jobs, and bringing innovative products to consumers. The draft legislation is an excellent start, and we look forward to working with Chairman Thune and other members of the Committee to ensure that the legislation reflects the unique technical and operational challenges that mobile broadband providers face in dynamically managing their networks in real time. These challenges include reliance on a finite amount of spectrum, consumer mobility (which means a constantly fluctuating number of users in each cell site), hundreds of different handsets with different capabilities, a variety of technology platforms across multiple spectrum bands, and each user's constantly changing channel conditions, to name a few. These challenges demand complex and dynamic network management. To continue providing Americans with increasingly faster speeds and mobile Internet access anytime and anywhere, wireless providers must have the flexibility to manage their networks so that all users enjoy the highest quality service experience. Legislation should also reflect the highly competitive and innovative wireless marketplace.

Question 2. To All Witnesses—While the FCC is in the process of ensuring net neutrality, some want the FCC to impose all of these obligations under the guise of ensuring consumer protection. Some argue that common carrier requirements on broadband providers should include almost most all of Title II, in addition to Sec-

tions 201, 202, and 208. Specifically, some activists have suggested the following parts of Title II must be applied to the broadband industry:

UNIVERSAL SERVICE
Sec. 214. [47 U.S.C. 214] Extension Of Lines
Sec. 225. [47 U.S.C. 225] Telecommunications Services for Hearing-Impaired and Speech-Impaired Individuals.
Sec. 254. [47 U.S.C. 254] Universal Service.
Sec. 255. [47 U.S.C. 255] Access by Persons With Disabilities.

CONSUMER PROTECTION
Sec. 217. [47 U.S.C. 217] Liability of Carrier for Acts and Omissions of Agents.
Sec. 222. [47 U.S.C. 222] Privacy Of Customer Information.
Sec. 230. [47 U.S.C. 230] Protection for Private Blocking and Screening of Offensive Material.
Sec. 258. [47 U.S.C. 258] Illegal Changes in Subscriber Carrier Selections.

COMPETITION
Sec. 224. [47 U.S.C. 224] Regulation of Pole Attachments.
Sec. 253. [47 U.S.C. 253] Removal of Barriers to Entry.
Sec. 251. [47 U.S.C. 251] Interconnection
Sec. 256. [47 U.S.C. 256] Coordination for Interconnectivity.
Sec. 257. [47 U.S.C. 257] Market Entry Barriers Proceeding.

Do you agree or disagree that these sections of Title II common carrier regulation are needed? If you agree, please explain why.

Answer. CTIA does not support the reclassification of broadband services as telecommunications services subject to Title II, or the application of Title II to the broadband industry.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO HON. MEREDITH ATTWELL BAKER

Question 1. According to your testimony, since 2010, wireless carriers have invested over $121 billion in capital expenditures, not including the cost of spectrum. If Chairman Wheeler and the FCC subject the wireless industry to rules that were designed for a monopoly telephone system and public utilities, I am concerned that it will chill this investment and impede future innovations. How can we ensure that any legislation we might enact to preserve an open Internet doesn't have a negative effect on capital investment?

Answer. We share your concern. The U.S. wireless industry has a significant impact on our Nation's economy under the current regulatory framework. In the last ten years, the wireless industry has invested over $260 billion. In 2013, U.S. carriers invested a one year record high of more than $33 billion. This was four times as much in network infrastructure per subscriber than the rest of the world in 2013. In addition, U.S. carriers have paid $53 billion for spectrum and just bid over $40 billion in the AWS–3 auction over the last two months. In addition to these staggering figures, there are significant downstream effects through jobs, GDP and productivity. The wireless industry directly or indirectly supports 3.8 million jobs, or 2.6 percent of all U.S. employment. The wireless industry pays wages that are 65 percent higher than the national average and contributes $195.5 billion to the U.S. GDP. Our industry is now larger than the publishing, agriculture, hotels and lodging, air transportation, motion picture and recording, and motor vehicle manufacturing industry segments.

CTIA believes an attempt to reclassify wireless broadband under Title II would be based upon dubious legal authority and would likely lead to years of litigation and uncertainty. The application of Title II, in any form, to wireless broadband would harm consumers and our economy, chill investment and impede future innovations. Clear Congressional legislation, in contrast, would provide legally sustainable requirements that protect Internet openness and recognize the unique technical and operational challenges that mobile networks face.

Question 2. According to statistics, 92 percent of consumers have access to three or more mobile broadband providers, and 82 percent are served by four or more. In this highly competitive marketplace, isn't Internet openness essential for a mobile provider to win and retain customers?

Answer. Yes. The wireless industry is fiercely competitive. They compete on price, speeds, service plans and offerings, quality of service or network management, and more. The result is a thriving, competitive mobile marketplace, with more choices, innovative options, and tremendous value. Internet openness is essential to attract

and retain customers in today's wireless market. Not surprisingly, there has not been a single formal complaint filed since the adoption of the FCC's 2010 Open Internet rules.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BRIAN SCHATZ TO HON. MEREDITH ATTWELL BAKER

Question. I believe that the FCC needs to have ongoing, flexible authority over broadband. I am concerned that the draft legislation does not preserve that type of authority. What changes can—or should—be made to the draft that would address this concern?

Answer. Currently, the FCC has no clear and explicit authority to address net neutrality or other broadband-related concerns. Congressional action remains the best path for ensuring the FCC has sufficient and legally sustainable authority going forward.

Section 13 of the draft legislation provides the FCC with case-by-case adjudicatory authority, which gives the FCC flexibility to interpret companies' responsibilities under the law. As new issues involving the broadband market arise, the FCC will be able to evaluate how best to resolve disputes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO HON. MEREDITH ATWELL BAKER

Question 1. One aspect largely absent from the debate on Chairman Thune's proposed neutrality legislation is the issue of interconnection. Interconnection is not covered under current legislation. Do you believe that interconnection points can be choke points to the Internet highway?

Answer. Internet companies have exchanged traffic subject to privately negotiated arrangements since the commercialization of the Internet. This system has worked effectively and not resulted in choke points on the Internet highway.

Question 1a. Under the proposed legislation, how would interconnection issues be addressed?

Answer. The proposed legislation does not address interconnection, and is focused on end-user Internet access issues.

Question 2. Students, health care providers, and entrepreneurs have benefited greatly from innovative online platforms and the free flow of information. I fear that, without strong net neutrality rules, a "tiered Internet" could emerge, creating barriers for innovators and small businesses.

In the absence of strong anti-discrimination protections provided under Title II, and without Section 706 authority, what tools does the FCC have to prevent discriminatory practices and differential treatment we all agree should be prohibited?

Answer. The draft legislation provides the FCC with legally sustainable authority to enforce prohibitions on paid prioritization, except if a consumer affirmatively chose such an arrangement, as well as specialized services that would "threaten the meaningful availability of broadband Internet access service" or are designed to circumvent the legislation's requirements. Further, differentiation and robust competition in the wireless sector continues to deliver great value and new services to consumers, and we hope any new approach preserves the ability of highly competitive mobile broadband providers to compete and innovate with unique and targeted offerings, such as the education and health-based services you reference.

Question 3. As currently drafted, what protections does the legislation provide that broadband reclassification would not?

Answer. For the reasons detailed in the appendix to my written testimony, CTIA believes an attempt to reclassify wireless broadband under Title II would be based upon dubious legal authority and would likely lead to years of litigation and uncertainty. The legislation, in contrast, would provide legally sustainable requirements that protect Internet openness and could provide the same sort of statutory support for growth that enactment of Section 332 did for wireless voice in 1993.

Question 4. Do you believe, as the draft legislation suggests, the FCC should not be able to claim any authority under Section 706 of the Telecommunications Act of 1996?

Answer. The strongest basis for the FCC's authority to ensure Internet openness would emanate from new, clear statutory authority provided by Congress. If such new authority was enacted, the FCC would not need to cite to other provisions.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO HON. MEREDITH ATWELL BAKER

Question 1. Ms. Baker, in your testimony, you argue that "mobile is different" than other communications technologies. Yet you indicate that CTIA would support net neutrality rules provided that such rules reflect the unique needs for wireless.

Could you please clarify CTIA's position on what net neutrality principles or rules your member companies would support? For example, do you agree that if consumers want to go online to Amazon, they should be able to get there without artificial barriers, whether they are using an iPhone or a desktop computer?

Answer. Yes, and that has always been the practice of the competitive wireless industry. Consumers should be able to access the legal content of their choosing using legal devices without artificial barriers as long as mobile broadband providers are able to manage their networks to address the unique congestion, interference, and other traffic management challenges faced by broadband providers that utilize spectrum and wireless networks to provide service to consumers. The proposed legislation would ensure such an outcome.

Question 1a. Would CTIA support FCC enforcement authority for those types of clear "rules of the road" for net neutrality that CTIA endorses?

Answer. CTIA supports the grant of adjudicatory authority for the FCC to resolve net neutrality-related disputes based upon clear statutory requirements.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOE MANCHIN TO HON. MEREDITH ATWELL BAKER

Question 1. During the hearing, I received conflicting information about how the Chairman's proposed legislation would impact Universal Service Fund (USF) broadband programs like the Connect America Fund (CAF) that help private companies make investments and expand their network into rural, underserved areas. Due to the importance of these programs to my state and the communities I represent, I am requesting a written explanation of the anticipated impacts this bill would have on USF programs from each of the witnesses, specifically:

What authority or authorities does the Federal Communications Commission currently rely on to operate and execute USF programs like the Connect America Fund?

Answer. Section 254 of the Communications Act is the primary jurisdictional basis to support Connect American Fund. The FCC has explained: "Section 254 grants the Commission clear authority to support telecommunications services and to condition the receipt of universal service support on the deployment of broadband networks, both fixed and mobile, to consumers." The Commission has further concluded: "We also have independent authority under section 706 of the Telecommunications Act of 1996 to fund the deployment of broadband networks." Thus, the FCC's current classification of broadband as a Title I information service poses no obstacle to USF programs like the Connect America Fund that support broadband deployment in West Virginia today.

Question 1a. Without either Section 706 of the Telecommunications Act of 1996 authority or Title II of the Communications Act of 1934 authority, as proposed in the draft legislation, under what authority, if any, could the FCC incentivize broadband deployment?

Answer. As explained above, the FCC has already concluded that Section 254 provides support for broadband services to high-cost areas, schools, libraries and hospitals, even though the relationship between broadband providers and consumers is classified as an information service under Title I. The FCC will therefore be able to continue to provide those subsidies and support going forward regardless of the classification of broadband services. Nothing in the draft legislation limits FCC ability to continue to support these important universal service priorities.

Moreover, given the substantial investment that has flowed into broadband facilities over the last decade outside of Title II, we are concerned that the application of Title II and its regulatory weight could disincent this sort of investment that has lead to over $121 billion over the last four years alone. We believe that the draft legislation and the clear statutory authority for ensuring Internet openness could be a spur to continued investment.

Question 1b. What would happen to the Connect America Fund and similar programs should this legislation pass in its current form?

Answer. The programs would continue to be administered by the FCC pursuant to its authority under Section 254 of the Communications Act.

Question 2. One of the primary concerns I have about the proposal we are discussing today is the removal of all rulemaking authority. Businesses need certainty, and rulemaking allows businesses to understand how the general goals and standards Congress establishes in law—such as affordable and accessible Internet—will be specifically applied before they make investment decisions. The proposed bill removes all the transparency requirements included in rulemaking and replaces them with a new, retroactive, case-by-case rulemaking process that could be very difficult for small start-up businesses to understand. Without rulemaking, how would entrepreneurs understand how the FCC would apply the mandates of this bill to particular circumstances?

Answer. Today, the wireless industry—from carriers to app developers—faces significant regulatory uncertainty and ongoing legal debate over the FCC's authority. Clear, Congressional action, like the draft legislation, is the best way to avoid years more of uncertainty for all affected stakeholders. Indeed, the legislation itself establishes rules without the delay and appellate review that accompany FCC rulemakings.

Further, Section 13 of the draft legislation provides the FCC with case-by-case adjudicatory authority, which gives the FCC flexibility to interpret companies' responsibilities under the law. As new issues involving the broadband market arise, the FCC will be able to evaluate how best to resolve disputes.

Question 2a. What opportunities would businesses and consumer groups have to weigh-in on the FCC's application of these rules going forward?

Answer. Businesses and consumer groups would have the opportunity to participate in the FCC's complaint process. Indeed, the FCC recently launched a new consumer help center "designed to empower consumers" and "streamline [the] complaint system" with a new web-based interface that "replaces 18 outdate complaint forms with one web portal" and that will "promptly serve complaints on providers, enabling them to respond more quickly to consumers."

Question 2b. How could any changes, however small, even be made to reflect the specific concerns of entrepreneurs or small businesses with the explicit prohibition on expanding Internet openness obligations included in Subsection (b) the draft bill?

Answer. We believe that congressional action is the best path forward for entrepreneurs and small business to have explicit and clear statutory protections. Further, as noted above, Section 13 of the draft legislation provides the FCC with case-by-case adjudicatory authority, which gives the FCC flexibility to interpret companies' responsibilities under the law. As new issues involving the broadband market arise, the FCC will be able to evaluate how best to resolve disputes.

Question 3. Do wireless network providers have different network management demands than wireline networks? Please explain.

Answer. Yes. Mobile services are technically different, completely dependent upon limited spectrum resources requiring nimble and dynamic network management to deliver service to consumers on the go. There is more bandwidth in a single strand of fiber than in all of the spectrum allocated for commercial mobile services. And the use of spectrum to provide broadband services involves unique congestion, interference, and other traffic management challenges that do not apply to wireline network management. More detail on the significant technical differences facing mobile broadband providers can be found at *http://www.ctia.org/docs/default-source/default-document-library/net-neutrality-and-technical-challenges-of-mobile-broadband-networks-9.pdf.*

Question 3a. If so, how would wireless service providers be impacted by a universal "reasonable network management" practice that treats all providers the same?

Answer. We are encouraged that the draft legislation explicitly states that " a network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and any technology and operational limitations of the broadband Internet access service provider." Wireless networks face unique congestion, interference and other traffic management challenges. Applying the same "reasonable network management" standard to all providers would deprive wireless broadband providers of the ability to manage their networks in a manner that satisfies consumer expectations and recognizes the unique challenges faced when delivering an ever-increasing amount of voice, video, and data traffic in a spectral environment.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. DEB FISCHER TO GENE KIMMELMAN

Question. To All Witnesses—While the FCC is in the process of ensuring net neutrality, some want the FCC to impose all of these obligations under the guise of ensuring consumer protection. Some argue that common carrier requirements on broadband providers should include almost most all of Title II, in addition to Sections 201, 202, and 208. Specifically, some activists have suggested the following parts of Title II must be applied to the broadband industry:

UNIVERSAL SERVICE
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Sec. 255. [47 U.S.C. 255] Access by Persons With Disabilities.

CONSUMER PROTECTION
Sec. 217. [47 U.S.C. 217] Liability of Carrier for Acts and Omissions of Agents.
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Sec. 230. [47 U.S.C. 230] Protection for Private Blocking and Screening of Offensive Material.
Sec. 258. [47 U.S.C. 258] Illegal Changes in Subscriber Carrier Selections.

COMPETITION
Sec. 224. [47 U.S.C. 224] Regulation of Pole Attachments.
Sec. 253. [47 U.S.C. 253] Removal of Barriers to Entry.
Sec. 251. [47 U.S.C. 251] Interconnection
Sec. 256. [47 U.S.C. 256] Coordination for Interconnectivity.
Sec. 257. [47 U.S.C. 257] Market Entry Barriers Proceeding.

Do you agree or disagree that these sections of Title II common carrier regulation are needed? If you agree, please explain why.

Answer. Public Knowledge has consistently supported the idea that there are basic, fundamental values of communications networks that must be preserved under Internet protocol (IP) networks [1], including protecting Universal Service, competition and interconnection of providers, and basic consumer protections such as privacy and truth-in-billing practices. Whatever the classification status that the FCC currently or subsequently applies to broadband and IP networks, these values remain as the baseline expectations of the public under the Communications Act.

I agree that the listed sections of the Communications Act continue to be needed for traditional voice services and potentially for broadband services as well. All of them have been important statutory manifestations of the fundamental values of communications networks and the rules crafted from them have been applied to traditional voice telephone services. However, it is possible that the FCC might find that some of these sections need not apply to broadband in order to preserve the fundamental values when broadband is reclassified under Title II.

In my testimony I highlighted concerns that the Thune draft bill may prevent the FCC ensuring that fundamental values (such as privacy, accessibility for the disabled, universal service, and others) could be protected because the draft bill limits the sort of further proceeding described above. Allowing the FCC such power can reduce regulatory burdens in the future through a transparent, APA-compliant process.

The ongoing FCC proceeding around the transition of the phone network to an all IP network is an appropriate place for the FCC and stakeholders to wrestle with the length of time that such statutes are necessary for voice services. Should the Congress continue with a process to update the Communications Act, Congress will be forced to show how it will maintain the fundamental values of communications networks under an updated or new statutory regime, including maintaining the power of the FCC to enforce such protections.

[1] *https://www.publicknowledge.org/news-blog/blogs/five-fundamentals-for-the-phone-network-transition*

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. AMY KLOBUCHAR TO GENE KIMMELMAN

Question. I have some concerns about transparency and rules governing the points of network interconnections, an area that we should explore more. My concern about a lack of rules or enforcement is not a prediction or hypothetical—it's already happening in the voice networks. For the last five years, we've seen rural communities suffering from persistent call completion problems which arise because we don't have enough visibility or enforcement capability with respect to how calls are flowing across networks. This is just an example of what not understanding or having transparency on a part of a network can mean.

Mr. Kimmelman, without some basic transparency at least at the interconnection between underlying networks, how do we protect consumers and achieve other important policy objectives?

Answer. I agree that rules governing points of interconnection continue to be important to ensure that networks function properly for all Americans, no matter where they may live or work. Public Knowledge continues to support the bipartisan resolution led by Senators Klobuchar, Fischer, Thune, and others acknowledge the central role of the FCC in resolving rural call completion problems and encouraging the FCC to use its broad authority to address these concerns. Similarly, as networks transition to newer, all-IP networks, the power of the FCC to resolve such issues must be maintained regardless of technological upgrades made to our national communications networks. It does not help consumers to see net neutrality rules applied at the point of the network connecting last mile providers to consumers if the problem simply moves upstream to these interconnection points. I am encouraged that Chairman Wheeler has signaled that he intends to preserve to the FCC's ability to address interconnection concerns beyond the narrower proceeding around net neutrality rules. We believe he has the power to address these concerns under his current statutory authority. If the Congress moves forward with legislation around net neutrality or a Communications Act update, it should preserve the power of FCC to investigate and conduct the necessary rule makings to preserve the end-to-end connectivity of the network for all Americans.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BRIAN SCHATZ TO GENE KIMMELMAN

Question. I believe that the FCC needs to have ongoing, flexible authority over broadband. I am concerned that the draft legislation does not preserve that type of authority. What changes can—or should—be made to the draft that would address this concern?

Answer. The simplest way to preserve flexible authority at the FCC would be to alter three parts of the draft bill. First, change Section 1 of the draft bill to place the language in Title II of the Communications Act. Second, delete subsection b(1)—labeled "Commission Authority"—in the new section inserted to the Communications Act by Section 1 of the draft bill. Removing this takes away the limitations on FCC rulemaking authority beyond the rules prescribed in the draft bill, giving the FCC flexibility to investigate related topics as technology, business practices, and the market changes. Third, elimination Section 2 of the draft bill which limits the FCC authority under 706 that was upheld by the DC Circuit Court in the Verizon case. These changes will give the FCC the flexibility it needs to fully address open Internet concerns, while not preventing the FCC from protecting other basic consumer protections that I highlighted in my testimony may be in danger from such a narrowly tailored bill.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO GENE KIMMELMAN

Question 1. One aspect largely absent from the debate on Chairman Thune's proposed neutrality legislation is the issue of interconnection. Interconnection is not covered under current legislation. Do you believe that interconnection points can be choke points to the Internet highway? Under the proposed legislation, how would interconnection issues be addressed?

Answer. Yes, interconnection points can be choke points on the Internet if disputes over interconnection and peering agreements slow or limit traffic across different parts of the network. Consumers lose in this situation, through no fault of their own.

The draft bill does not seem to address interconnection issues since it narrowly creates new rules to protect consumers, but limits the authority of the FCC to go beyond those consumer focused rules. I believe the agency already has the authority to address interconnection under Title II of the Communications Act, but Congress could reaffirm this by placing these rules under Title II and then removing the restrictions against other regulatory action in the draft bill.

Question 2. Students, health care providers, and entrepreneurs have benefited greatly from innovative online platforms and the free flow of information. I fear that, without strong net neutrality rules, a "tiered Internet" could emerge, creating barriers for innovators and small businesses.

In the absence of strong anti-discrimination protections provided under Title II, and without Section 706 authority, what tools does the FCC have to prevent discriminatory practices and differential treatment we all agree should be prohibited?

Answer. A tiered Internet is not just a real fear in a world without strong net neutrality rules, it is a likely outcome. Some Internet service providers have been clear that without net neutrality rules they would like to create business practices that would section off the internet, charging extra fees for the delivery of content and services.[1] We have already seen some instances of discrimination by Internet service providers against potential competitive services. One example is the concern that Public Knowledge and others raised in connection to AT&T's treatment of Facetime in 2013.[2] Fortunately, Public Knowledge was able to threaten a complaint under the FCC's 2010 open Internet rules, which were still in effect at the time, and AT&T changed its practices.

In the absence of Title II and Section 706 authority the FCC does not have any tools to prevent discriminatory practices and would require Congress to act in order to restore its authority.

Question 3. As currently drafted, what protections does the legislation provide that broadband reclassification would not?

Answer. The draft bill, as currently drafted, does not provide any protections beyond what rules crafted under a reclassification to Title II would provide.

Question 4. Do you believe, as the draft legislation suggests, the FCC should not be able to claim any authority under Section 706 of the Telecommunications Act of 1996?

Answer. The FCC has used Section 706 for a number of rulemakings and reforms over the years including its ongoing reform of the Universal Service Program (USF). I would caution against removing the FCC's authority under 706 without addressing possible unintended consequences such as harming these reforms of USF.

Question 5. Recent data shows 96 percent of the population has *at most,* two Internet Service Provider options. How do you respond to concerns that the current legislative proposal would hamstring the FCC's ability to promote competition in broadband?

Answer. All stakeholders agree that deploying high-speed broadband services is a capital intensive undertaking. Combined with the increasing consumer expectations and FCC standards for what constitutes broadband[3], many Americans would say that they do not have true competition for broadband services. The FCC has several tools to promote broadband deployment and competition in the marketplace. One is the Universal Service Program which subsidizes deployment in high cost areas, as well as to schools and libraries which anchor communities. The FCC is currently looking at another tool; if its authority under Section 706 of the Communications Act can allow it to promote broadband deployment and competition by overturning state prohibitions on community broadband deployment projects in Chattanooga, TN and Wilson, NC. The draft bill as currently constructed could eliminate the power of the FCC to act in these cases and extend the competition that the Chattanooga and Wilson projects are already successfully providing to surrounding communities. Given the enormous cost and risk involved in deploying high-speed broadband, we should not limit the ways in which communities can choose to ensure their residents are connected to the market. These projects are critical economic development opportunities for many communities when carefully planned and created with community support and input.

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[1] *https://www.publicknowledge.org/news-blog/blogs/these-rules*
[2] *https://www.publicknowledge.org/news-blog/blogs/att-hangout*
[3] *http://www.fcc.gov/document/fcc-finds-us-broadband-deployment-not-keeping-pace*

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO GENE KIMMELMAN

Question 1. Mr. Kimmelman, debate over the FCC's authority to issue net neutrality rules also raise the broader question of what the role of the FCC should be in the new broadband era. Last year, for example, the FCC adopted a set of governing principles for the phone-to-broadband transition. Those core values include Public Safety, Universal Service, Competition, and Consumer Protection. Can you share your thoughts about how legislation limiting the FCC's authority over broadband matters could potentially undermine the agency's ability to ensure those core values for our communications systems in the future?

Answer. The FCC is currently undergoing a process of managing the transition of the traditional phone networks to 21st Century, all Internet protocol networks through its open proceeding on the tech transition. This transition is happening right now in the market and is good for consumers, but the FCC's involvement is critical to make sure that vulnerable consumers are not left behind and these network changes are upgrades for everyone. We agree that the core "network compact" values you cited are an important check list of values that must be maintained in the Communications Act and at the FCC to protect the public interest. The draft bill, as written, would strip the ability for the FCC to manage the tech transition and continue to preserve these core values since many of them reside in Title II or have been justified using Section 706. Reclassification of broadband under Title II simplifies the FCC's work in managing the transition, but it has been able to do so under its current authority in Section 706 as well.

Question 2. Mr. Kimmelman, I would like to ask you to respond to some of the issues raised around crafting rules that reflect the realities for a wireless company managing its network. Last year, FCC Chairman Tom Wheeler wrote to Verizon about his concerns that some features of wireless data plans seem to go beyond reasonable network management practices. Given the draft Thune bill's lack of FCC enforcement authority, does the legislation go far enough to protect Internet openness for wireless users?

Answer. While the draft bill does include net neutrality rules that cover both wireline and wireless services, there are two weaknesses in the bill around wireless services. First, as we've mentioned before, the bill limits the FCC's rule making authority to the specific net neutrality rules prescribed in the bill. It would not allow the FCC to investigate harms from future business practices as new technology and business practices change. It freezes the abilities of the agency in time, while technology continues to develop. Second, the draft bill does not prohibit broader discrimination beyond throttling and paid prioritization. Nondiscrimination has always been a core value of network neutrality rules that both throttling and paid prioritization fall under. A broader nondiscrimination rule would allow the FCC to deal with harmful practices that we already concerned about but that don't fall into basic throttling or paid prioritization. These harmful practices include anticompetitive uses of data caps and exemption of a network providers services from such caps.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOE MANCHIN TO GENE KIMMELMAN

Question 1. During the hearing, I received conflicting information about how the Chairman's proposed legislation would impact Universal Service Fund (USF) broadband programs like the Connect America Fund (CAF) that help private companies make investments and expand their network into rural, underserved areas. Due to the importance of these programs to my state and the communities I represent, I am requesting a written explanation of the anticipated impacts this bill would have on USF programs from each of the witnesses, specifically:

Question 1a. What authority or authorities does the Federal Communications Commission currently rely on to operate and execute USF programs like the Connect America Fund?

Answer. In order to include broadband in the services funded through the Universal Service Fund programs, the Commission relied upon Sections 254(e) and 706(b) as independent sources of authority to require carriers to offer broadband in addition to telephony service as a condition for receiving USF support. Support for broadband is currently implemented as a condition on carriers that are also offering Title II telephony service. The Commission's reasoning was upheld by the 10th Circuit but U.S. Cellular has asked the Supreme Court to reverse that holding.

Question 1b. Without either Section 706 of the Telecommunications Act of 1996 authority or Title II of the Communications Act of 1934 authority, as proposed in

the draft legislation, under what authority, if any, could the FCC incentivize broadband deployment?

Answer. Without Section 706, the Commission would be stripped of one of the sources of authority it used to support broadband deployment through the USF. The Commission may still be able to appeal to its Section 254(e) authority to specify what USF recipients may or may not do with USF funds, but that question is still not settled in the courts. Lacking both Title II authority for broadband and Section 706 authority would create serious questions about how the Commission can move forward in administering USF programs. Moreover, if the Commission lacks both Section 706 and Title II authority for broadband, any conversations about adjusting the fund to better support broadband deployment would be stopped in their tracks, and the Commission would lose the ability to be more forward-thinking as a steward of the USF.

Question 1c. What would happen to the Connect America Fund and similar programs should this legislation pass in its current form?

Answer. The draft bill in its current form would create uncertainty for the Commission's ability to continue administering and improving the ways in which Universal Service programs fund broadband. The draft would strip the FCC of its Section 706 authority, which was an independent source of authority upheld by the 10th Circuit for the Commission's decision to require recipients to deploy broadband. Moreover, if the Commission lost its Section 706 authority and could not classify broadband Internet access services as telecommunications services, it is not clear how the Commission could at some point reshape USF programs to fund broadband services independently. Losing that option as a legal matter stops the policy conversation about the future of universal broadband service in its tracks.

Question 2. One of the primary concerns I have about the proposal we are discussing today is the removal of all rulemaking authority. Businesses need certainty, and rulemaking allows businesses to understand how the general goals and standards Congress establishes in law—such as affordable and accessible Internet—will be specifically applied before they make investment decisions. The proposed bill removes all the transparency requirements included in rulemaking and replaces them with a new, retroactive, case-by-case rulemaking process that could be very difficult for small start-up businesses to understand. Without rulemaking, how would entrepreneurs understand how the FCC would apply the mandates of this bill to particular circumstances?

Answer. A rulemaking would absolutely provide more certainty than a case-by-case review process. Rulemakings by design provide an agency the flexibility to adapt policy and law to changing circumstances much more quickly and agilely than Congress can. An agency only requires 3 votes to alter a rule that may no longer be working. It is also unclear how an individual case would apply to subsequent cases brought—whether it would have binding precedent, and to what extent.

Question 2a. What opportunities would businesses and consumer groups have to weigh-in on the FCC's application of these rules going forward?

Answer. There are number of problems with relying on a complaint process alone. First, it is not preventive—you have to wait for the harm to happen—and the party filing the complaint naturally has to be aware that the harm is happening. This is not always clear to consumers who are often poorly positioned to recognize potential violations. It is also not always clear who has standing to bring a complaint. Finally, even when standing is clear, bringing a complaint is time-consuming and expensive, which most disadvantages the consumers or small businesses the process ostensibly exists to protect most.

Question 2b. How could any changes, however small, even be made to reflect the specific concerns of entrepreneurs or small businesses with the explicit prohibition on expanding Internet openness obligations included in Subsection (b) the draft bill?

Answer. There is no simple fix—the legislation is fundamentally problematic because it would eliminate the Commission's rulemaking authority. The complaint process is a valuable one but to be effective it really must be connected to an actual rulemaking, not supplant rulemaking. It is also counterproductive to foreclose the expert agency from applying policies to new technologies as the Internet access environment continues to evolve.

Question 3. Do wireless network providers have different network management demands than wireline networks? Please explain.

Answer. All communications technologies have unique technical qualities that would require unique network management considerations—DSL has network management demands distinct from cable, which is also distinct from satellite, which is distinct from wireless, and so forth. But each of these provides the same funda-

mental on-ramp to the Internet, and so any public policy considerations on openness and reliable access applies equally to any connectivity technology.

This means that a reasonable network management standard must serve the same underlying policy equally. The best approach for a universal "reasonable network management" practice considers the technical qualities of types of access as well as the fundamental principles it exists to preserve. A clear rule based on fundamental principles can be applied flexibly to any particular access technology. This best addresses reasonable network management for existing technologies as well as any yet unimagined future technologies.

Question 3a. If so, how would wireless service providers be impacted by a universal "reasonable network management" practice that treats all providers the same?

Answer. All communications technologies have technical qualities that will make them inherently different from any others and that will therefore require their own unique network management considerations—DSL has network management demands distinct from cable, which is also distinct from satellite, which is distinct from wireless, and so forth. But each of these provides the same fundamental on-ramp to the Internet, and so any public policy considerations on openness and reliable access applies equally to any connectivity technology.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO HON. ROBERT M. MCDOWELL

Question 1. What would provide greater certainty for the marketplace—the FCC's adoption of rules that reclassify broadband services as telecommunications services subject to Title II, or enactment of legislation by Congress?

Answer. Thank you, Senator, for the opportunity to comment on this issue. Enactment of legislation by Congress would provide far more certainty to the Internet marketplace than FCC regulation of last-mile broadband networks and the entire Internet backbone under Title II.[1] In fact, an FCC decision to impose Title II on broadband providers will increase uncertainty for many businesses, with harmful implications for continued investment and innovation in the Internet economy.

For instance, American technology companies that derive a competitive advantage from our country's historic commitment to innovation without permission and the ability adjust rapidly to changes in consumer demand may soon find themselves waiting for Washington's approval as their global competitors take advantage of our newly-regulated, and therefore slower, "mother-may-I-innovate" regulatory regime. America's tech sector will not be immune from Title II common carrier regulation if the FCC attempts to regulate broadband Internet access services under Title II. Over my career as an FCC Commissioner and as an attorney, I have had extensive experience interpreting and enforcing Title II, and I can confidently say that "tech" companies are likely to be swept up into Title II's regulatory vortex along with the targeted network operators. As innovation and consumer demand continue to blur the lines between what used to be clearly delineated legal and regulatory silos between network operators (such as phone, cable and wireless companies) and "tech" companies that offer "information services"—such as computer processing and data storage processing, as well as content and application providers—it will become increasingly difficult for bureaucrats to parse with surgical precision the differences between transmission and information services.[2]

As a group of entrepreneurs, including Mark Cuban, recently explained, Title II classification of the Internet will fundamentally blur the lines between regulated and unregulated networks and services—making it "impossible for entrepreneurs to know whether their IP-based offering will be subject to Title II regulation. . .[thus] undermin[ing] the very innovation and investment that the Commission purportedly seeks to protect."[3] Furthermore, "[t]his concern is particularly acute in an era

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[1] Steve Lohr, *In Net Neutrality Push, F.C.C. Is Expected to Propose Regulating Internet Service as a Utility,* N.Y. TIMES, Feb. 2, 2015, available at *http://nyti.ms/1wXgOoe* (noting that Chairman Wheeler may suggest imposing regulations on "companies that manage the backbone of the Internet").

[2] *See, e.g.,* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Docket No. FCC–02–77, 17 FCC Rcd 4798, ¶40 (2002) (noting the increasing difficulty in distinguishing between "transmission" and "information" services).

[3] VCXC Ex Parte, *Protecting and Promoting the Open Internet,* GN Docket No. 14–28 (Jan. 23, 2015), available at *http://apps.fcc.gov/ecfs/comment/view?id=60001010900.*

where all new consumer electronics and information technologies include a component the Commission could conceivably view as a 'telecommunications service.'"[4]

One thing we know for sure is that, if the FCC proceeds down the Title II path, years of litigation—and resulting uncertainty—will result. When all is said and done, a court of appeals may strike down the FCC's decision to regulate broadband under Title II, as they have done twice before. Such an outcome would be a setback for those who seek enforceable net neutrality rules. Worse yet, the courts may uphold the FCC's decision to impose Title II on broadband providers but overturn its decision to forbear from the vast majority of Title II's requirements. Such a determination could have devastating consequences as the full brunt of Title II is thrust upon the entire Internet marketplace.

On the other hand, Congressional action—such as the proposed legislation—has the ability to provide the protections net neutrality proponents ostensibly seek, while shielding the Internet from harmful regulatory overreach. The proposed legislation would provide far more certainty for businesses and consumers because it would allow the Internet to flourish without the risk of being overturned in court.

Question 2. Chairman Wheeler has suggested that he is planning to go forward with an open Internet rule in February even knowing that members of Congress are working to try to provide the agency with the appropriate tools to prevent blocking, throttling, and paid prioritization.

Can you tell me why you think the Chairman plans to move forward? And if there is such urgency, wouldn't legislative action not only provide the Commission with better tools but also a foundation that wouldn't require the exhaustive process of forbearance?

Answer. I cannot speak to Chairman Wheeler's state of mind. I am taking the liberty of including a link to a recent *Washington Post* article which sheds some light on this question.[5]

Question 3. In in 2012, I led an effort to pass S. Con. Res. 50., a quote, "Sense of Congress that the Secretary of State in consultation with the Secretary of Commerce, should continue to implement the position of the United States on Internet governance that clearly articulates the consistent and unequivocal policy of the United States to promote a global Internet free from government control and preserve and advance the successful multi-stakeholder model that governs the Internet today." I realize there are distinctions to be made between this bill and the efforts being pursued at the FCC but S. Con. Res. 50 passed unanimously by Congress and sent a strong message to international stakeholders of the Internet.

With your efforts being involved in Internet governance issues, can you give us a sense of how an FCC ruling on Net Neutrality would be perceived by our international allies who look to the United States for leadership on these issues? Should the tech community and consumers here in the U.S. be concerned about what it means for them around the world, as less democratic regimes take notice of the FCC's heavy-handed rules?

Answer. Having been part of official U.S. diplomatic delegations to negotiate treaties in the communications space, as well as recently being a member of a blue ribbon panel on Internet governance,[6] I can personally attest to the influence of the American net neutrality debate on international efforts to regulate all corners of the Internet. Vladimir Putin has stated plainly his goal to have "international control of the Internet" through the International Telecommunication Union.[7] In light of Russia's recent expansion into the Crimea and Ukraine, not to mention crackdowns on Internet freedoms, it is now obvious that Putin's threats should be taken seriously. And so should the explicit proposed treaty language of China, Saudi Arabia, Iran and their client states, some of which call for massive multilateral regulation of the Internet including networks, content and applications.[8]

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[4] *Id.*

[5] Brian Fung, *FCC Chairman Warns: The GOP's Net Neutrality Bill Could Jeopardize Broadband's Vast Future,* WASH. POST, Jan. 29, 2015, available at *http://www.washingtonpost.com/blogs/the-switch/wp/2015/01/29/fcc-chairman-warns-that-republican-bill-could-jeopardize-broadbands-vast-future/.*

[6] *See* Panel On Global Internet Cooperation and Governance Mechanisms, available at *www.internetgovernancepanel.org.*

[7] Vladimir Putin, Prime Minister of the Russian Federation, Working Day, *Prime Minister Vladimir Putin Meets with Secretary General of the International Telecommunications Union Hamadoun Touré,* GOV'T OF THE RUSSIAN FED'N (June 15, 2011), *http://premier.gov.ru/eng/events/news/15601/.*

[8] *See, e.g., Proposals for the Work of the Conference,* Algeria, Saudi Arabia, Bahrain, China, United Arab Emirates, Russian Federation, Iraq, Sudan, Contribution 47, at Art. 2 (Dec. 11, 2012), *http://www.itu.int/md/S12-WCIT12-C-0047/en* (advocating changes to basic definitions contained in treaty text so the ITU would have unrestricted jurisdiction over the Internet); *Con-*

Furthermore, I have been told in official bilateral negotiations with foreign governments, as well as by global ministers of communications, regulators and international business executives in more informal settings, that the FCC's efforts to regulate Internet network management have generated thinking throughout the world that more regulation of the Internet ecosystem should be the norm. Recent initiatives in Europe underscore this point.[9] Ironically, the Snowden/NSA matter has also fueled international efforts in this regard—as if the problem of government involvement in this area can be cured by even *more* government involvement.

In short, the imposition of Title II regulation on broadband providers will provide cover to less freedom friendly international regimes that wish to subvert the private sector, non-profit and nongovernmental multi-stakeholder model of Internet governance. Regimes seeking to impose extensive economic and social regulations—from regulations on rates and payment flows, to restrictions on speech over the Internet—will find themselves more insulated than ever from criticism. The negative consequences of dramatically increased regulations on a global level would hit American tech companies, which operate in numerous countries around the world, particularly hard as the door opens to a new "sending party pays" construct where American content and application companies subsidize state-owned phone companies across the globe.[10] Any decision to regulate broadband like traditional telephone services would, without question, damage the global Internet economy—to the detriment of consumers and American tech companies worldwide.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO HON. ROBERT M. MCDOWELL

Question 1. Mr. McDowell—Please explain how Title II regulations would inhibit American dominance and global competitiveness in "Internet of Things?"

Answer. Thank you, Senator, for the opportunity to offer my views on this important topic. Over the past few years, the world has witnessed an explosion in the development of the "Internet of Everything" fueled by America's tech sector. From innovations with dramatic implications for the health and automotive sectors, to developments that improve the everyday lives of ordinary people, the Internet of Everything is transforming the global economy. In fact, Cisco estimates that, over the next decade, the Internet of Everything will result in more than $14 trillion in global economic growth as the number of Internet-connected devices rises to around 50 billion.[1]

To ensure our tech sector remains the envy of the world, we must continue to follow the open and permission-less approaches to innovation that have worked so well thus far. For example, America is, and always has been, the global leader in wireless technology and services by avoiding burdensome regulations.[2] In the absence of harmful Title II regulations, America's wireless broadband market has become fiercely competitive—driving massive investment and innovation that has contributed to, and will continue to contribute to, vital economic growth.[3] In light of the

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tribution from Iran, The Islamic Republic of Iran, CWG–WCIT12 Contribution 48, Attachment 2 (2011), *http://www.itu.int/md/T09-CWG.WCIT12-C-0048/en* (arguing that the ITU's rules define "telecommunications" to include "processing" or computer functions).

[9] *See, e.g.,* Case C–131/12, *Google Inc. v. Agencia Española de Protección de Datos* (E.C.R. 2014) (European High Court's ruling on the "right to be forgotten"); *European Single Market for Electronic Communications,* COM (2013) 0627—C7–0267/2013—2013/0309(COD) A7–0190/2014 (European Union's Net Neutrality proposal).

[10] *See, e.g.,* Revisions of the International Telecommunications Regulations—Proposals for High Level Principles to be Introduced in the ITRs, ETNO, CWG–WCIT12 Contribution 109, at 2 (2012), *http://www.itu.int/md/T09-CWG.WCIT12-C-0109/en.* (advocating application of a sending party pays principle).

[1] Joseph Bradley, *et al., Embracing the Internet of Everything to Capture Your Share of $14.4 Trillion,* Cisco Internet Bus. Solutions Grp. (2013), available at *http://www.cisco.com/web/about/ac79/docs/innov/IoE__Economy.pdf; see also* Federal Trade Commission, *Internet of Everything: Privacy and Security in a Connected World,* at i (Jan. 2015), available at *http://www.ftc.gov/system/files/documents/reports/federal-trade-commission-staff-report-november-2013-workshop-entitled-internet-things-privacy/150127iotrpt.pdf* (noting that "[s]ix years ago, for the first time, the number of 'things' connected to the Internet surpassed the number of people").

[2] *See* Ovum's Informa Telecoms & Media World Cellular Information Service (WCIS+) (as of Sept. 2014) (noting that U.S. consumers, who make up less than 5 percent of the world's population, account for more than 37 percent of the world's LTE subscribers).

[3] *See* Alan Pearce, J. Richard Carlson & Michael Pagano, *Wireless Broadband Infrastructure: A Catalyst for GDP and Job Growth 2013–2017* (2013), available at *http://www.pcia.com/images/IAE__Infrastructure__and__Economy__Fall__2013.PDF* (estimating that, from 2013 to

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unprecedented success we've seen as the Internet economy has continued to develop, it is difficult to imagine why some advocate turning away from tried-and-true policies in favor of a stifling regulatory regime designed for an era of vacuum tubes and rotary-dial telephones. Indeed, black rotary-dial telephones were "state-of-the-art" for 40 years, even though technology and innovation allowed better consumer experiences. Imposing this antiquated regime on the vibrant Internet economy will threaten American innovation and future economic growth.

The speed at which the Internet has been able to develop and flourish was a direct result of the Clinton Administration's policy of keeping the government's hands off of the Internet sector. As former FCC Chairman William Kennard stated, "[i]t just doesn't make sense to apply hundred-year-old regulations meant for copper wires and giant switching stations to the IP networks of today."[4] The Clinton-era view has enjoyed strong bipartisan support, until recently. While the proposed legislation honors this hands-off tradition, as Chairman Kennard warned, Title II classification of broadband would represent a dramatic departure from the policies that have allowed the Internet to become the fastest growing disruptive technology in human history.

America's tech sector will not be immune from Title II common carrier regulation if the FCC attempts to regulate broadband Internet access services under Title II. Over my career as an FCC Commissioner and as an attorney, I have had extensive experience interpreting and enforcing Title II, and I can confidently say that "tech" companies are likely to be swept up into Title II's regulatory vortex along with the targeted network operators. As innovation and consumer demand continue to blur the lines between what used to be clearly delineated legal and regulatory silos between network operators (such as phone, cable and wireless companies) and "tech" companies that offer "information services"—such as computer processing and data storage processing, as well as content and application providers—it will become increasingly difficult for bureaucrats to parse with surgical precision the differences between transmission and information services.[5]

For example, many application and content providers, content delivery networks, and providers of services offered through connected devices provide transmission services as a component of their information services, such as the CDNs that give us Netflix movies or YouTube videos. The same is true for search engines that connect an advertising network to a search request and for e-mail providers and social networks that enable chat or messaging sessions. Some tech companies sell other services, such as e-reader services, but buy wireless access on a wholesale basis to deliver their content. Such synergistic deals would be complicated—at best—under Title II because the e-reader service provider would be considered a reseller of telecommunications services under Commission precedent. In a Title II world, tech companies offering these and similar services will be forced to make vital decisions on long-term investments and business strategies affecting the Internet of Everything, while facing the prospect that they may one day be subjected to increasingly costly and stifling regulations.

As a group of entrepreneurs, including Mark Cuban, recently explained, Title II classification of the Internet will fundamentally blur the lines between regulated and unregulated networks and services—making it "impossible for entrepreneurs to know whether their IP-based offering will be subject to Title II regulation . . . [thus] undermin[ing] the very innovation and investment that the Commission purportedly seeks to protect."[6] Furthermore, "[t]his concern is particularly acute in an era where all new consumer electronics and information technologies include a component the Commission could conceivably view as a 'telecommunications service.'"[7]

As legal scholars have observed, regulation tends to grow.[8] For example, recent actions by regulators and courts in Europe, which view "Internet companies" as a

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2017, wireless investments will generate as much as $1.2 trillion to the economy and add up to 1.2 million new jobs).

[4] Remarks of the Hon. William E. Kennard, Chairman, FCC, *Voice Over Net Conference: Internet Telephony: America Is Waiting* (Sept. 12, 2000) ("We know that decisions once made by governments can be made better and faster by consumers, and we know that markets can move faster than laws.").

[5] *See, e.g., Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities,* Docket No. FCC–02–77, 17 FCC Rcd 4798, ¶40 (2002) (noting the increasing difficulty in distinguishing between "transmission" and "information" services).

[6] VCXC Ex Parte, *Protecting and Promoting the Open Internet,* GN Docket No. 14–28 (Jan. 23, 2015), available at *http://apps.fcc.gov/ecfs/comment/view?id=60001010900.*

[7] *Id.*

[8] Berin Szoka & Adam Thierer, *Net Neutrality, Slippery Slopes & High-Tech Mutually Assured Destruction,* Tech. Liberation Front (Oct. 23, 2009), *http://techliberation.com/2009/10/23/netneutrality-slippery-slopes-high-tech-mutually-assured-destruction/* ("The reality is that regula-

single category, have led to regulations that grow heavier by the day. As a result, particularly in the wireless broadband sector, America has gained a substantial advantage over Europe in terms of investment, connection speeds, and innovation. European broadband providers have invested considerably less ($244 per household) in their networks than their American counterparts ($562 per household).[9] Recent data show that 82 percent of all Americans have access to 25 Mbps speeds using wired broadband, while only 54 percent of Europeans have access to comparable broadband service.[10] European regulators lament that broadband providers are "reluctant to invest large sums in new high-speed networks" in Europe, that "Europe is losing the global race to build fast fixed broadband connections," and that "frustrated consumers are stuck in the Internet slow lane."[11]

Subjecting the flourishing Internet of Everything to the risk of Title II regulation will undoubtedly hamstring America in its ability to compete with the rest of the world. American technology companies that derive a competitive advantage from our country's historic commitment to innovation without permission and the ability to adjust rapidly to changes in consumer demand may soon find themselves sidelined, waiting for Washington's approval, as their competitors take advantage of waning American influence. Tech companies that assume they would be insulated from the burdens of Title II could turn out to be sorely mistaken.

Question 2. Mr. Simmons and Mr. McDowell—can you please describe the impacts on a small cable operator in the state of Nebraska of having the FCC force heavy-handed Title II utility regulations. My understanding is the FCC currently has 1,000 active rules based on Title II, occupying nearly 700 pages in the Code of Federal Regulations and that the Progressive Policy Institute recently issued a report highlighting how Title II reclassification of the Internet would add about $15 billion in user fees to our economy, increasing annual levies on middle class families by $67 for wireline service and $72 for wireless broadband.

Answer. You are correct, Senator, that the requirements of Title II are voluminous with extensive, complex, and burdensome provisions that will hit small cable operators and other small broadband providers particularly hard. Like all other broadband providers, small cable operators will likely face increased taxes, costs, restricted access to financing, and reduced opportunities to innovate.

The regulatory burdens resulting from Title II classification are substantial and include, in part: the regulation of rates, terms, and conditions; non-discrimination requirements (which in fact *allow* reasonable pricing discrimination); entry and exit regulations; confidentiality requirements, audits, and privacy restrictions. Additionally, if the FCC follows through with classifying broadband as a telecommunications service under Title II, broadband providers will be required to contribute to Federal and state universal service funds. These taxes and fees will be passed on to consumers, and every broadband customer in America will see a jump in their Internet bills. While large providers will no doubt feel the effect of costs associated with Title II, small providers with fewer resources will be hit particularly hard.

As I mentioned in my testimony before the Committee, there is one industry that stands to benefit greatly from Title II classification—lawyers. Cable operators generally have not had experience complying with Title II. Without having navigated the morass of Title II's requirements, small cable operators in particular are likely to see their compliance costs surge. They will need to hire regulatory personnel and retain telecom attorneys to advise them on which forms to file and how they can offer their services to the public without running afoul of Title II requirements. That's great for Washington, D.C. lawyers, but a terrible thing for small businesses and American innovation.

Question 3. To All Witnesses—While the FCC is in the process of ensuring net neutrality, some want the FCC to impose all of these obligations under the guise of ensuring consumer protection. Some argue that common carrier requirements on broadband providers should include almost most all of Title II, in addition to Sec-

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tion *always* spreads. The march of regulation can sometimes be glacial, but it is, sadly, almost inevitable: Regulatory regimes grow but almost never contract.").

[9] Christopher S. Yoo, *U.S. vs. European Broadband Deployment: What Do the Data Say?,* at i (June 2014), available at *https://www.law.upenn.edu/live/files/3352-us-vs-europeanbroadband-deployment; see also* Erik Bohlin, Kevin W. Caves, and Jeffrey A. Eisenach, "Mobile Wireless Performance in the EU & the US" (May 2013), available at *http://www.gsmamobilewirelessperformance.com/*.

[10] Yoo Report, *supra,* at i.

[11] European Commission Memo 13/756, *Regulatory mess hurting broadband investment: consumers and businesses stuck in slow lane* (Aug. 30, 2013), available at *http://europa.eu/rapid/press-release_MEMO-13-756_en.htm.*

tions 201, 202, and 208. Specifically, some activists have suggested the following parts of Title II must be applied to the broadband industry:

UNIVERSAL SERVICE
Sec. 214. [47 U.S.C. 214] Extension Of Lines
Sec. 225. [47 U.S.C. 225] Telecommunications Services for Hearing-Impaired and Speech-Impaired Individuals.
Sec. 254. [47 U.S.C. 254] Universal Service.
Sec. 255. [47 U.S.C. 255] Access by Persons With Disabilities.

CONSUMER PROTECTION
Sec. 217. [47 U.S.C. 217] Liability of Carrier for Acts and Omissions of Agents.
Sec. 222. [47 U.S.C. 222] Privacy Of Customer Information.
Sec. 230. [47 U.S.C. 230] Protection for Private Blocking and Screening of Offensive Material.
Sec. 258. [47 U.S.C. 258] Illegal Changes in Subscriber Carrier Selections.

COMPETITION
Sec. 224. [47 U.S.C. 224] Regulation of Pole Attachments.
Sec. 253. [47 U.S.C. 253] Removal of Barriers to Entry.
Sec. 251. [47 U.S.C. 251] Interconnection
Sec. 256. [47 U.S.C. 256] Coordination for Interconnectivity.
Sec. 257. [47 U.S.C. 257] Market Entry Barriers Proceeding.

Do you agree or disagree that these sections of Title II common carrier regulation are needed? If you agree, please explain why.

Answer. Senator, you raise a terrific point about the slippery slope of Title II, which has over 1,000 separate requirements. The FCC is essentially legislating as it decides which of those requirements should apply to last-mile broadband networks and the entire Internet backbone in order to benefit politically favored constituencies.[12] Importantly, none of these Title II provisions are needed to protect consumers. Other laws are already in place to help consumers, and the Federal Trade Commission (FTC),[13] state attorneys general, consumer advocates, and trial lawyers are poised to act if broadband service providers were to act in an anti-competitive manner.

In fact, the FCC sought comment on proposals to impose many of these Title II provisions on broadband providers ten years ago—proposals that the FCC did not adopt.[14] In the intervening decade, the Internet has flourished as an engine for innovation and economic growth under a light-touch regulatory approach—under both Republican and Democratic FCC Chairmen—without the need for any of these Title II provisions. As the influential thought-leader of the net neutrality movement, the man who coined the term "net neutrality," Columbia law professor Timothy Wu, recently told Congress, "[o]ne way or another, the light-handed protection of open Internet norms over the last twenty years has served to protect the Internet as an innovation platform."[15]

The sections of Title II that net neutrality proponents are advocating be thrust upon the Internet ecosphere would actually harm consumers by stifling innovation with "mother-may-I" mandates.[16] The core provisions of Title II—Sections 201, 202,

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[12] Steve Lohr, *In Net Neutrality Push, F.C.C. is Expected to Propose Regulating Internet Service as a Utility,* N.Y. TIMES, Feb. 2, 2015, available at *http://nyti.ms/1wXgOoe* (noting that Chairman Wheeler may suggest imposing regulations on "companies that manage the backbone of the Internet").

[13] Importantly, Title II classification would effectively strip the FTC of its ability to protect Internet consumers under Section 5 of the Federal Trade Commission Act, because Section 5 includes a common carrier exemption. 15 U.S.C. § 45(a)(2).

[14] *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities,* Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853, ¶¶ 146–57 (2005).

[15] House Judiciary Subcommittee on Regulatory Reform, Commercial and Antitrust Law, *Net Neutrality: Is Antitrust Law More Effective than Regulation in Protecting Consumers and Innovation?,* 113th Congress, 2nd sess., 2014 (testimony of Timothy Wu), available at *http://judiciary.house.gov/__cache/files/bcecca84-4169-4a47-a202-5e90c83ae876/wu-testimony.pdf.*

[16] Comments of Public Knowledge *et al.,* at 88–89, GN Docket No. 14–28 (July 14, 2014) (arguing that "the Commission should not simply forbear from . . . Commission authority over interconnection and shut down of service (Sections 251(a), 256, and portions of 214(c)), discretionary authority to compel production of information (Sections 211, 213, 215, and 218–20), provisions which provide explicit power for the Commission to hold parties accountable and prescribe adequate remedies (Sections 205–07, 209, 212, and 216), provisions designed to protect consumers (Sections 203 and 222), or provisions designed to ensure affordable deployment and the benefits of broadband access to all Americans (Sections 214(e), 225, 254, 255, and 257). These statutes are in addition to the bare minimum recognized in Section 332(c) as the minimum needed to protect consumers—Sections 201, 202, and 208."); *see also* Senate Committee on Commerce,

and 208—derive from the common carrier regime that Congress imposed on the railroads in the 1880s. These provisions allow the FCC to regulate nearly every aspect of a common carrier's business—including their prices and practices. If the FCC follows through with classifying broadband under Title II, the FCC will delegate to itself the power to impose pervasive rate regulation over the Internet economy.

Moreover, if the FCC were to impose Section 214 on Internet access services, broadband providers could not build new broadband lines or extend existing lines without first obtaining permission from the FCC. Broadband providers, even those operating in communities that enjoy multiple providers, would also be prohibited from discontinuing service to a community or part of a community without first obtaining permission from the FCC. Title II's requirement that providers obtain regulatory permission before introducing or discontinuing services stands in stark contrast to the "permission-less" innovation that has been the hallmark of the Internet. Yet fast-paced innovation has been essential to market success in the Internet ecosystem. If a provider develops a better way to serve its customers, it races to roll out new features or updates quickly in order to stay ahead of the competition. Similarly, if a new service fails to attract customers, a provider must be able to quickly modify or even abandon the service and move on to the next idea. Imagine if something as innovative as the e-reader required FCC oversight at every stage of its development.

Section 222 is the provision of Title II that requires common carriers to protect customer proprietary network information. While it is unclear how the requirements of Section 222 would even operate when applied to the Internet—given that the statute is designed to protect details about customers' telephone calls—some net neutrality advocates may attempt to use this ill-fitting set of FCC regulations to impose heightened privacy restrictions throughout the entire Internet ecosystem. Importantly, the FTC already has jurisdiction to protect consumer privacy on the Internet, but Title II classification would strip the FTC of its authority under Section 5's common carrier exemption.[17] Moreover, the restrictions of Section 222 are largely inconsistent with the existing privacy policies of many Internet companies—from search engines and advertising networks, to social network and e-mail providers. Imposing these inconsistent requirements could discourage such companies from pursuing innovative new ways to provide broadband services.

Section 251 is the provision of Title II that requires interconnection and sharing of networks. If the FCC classifies broadband under Title II, interconnection between broadband providers would be subject to government regulation. At the same time, some parties would inevitably seek to use Section 251 to try to require broadband providers to share or "unbundle" their networks at government mandated prices, which would create strong disincentives to invest in new networks. Indeed, Tim Wu recently said that "Title II actually could be used in very bold ways to try and increase competition should a future FCC want to. It creates the option, if the future FCC wanted to, of saying alright . . . we're glad you built that out now we're going to let competitors all use the underlying infrastructure and try and sell services separately."[18] As both the D.C. Circuit and the Commission have explained, however, such "unbundling requirements tend to undermine the incentives . . . to invest in new facilities and deploy new technology."[19]

Section 254 is the provision of Title II that charges the FCC with ensuring all Americans have access to telecommunications and information services. The FCC does not need to regulate broadband under Title II to encourage broadband deployment because the FCC has already exercised—and the courts have upheld—the Commission's Section 254 authority to use the Universal Service Fund (USF) to support broadband deployment. However, if the FCC follows through with classifying broadband as a telecommunications service under Title II, broadband providers will be required to contribute to Federal and state universal service funds. These taxes and fees—amounting to as much as $11 billion by some estimates—will be passed

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Science, and Transportation, *Protecting the Internet and Consumers Through Congressional Action,* 114th Congress, 1st sess., 2015 (testimony of Gene Kimmelman).

[17] 15 U.S.C. § 45(a)(2).

[18] C–SPAN, Communicators with Tim Wu, *Title II & Local Loop Unbundling: Tim Wu discusses how Title II could be used to foster competition through local loop unbundling* (Nov. 12, 2014), available at *http://www.c-span.org/video/?c4520676/title-ii-local-loop-unbundling.*

[19] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers,* Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, ¶3 (2003); *United States Telecom Ass'n v. FCC,* 359 F.3d 554, 584–85 (D.C. Cir. 2004) (explaining that unbundling requirements are "likely to delay infrastructure investment, with CLECs tempted to wait for ILECs to deploy [broadband-capable loops] and ILECs fearful that CLEC access would undermine the investments' potential return").

on to consumers, and every broadband customer in America will see an increase in their bills.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO HON. ROBERT M. MCDOWELL

Question 1. What will be the tax implications of applying Title II to broadband providers? What new costs will consumers see on their monthly bills if the FCC moves forward with its proposed Title II approach?

Answer. Thank you, Senator, for raising this important concern. Title II classification will undoubtedly result in increased costs for broadband providers and end-users and run the risk of increased taxes for other Internet service offerings as well. The regulatory burdens resulting from Title II classification are substantial and include, in part: the regulation of rates, terms, and conditions; non-discrimination requirements (which, in fact *allow* reasonable pricing discrimination); entry and exit regulations; confidentiality requirements, audits, and privacy restrictions.

As I noted in my testimony, the Progressive Policy Institute has estimated that Title II regulation of broadband could lead to substantial state and local regulations, taxes, and fees costing consumers $11 billion a year.[1] These costs, of course, would come "on top of the adverse impact on consumers of less investment and slower innovation that would result" from Title II.[2]

Additionally, if the FCC follows through with classifying broadband as a telecommunications service under Title II, broadband providers will be required to contribute to Federal and state universal service funds. These taxes and fees will be passed on to consumers, and every broadband customer in America will see an increase in their bills. While large providers will no doubt feel the impact of increased costs associated with Title II, small providers with fewer resources will be hit particularly hard. In short, Title II will result in an Internet "tax."

Resulting legal fees incurred to comply with and combat the new regime will also raise costs for providers—and thus consumers. As I mentioned in my testimony, the only group that stands to benefit from Title II classification are lawyers. Because Title II compliance is complicated, most broadband providers will need to hire experienced attorneys to help them navigate the Title II regulatory maze. That's great for Washington, D.C. lawyers, but a needless drag on American innovation.

It would be naïve to assume higher taxes, fees, and legal costs will not find their way to consumers' monthly bills. Thus, at the end of the day, it is the end-user consumer that will suffer due to the FCC's experiment with Title II.

Question 2. For comparison, would the bill Senator Thune has circulated result in any new taxes on consumers?

Answer. No.

Question 3. How easy will it be for the FCC to forbear from onerous provisions of Title II? I have heard many say that the FCC could apply Title II but forbear from all of the outdated provisions. On the other hand, Consumer Watchdog recently told the FCC that Sections 214, 225, 254, 255, 217, 222, 230, 258, 224, 253, 251, 256, and 257 should be applied to broadband providers to "ensure vital consumer protections are in place as [the FCC] strive[s] to ensure 'net neutrality'". It appears that there isn't a whole lot of agreement on what we should forbear from. Is there a concern that either the FCC will not adequately forbear or that any forbearance will be challenged in court (by groups like Consumer Watchdog)?

Answer. Thank you for your question, Senator.

It will not be easy, as many claim, for the FCC to forbear from the onerous provisions of Title II because the FCC has turned the Section 10 forbearance process into a lengthy, burdensome, and data-intensive ordeal in recent years. Under Section 10 of the Communications Act, the FCC is required to forbear if: "(1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory; (2) enforcement of such regulation or provision is not necessary for the protection of consumers; and (3) forbearance from applying

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[1] Robert Litan and Hal Singer, *Outdated Regulations Will Make Consumers Pay More for Broadband,* Progressive Policy Institute, at 1 (Dec. 1, 2014). Note that the Progressive Policy Institute issued a correction on its initial assessments—revising its estimate for costs and fees down from $15 billion to $11 billion. Hal Singer and Robert Litan, *No Guarantees When it Comes to Telecom Fees,* The Progressive Policy Institute (Dec. 16, 2014), available at *http://www.progressivepolicy.org/issues/economy/no-guarantees-when-it-comes-to-telecom-fees/*.

[2] *Id.*

such provision or regulation is consistent with the public interest."[3] Historically, forbearance proceedings have involved narrow questions of law. They operate much like an adjudicatory proceeding and require large amounts of evidence for every regulation question. The FCC puts the "burden" of persuasion and production on the proponent of forbearance;[4] if the proponent fails to carry one of its burdens, the FCC can simply deny forbearance. Any similar approach here would increase the risk of large parts of Title II potentially applying. Because of the fact-and data-intensive nature of the inquiry, forbearance proceedings often take 15 months, notwithstanding Congress's direction that the FCC act on forbearance petitions within 12 months.[5] Furthermore, recently the trend at the FCC is for even the most obvious of forbearance petitions to be denied.

For example, it took the FCC fifteen months to deny forbearance from antiquated accounting rules developed in the 1930s for monopoly-era telephone companies—the Part 32 Uniform System of Accounts.[6] Instead of demonstrating a continuing need for its Part 32 rules, the FCC denied forbearance because the petitioner had "not demonstrated that Part 32 is not necessary to ensure that charges and practices are just and reasonable, that Part 32 is not necessary for the protection of consumers, and that forbearance from Part 32 would be consistent with the public interest."[7] It took another 17 months of uncertainty to conclude the litigation over the FCC's denial of forbearance.

A more fundamental problem is that the logic of forbearance is incompatible with the FCC's desire to impose Title II on broadband providers to the extent it tries to ground such a decision on the purported market power they enjoy. By contrast, to justify forbearance under Section 10 of the Act, the Commission would have to find that enforcing certain provisions of Title II is not necessary to ensure just and reasonable rates or to protect consumers. There is obvious tension between finding (i) that broadband providers have market power to justify Title II regulation but (ii) that certain Title II requirements are unnecessary to constrain such market power. As I said in my testimony, trying to forbear from applying most of Title II's approximately 1,000 heavy-handed requirements while selecting only a few, as some have proposed, including Chairman Wheeler, involves picking and choosing between who gets regulated and who does not, which will look arbitrary and politically-driven to an appellate court.

The assumption that forbearance can mitigate the draconian impact of Title II is also mistaken. As the Commission previously told Congress, classifying broadband under Title II "would effectively impose a presumption in favor of Title II regulation of such providers. Such a presumption would be inconsistent with the deregulatory and procompetitive goals of the 1996 Act. In addition, uncertainty about whether the Commission would forbear from applying specific provisions could chill innovation."[8]

You are correct that there is not agreement—even among net neutrality proponents—on which Title II provisions should be subject to forbearance. Some of the most restrictive provisions of Title II are those embraced by the proponents of Title II classification as essential to their cause.[9] FCC decisions granting forbearance are often challenged in court, and net neutrality proponents will inevitably sue to stop the FCC from forbearing from any provisions of Title II that they deem essential to maintaining an open Internet. For example, net neutrality proponents

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[3] 47 U.S.C. 160(a).

[4] *Petition to Establish Procedural Requirements to Govern Proceedings for Forbearance Under Section 10 of the Communications Act of 1934, as Amended,* 24 FCC Rcd 9543, ¶21 (2009).

[5] 47 U.S.C. §160(c).

[6] *Petition of USTelecom for Forbearance Under 47 U.S.C. §160(c) from Enforcement of Certain Legacy Telecommunications Regulations,* Memorandum Opinion and Order and Report and Order and Further Notice of Proposed Rulemaking and Second Further Notice of Proposed Rulemaking, 28 FCC Rcd 7627, ¶¶56–77 (2013), *aff'd, Verizon & AT&T v. FCC,* 770 F.3d 961 (D.C. Cir. 2014).

[7] *Id.* ¶59.

[8] *Federal-State Joint Board on Universal Service,* Report to Congress, 13 FCC Rcd 11830, ¶47 (1998).

[9] Comments of Public Knowledge *et al.,* at 88–89, GN Docket No. 14–28 (July 14, 2014) (arguing that "the Commission should not simply forbear from . . . Commission authority over interconnection and shut down of service (Sections 251(a), 256, and portions of 214(c)), discretionary authority to compel production of information (Sections 211, 213, 215, and 218–20), provisions which provide explicit power for the Commission to hold parties accountable and prescribe adequate remedies (Sections 205–07, 209, 212, and 216), provisions designed to protect consumers (Sections 203 and 222), or provisions designed to ensure affordable deployment and the benefits of broadband access to all Americans (Sections 214(e), 225, 254, 255, and 257). These statutes are in addition to the bare minimum recognized in Section 332(c) as the minimum needed to protect consumers—Sections 201, 202, and 208.").

challenged the FCC's 2010 *Open Internet Order* because they believed the FCC did not go far enough in regulating wireless broadband.[10] Any decision by the FCC to forbear from Title II will be challenged in court, and, as the Commission previously told the Supreme Court, "[f]orbearance proceedings would be time-consuming and hotly contested and would assuredly lead to new rounds of litigation, and there is no way to predict in advance the ultimate outcome of such proceedings."[11]

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BRIAN SCHATZ TO HON. ROBERT M. MCDOWELL

Question. I believe that the FCC needs to have ongoing, flexible authority over broadband. I am concerned that the draft legislation does not preserve that type of authority. What changes can—or should—be made to the draft that would address this concern?

Answer. Thank you, Senator, for the opportunity to comment on this issue. The draft legislation, as written, provides the FCC with an appropriate level of flexibility to enforce prohibitions on blocking, throttling, and paid prioritization that net neutrality proponents have long sought. Unlike the Title II approach proposed by the FCC, the draft legislation will finally provide a level of certainty in the Internet ecosystem that will benefit consumers and businesses alike.

While Congressional action would serve to provide a stable path forward, an FCC decision to impose Title II on not just last-mile broadband networks, but the entire Internet backbone as well, will create harmful uncertainty.[1] Furthermore, America's tech sector will not be immune from Title II common carrier regulation if the FCC attempts to regulate broadband Internet access services under Title II, however, there is substantial uncertainty as to how exactly Title II will be imposed on tech companies. Over my career as an FCC Commissioner and as an attorney, I have had extensive experience interpreting and enforcing Title II, and I can confidently say that "tech" companies are likely to be swept up into Title II's regulatory vortex along with the targeted network operators. As innovation and consumer demand continue to blur the lines between what used to be clearly delineated legal and regulatory silos between network operators (such as phone, cable and wireless companies) and "tech" companies that offer "information services"—such as computer processing and data storage processing, as well as content and application providers—it will become increasingly difficult for bureaucrats to parse with surgical precision the differences between transmission and information services.[2] In this Title II world, tech companies will be forced to make vital decisions on long-term investments and business strategies, while facing the prospect that they may one day be subjected to increasingly costly and stifling regulations.

As a group of entrepreneurs, including Mark Cuban, recently explained, Title II classification of the Internet will fundamentally blur the lines between regulated and unregulated networks and services—making it "impossible for entrepreneurs to know whether their IP-based offering will be subject to Title II regulation . . . [thus] undermin[ing] the very innovation and investment that the Commission purportedly seeks to protect."[3] Furthermore, "[t]his concern is particularly acute in an era where all new consumer electronics and information technologies include a component the Commission could conceivably view as a 'telecommunications service.'"[4]

One thing we know for sure is that, if the FCC proceeds down the Title II path, years of litigation—and resulting uncertainty—will result. When all is said and done, a court of appeals may strike down the FCC's decision to regulate broadband under Title II, as the courts did on two prior occasions in sustaining challenges to the FCC's net neutrality rules. Such an outcome would be a setback for those who seek enforceable net neutrality rules.

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[10] *See Free Press* v. *FCC,* No. 11–1411 (D.C. Cir. filed Oct. 25, 2011).

[11] Petition for Writ of Certiorari, U.S. Dept. of Justice and FCC, *FCC* v. *Brand X Internet Servs.,* No. 04–277, at 25, 2004 WL 1943678 (Aug. 27, 2004) (internal citations omitted).

[1] Steve Lohr, *In Net Neutrality Push, F.C.C. is Expected to Propose Regulating Internet Service as a Utility,* N.Y. TIMES, Feb. 2, 2015, available at *http://nyti.ms/1wXgOoe* (noting that Chairman Wheeler may suggest imposing regulations on "companies that manage the backbone of the Internet").

[2] *See, e.g.,* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Docket No. FCC–02–77, 17 FCC Rcd 4798, ¶40 (2002) (noting the increasing difficulty in distinguishing between "transmission" and "information" services).

[3] VCXC Ex Parte, *Protecting and Promoting the Open Internet,* GN Docket No. 14–28 (Jan. 23, 2015), available at *http://apps.fcc.gov/ecfs/comment/view?id=60001010900.*

[4] *Id.*

On the other hand, Congressional action—such as the proposed legislation—has the ability to provide the protections net neutrality proponents want, while shielding the Internet from harmful regulatory overreach or prolonged regulatory uncertainty during the inevitable legal challenges. This approach would provide far more certainty for businesses and consumers because it would allow the Internet to flourish without the risk of being overturned in court.

Finally, to the extent that concerns over the FCC's authority to regulate broadband stem from a desire to protect consumers—as net neutrality advocates claim—both the Department of Justice and the Federal Trade Commission are well equipped to cure any market ills that may negatively affect consumers.[5] Many other complex sectors of the American economy operate under government supervision afforded by antitrust and consumer protection laws without new extra layers of untested regulations and bureaucracies. Additionally, there are the protections of state and Federal common law such as breach of contract, tortious interference with contract, deceptive trade practices, fraud and more. For instance, if ISPs were to breach their terms of service with their customers, the plaintiff's bar would have a field day launching an uncountable number of class action lawsuits.

The argument that antitrust or consumer protection actions take too long and would produce results only after it was "too late" is specious. Antitrust and consumer protection agencies, such as the Federal Trade Commission, can act at the same speed as, if not more quickly than, the Federal Communications Commission.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO HON. ROBERT M. MCDOWELL

Question 1. One aspect largely absent from the debate on Chairman Thune's proposed neutrality legislation is the issue of interconnection. Interconnection is not covered under current legislation. Do you believe that interconnection points can be choke points to the Internet highway?

Answer. Thank you, Senator, for the opportunity to respond to your questions. With respect to your first question, no, I do not believe that interconnection points can be choke points to the Internet. Since the inception of the commercial Internet, interconnection agreements—*i.e.,* peering arrangements and transit arrangements—have been privately negotiated without government oversight—an approach that, since the Clinton-Gore Administration, the Commission has found benefits consumers. The FCC has explained that "interconnection between Internet backbone providers has never been subject to direct government regulation, and settlement-free peering and degradation-free transit arrangements have thrived."[6] The FCC has also concluded that "the Internet backbone market is sufficiently competitive and will remain so" and that "the prices and terms of interconnection in the market will also be competitive."[7]

In fact, the FCC agreed that Internet interconnection should not be regulated in the 2010 *Open Internet Order*[8] and again as recently as the 2014 *Open Internet Notice of Proposed Rulemaking.*[9] The 2010 net neutrality rules "applied to a broadband

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[5] Section 2 of the Sherman Act, 15 U.S.C. § 2, prohibits conduct that would lead to monopolization. In the event of abuse of market power, this is the main statute that enforcers would use. In the context of potential abuses by broadband Internet access service providers, this statute would forbid: (1) Exclusive dealing—for example, the only way a consumer could obtain streaming video is from a broadband provider's preferred partner site; (2) Refusals to deal (the other side of the exclusive dealing coin)—*i.e.,* if a cable company were to assert that the only way a content delivery network could interconnect with it to stream unaffiliated video content to its customers would be to pay $1 million/port/month, such action could constitute a "constructive" refusal to deal if any other content delivery network could deliver any other traffic for a $1,000/port/month price; and (3) Raising rivals' costs—achieving essentially the same results using different techniques.

Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45, essentially accomplishes the same curative result, only through the FTC. It generally forbids "unfair competition." This is an effective statute to empower FTC enforcement as long as Internet access service is considered an "information service." The FTC Act explicitly does not apply to "common carriers."

[6] *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control,* Memorandum Opinion and Order, 20 FCC Rcd 18433, ¶ 133 (2005).

[7] *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control,* Memorandum Opinion and Order, 20 FCC Rcd 18290, ¶ 132 (2005)

[8] *Preserving the Open Internet,* Report and Order, 25 FCC Rcd 17905, ¶ 67 n.209 (2010) ("*Open Internet Order*").

[9] *Protecting & Promoting the Open Internet,* Notice of Proposed Rulemaking, 29 FCC Rcd 5561, ¶ 59 (2014) ("*Open Internet Notice of Proposed Rulemaking*").

provider's use of its own network but did not apply the no-blocking or unreasonable discrimination rules to the exchange of traffic between networks, whether peering, paid peering, content delivery network (CDN) connection, or any other form of internetwork transmission of data, as well as provider-owned facilities that are dedicated solely to such interconnection."[10] The FCC proposed to "maintain this approach" in the 2014 *Open Internet Notice of Proposed Rulemaking.*[11]

Nothing has changed in the Internet's backbone that could possibly justify now regulating Internet interconnection under Title II. Even as the business models of some large content providers have consumed an increasingly large share of Internet traffic, the market has responded just as it always has—with individualized agreements that take into account the myriad of unique circumstances that exist between any two particular networks considering how to interconnect with each other. This approach has a proven track record of accommodating new business models such as content delivery networks (CDNs), encouraging more efficient interconnection arrangements, creating incentives for the deployment and upgrade of broadband networks, and ultimately enhancing and improving end users' experience.

Interconnection points have never been viewed as "choke points" to the Internet because no current backbone provider has market power that would be required to prevent interconnection.[12] Indeed, content providers have numerous choices for delivering their Internet traffic to consumers. In addition to relying on CDNs to aggregate and deliver traffic to ISPs, a content provider can choose from among numerous providers of "transit" services whose business models revolve around the delivery of traffic to ISPs, or can interconnect directly with the ISP itself. As proof of how competitive these markets are, transit rates have plummeted with year-over-year price reductions of 25 percent to 44 percent over the past 6 years, as transit prices fell from $9 per Mbps in 2009 to $0.94 per Mbps in 2014—and are expected to fall further, to $0.63 per Mbps in 2015.[13] At the same time, however, the volume of Internet traffic flowing over peering and transit arrangements has been growing at a remarkable pace due, in part, to the increase of Internet traffic generated by the popularity of Netflix and YouTube.[14] This combination of falling prices and increased output belies the suggestion that interconnection points are or could be used as choke points to the Internet.

Question 1a. Under the proposed legislation, how would interconnection issues be addressed?

Answer. As explained in my answer to Question 1a, interconnection would and should remain unregulated. Private companies would continue to negotiate interconnection arrangements without the need for government regulation as they have done successfully since the inception of the commercial Internet.

Question 2. Students, health care providers, and entrepreneurs have benefited greatly from innovative online platforms and the free flow of information. I fear that, without strong net neutrality rules, a "tiered Internet" could emerge, creating barriers for innovators and small businesses.

In the absence of strong anti-discrimination protections provided under Title II, and without Section 706 authority, what tools does the FCC have to prevent discriminatory practices and differential treatment we all agree should be prohibited?

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[10] *Open Internet Notice of Proposed Rulemaking* ¶59; *see also Open Internet Order* ¶67 n.209 ("*Open Internet Order*") (explaining that rules did not "affect existing arrangements for network interconnection, including existing paid peering arrangements"); *see also id.* ¶47 ("Nor does broadband Internet access service include virtual private network services, content delivery network services, multichannel video programming services, hosting or data storage services, or Internet backbone services (if those services are separate from broadband Internet access service). These services typically are not mass market services and/or do not provide the capability to transmit data to and receive data from all or substantially all Internet endpoints.").

[11] *Open Internet Notice of Proposed Rulemaking* ¶59.

[12] *See AT&T Inc. & BellSouth Corp. Application for Transfer of Control,* Memorandum Opinion and Order, 22 FCC Rcd 5662, ¶¶127, 143 (2007) (finding that the "Tier 1" backbone market—which includes the largest backbone providers, as measured by their size, geographic scope, and interconnections—is "both competitive and dynamic," and noting that providers "compete vigorously" with regard to price, quality, and geographic reach); *see also Applications Filed by Global Crossing Ltd. & Level 3 Commc'ns, Inc. for Consent to Transfer Control,* 26 FCC Rcd 14056, 14069 (2011) (noting that the number of "Tier I" Internet backbone providers has increased, from eight providers in 2005, to twelve in 2011).

[13] Dr. Peering, *What are the Historical Transit Pricing Trends?,* available at *http://drpeering.net/FAQ/What-are-the-historical-transit-pricing-trends.php.*

[14] *See, e.g.,* Cisco, *Cisco Visual Networking Index: Forecast and Methodology, 2013–2018* at 1 (June 10, 2014); *see also Global Internet Phenomena Report: 2H 2014,* Sandvine (Nov. 11, 2014) (noting that Netflix accounts for 34.9 percent of all download traffic at peak times—with YouTube accounting for 14 percent).

Answer. A key fact that has been lost in this debate is that a "tiered Internet" already exists—and always has—because many content and application providers have entered into peering arrangements with ISPs, which enable their content and data to be delivered directly to customers quickly and efficiently rather than relying upon multiple providers. Furthermore, companies like Netflix and Google have created content delivery networks by placing their own servers inside the networks of ISPs to provide faster delivery of their content. While these practices clearly create a "tiered Internet," they are necessary when considering the sheer volume of data sent by content providers like Netflix and ultimately benefit consumers. Without reasonable differentiation, users simply would not be able to access the same quality of services they enjoy today.

Also, while it may come as a surprise to some net neutrality proponents who have viewed Title II as the holy grail of Internet regulation, Title II does not prohibit all discrimination. What Title II prohibits is "unjust or unreasonable discrimination,"[15] meaning that discrimination among content owners and users is not prohibited so long as similarly situated parties are treated the same. This means that paid prioritization, tiered pricing, sending party pays arrangements, and two-sided markets are all permissible under Title II. In fact, allowing these types of "discriminatory" business relationships lies at the heart of Title II.

Furthermore, to the extent that concerns over the FCC's authority to regulate broadband stem from a desire to protect consumers—as net neutrality advocates claim—both the Department of Justice and the Federal Trade Commission are well equipped to cure any market ills that may negatively impact consumers.[16] Other complex sectors of the American economy operate under government supervision through the rules afforded by antitrust and consumer protection laws without new extra layers of untested regulations and bureaucracies. Additionally, there are the protections of state and Federal common law such as breach of contract, tortious interference with contract, deceptive trade practices, fraud and more.

Question 3. As currently drafted, what protections does the legislation provide that broadband reclassification would not?

Answer. The proposed legislation has a number of advantages over the FCC's proposal to regulate last-mile broadband networks and the entire Internet backbone under Title II.[17] The legislation would provide certainty to businesses, thus promoting continued investment and innovation by companies throughout the entire Internet ecosystem. It would also prevent the inevitable litigation that will result if the FCC classifies broadband Internet access services under Title II.

Most importantly, the proposed legislation would protect businesses from the burdensome and harmful regulations of Title II. Title II classification will undoubtedly result in increased costs for broadband providers and end-users and run the risk of increased taxes for other Internet service offerings as well. The regulatory burdens resulting from Title II classification are substantial and include, in part: the regulation of rates, terms, and conditions; non-discrimination requirements (which, in fact *allow* reasonable pricing discrimination); entry and exit regulations; confidentiality requirements, audits, and privacy restrictions.

As I noted in my testimony, the Progressive Policy Institute has estimated that Title II regulation of the Internet could lead to substantial state and local regula-

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[15] 47 U.S.C. § 202(a).

[16] Section 2 of the Sherman Act, 15 U.S.C. § 2, prohibits conduct that would lead to monopolization. In the event of abuse of market power, this is the main statute that enforcers would use. In the context of potential abuses by broadband Internet access service providers, this statute would forbid: (1) Exclusive dealing—for example, the only way a consumer could obtain streaming video is from a broadband provider's preferred partner site; (2) Refusals to deal (the other side of the exclusive dealing coin)—*i.e.,* if a cable company were to assert that the only way a content delivery network could interconnect with it to stream unaffiliated video content to its customers would be to pay $1 million/port/month, such action could constitute a "constructive" refusal to deal if any other content delivery network could deliver any other traffic for a $1,000/port/month price; and (3) Raising rivals' costs—achieving essentially the same results using different techniques.

Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45, essentially accomplishes the same curative result, only through the FTC. It generally forbids "unfair competition." This is an effective statute to empower FTC enforcement as long as Internet access service is considered an "information service." The FTC Act explicitly does not apply to "common carriers."

[17] Steve Lohr, *In Net Neutrality Push, F.C.C. Is Expected to Propose Regulating Internet Service as a Utility,* N.Y. TIMES, Feb. 2, 2015, available at *http://nyti.ms/1wXgOoe* (noting that Chairman Wheeler may suggest imposing regulations on "companies that manage the backbone of the Internet").

tions, taxes, and fees costing consumers $11 billion a year.[18] These costs, of course, would come "on top of the adverse impact on consumers of less investment and slower innovation that would result" from Title II.[19] Additionally, if the FCC follows through with classifying broadband as a telecommunications service under Title II, broadband providers will be required to contribute to Federal and state universal service funds.

In addition to the regulatory burdens of Title II, imposing Title II on broadband Internet and backbone service providers will create harmful uncertainty. For instance, America's tech sector will not be immune from common carrier regulation if the FCC attempts to regulate broadband Internet access services under Title II, however, there is substantial uncertainty as to how exactly Title II will be imposed on tech companies. As innovation and consumer demand continue to blur the lines between what used to be clearly defined legal and regulatory silos between network operators (such as phone, cable and wireless companies) and "tech" companies that offer "information services"—such as computer processing and storage processing—it will become increasingly difficult for bureaucrats to parse with surgical precision the differences between transmission and information services.[20] In this Title II world, tech companies will be forced to make vital decisions on long-term investments and business strategies, while facing the prospect that they may one day be subjected to increasingly costly and stifling regulations.

Many net neutrality supporters, emboldened by the prospect of Title II classification, have increasingly expressed an ultimate policy goal of comprehensive industrial policy for the entire Internet space. The influential thought leader who coined the term "net neutrality," Tim Wu, has stated that state manipulation of the Internet could be used to shape "not merely economic policy, not merely competition policy, but also media policy, social policy" and "oversight of the political process."[21] Also, as the President and CEO of Public Knowledge, Gene Kimmelman, noted in his testimony, supporters of Title II classification seek expansive control over the Internet.[22]

Question 4. Do you believe, as the draft legislation suggests, the FCC should not be able to claim any authority under Section 706 of the Telecommunications Act of 1996?

Answer. Yes, I do. As I wrote in my dissent to the FCC's *2010 Open Internet Order,* Congress never designed Section 706 to contain an affirmative grant of authority.[23] Indeed, the FCC historically had not viewed Section 706 as a source of regulatory authority. The FCC's decision in 2010 to abandon its own precedent and find direct authority to regulate the Internet in Section 706, a clearly *de-regulatory* provision, was improper. The proposed legislation would restore what I believe to be to the original Congressional intent of Section 706 and overturn the D.C. Circuit's contrary determination.[24] The remarkable development of the Internet occurred without the need for the FCC to take any regulatory action grounded solely in Section 706, and there is no reason to believe the Internet will not continue to flourish under the proposed legislation.

At the same time, the FCC would claim new authority from Congress under the proposed legislation that would provide clarity, appellate certainty and protections for consumers and entrepreneurs.

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[18] Robert Litan and Hal Singer, *Outdated Regulations Will Make Consumers Pay More for Broadband,* Progressive Policy Institute, at 1 (Dec. 1, 2014). The Progressive Policy Institute issued a correction on its initial assessments—revising its estimate for costs and fees down from $15 billion to $11 billion. Hal Singer and Robert Litan, *No Guarantees When it Comes to Telecom Fees,* The Progressive Policy Institute (Dec. 16, 2014), available at *http://www.progressivepolicy.org/issues/economy/no-guarantees-when-it-comes-to-telecom-fees/*.

[19] *Id.*

[20] *See, e.g.,* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Docket No. FCC–02–77, 17 FCC Rcd 4798, ¶40 (2002) (noting the increasing difficulty in distinguishing between "transmission" and "information" services).

[21] House Judiciary Subcommittee on Regulatory Reform, Commercial and Antitrust Law, *Net Neutrality: Is Antitrust Law More Effective than Regulation in Protecting Consumers and Innovation*?, 113th Congress, 2nd sess., 2014 (testimony of Timothy Wu), available at *http://judiciary.house.gov/__cache/files/bcecca84-4169-4a47-a202-5e90c83ae876/wu-testimony.pdf.*

[22] Senate Committee on Commerce, Science, and Transportation, *Protecting the Internet and Consumers Through Congressional Action,* 114th Congress, 1st sess., 2015 (testimony of Gene Kimmelman), available at *http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord__id=7ba9cc4e-3cd8–44dd-bb84-fed5f6309ab2&ContentType__id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group__id=b06c39af-e033-4cba-9221-de668ca1978a&MonthDisplay=1&YearDisplay=2015.*

[23] Dissenting Statement of Commissioner Robert M. McDowell, *Preserving the Open Internet,* Report and Order, 25 FCC Rcd 17905, 18049 (2010) ("*Open Internet Order*").

[24] *Verizon* v. *FCC,* 740 F.3d 623, 630 (D.C. Cir. 2014).

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOE MANCHIN TO HON. ROBERT M. MCDOWELL

Question 1. During the hearing, I received conflicting information about how the Chairman's proposed legislation would impact Universal Service Fund (USF) broadband programs like the Connect America Fund (CAF) that help private companies make investments and expand their network into rural, underserved areas. Due to the importance of these programs to my state and the communities I represent, I am requesting a written explanation of the anticipated impacts this bill would have on USF programs from each of the witnesses, specifically:

Question 1a. What authority or authorities does the Federal Communications Commission currently rely on to operate and execute USF programs like the Connect America Fund?

Answer. The FCC relied upon Section 254 and Section 706 in creating the Connect America Fund. Section 254 provides authority for the Commission to ensure consumers have "[a]ccess to advanced telecommunications and information services . . . in all regions of the Nation."[25] Section 706 directs the Commission to encourage broadband deployment to all Americans.[26] In 2011, the Commission concluded that both of these provisions independently authorize the Commission to provide support for broadband networks.[27] The U.S. Court of Appeals for the Tenth Circuit upheld the Commission's authority under Sections 254 and 706 to use the USF to support the deployment of broadband networks.[28]

Question 1b. Without either Section 706 of the Telecommunications Act of 1996 authority or Title II of the Communications Act of 1934 authority, as proposed in the draft legislation, under what authority, if any, could the FCC incentivize broadband deployment?

Answer. Even without Section 706, the FCC could still rely upon its authority under Section 254 to incentivize broadband deployment. As the FCC has explained, "Section 254 grants the Commission clear authority to support telecommunications services and to condition the receipt of universal service support on the deployment of broadband networks, both fixed and mobile, to consumers."[29] The Tenth Circuit upheld the FCC's authority under Section 254 to condition "USF funding on recipients' agreement to provide broadband Internet access services."[30]

Question 1c. What would happen to the Connect America Fund and similar programs should this legislation pass in its current form?

Answer. Nothing would happen to the Connect America Fund or similar USF programs because the FCC would retain its existing authority under Section 254.

Question 2. One of the primary concerns I have about the proposal we are discussing today is the removal of all rulemaking authority. Businesses need certainty, and rulemaking allows businesses to understand how the general goals and standards Congress establishes in law—such as affordable and accessible Internet—will be specifically applied before they make investment decisions. The proposed bill removes all the transparency requirements included in rulemaking and replaces them with a new, retroactive, case-by-case rulemaking process that could be very difficult for small start-up businesses to understand. Without rulemaking, how would entrepreneurs understand how the FCC would apply the mandates of this bill to particular circumstances?

Answer. Thank you for your question, Senator. As a threshold matter, it is important to note that the remarkable development of the Internet occurred in the absence of FCC rulemaking authority in this area. Prior to the Commission's 2010 *Open Internet Order,* the FCC adhered to long-standing precedent that it did not have regulatory authority over the Internet, particularly when Congress concluded it was the policy of the United States "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer serv-

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[25] 47 U.S.C. § 254(b)(2).

[26] 47 U.S.C. § 1302(a).

[27] *Connect America Fund,* Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, ¶ 60[-730 (2011) ("Section 254 grants the Commission clear authority to support telecommunications services and to condition the receipt of universal service support on the deployment of broadband networks, both fixed and mobile, to consumers. Section 706 provides the Commission with independent authority to support broadband networks in order to 'accelerate the deployment of broadband capabilities' to all Americans.").

[28] *In re FCC 11–161,* 753 F.3d 1015, 1054 (10th Cir. 2014).

[29] *Connect America Fund* ¶ 60.

[30] *In re FCC 11–161,* 753 F.3d at 1047–48.

ices, unfettered by Federal or state regulation."[31] Congress wrote those words at the same time it wrote Section 706. There is no reason to believe the Internet will not continue to flourish under the proposed legislation.

The draft legislation provides the FCC with an appropriate level of flexibility to enforce prohibitions on blocking, discrimination, and paid prioritization that net neutrality proponents have long sought. Unlike the Title II approach proposed by the FCC, the draft legislation will finally provide a level of certainty in the Internet marketplace that will benefit consumers and businesses alike.

While Congressional action would serve to provide a stable path forward, an FCC decision to regulate last-mile broadband networks and the entire Internet backbone under Title II will create harmful uncertainty.[32] For instance, America's tech sector will not be immune from Title II common carrier regulation if the FCC attempts to regulate broadband Internet access services under Title II, however, there is substantial uncertainty as to how exactly Title II will be imposed on tech companies. Over my career as an FCC Commissioner and a private practitioner, I've had ample experience interpreting and enforcing Title II, and I can confidently say that we are unlikely to see the type of precise application of Title II needed to protect tech companies from being swept up with network operators. As innovation and consumer demand continue to blur the lines between what used to be clearly defined legal and regulatory silos between network operators (such as phone, cable and wireless companies) and "tech" companies that offer "information services"—such as computer processing and storage processing—it will become increasingly difficult for bureaucrats to parse with surgical precision the differences between transmission and information services.[33] In this Title II world, tech companies will be forced to make vital decisions on long-term investments and business strategies, while facing the prospect that they may one day be subjected to increasingly costly and stifling regulations.

As a group of entrepreneurs, including Mark Cuban, recently explained, Title II classification of the Internet will fundamentally blur the lines between regulated and unregulated networks and services—making it "impossible for entrepreneurs to know whether their IP-based offering will be subject to Title II regulation. . .[thus] undermin[ing] the very innovation and investment that the Commission purportedly seeks to protect."[34] Furthermore, "[t]his concern is particularly acute in an era where all new consumer electronics and information technologies include a component the Commission could conceivably view as a 'telecommunications service.'"[35]

It will be very difficult for the tech community to understand how to comply with Title II. The regulatory burdens resulting from Title II classification are substantial and include, in part: the regulation of rates, terms, and conditions; non-discrimination requirements (which, in fact *allow* reasonable pricing discrimination); entry and exit regulations; confidentiality requirements, audits, and privacy restrictions. Complicating matters further, if the FCC follows through with classifying broadband as a telecommunications service under Title II, broadband providers will be required to contribute to Federal and state universal service funds. Understanding and complying with this onslaught of new regulations will require expensive legal advice, which is why Title II classification will be great for Washington, D.C. lawyers, but a terrible thing for businesses and American innovation.

One thing we know for sure is that, if the FCC proceeds down the Title II path, years of litigation—and resulting uncertainty—will result. When all is said and done, a court of appeals may strike down the FCC's decision to regulate broadband under Title II, as the courts did on two prior occasions in sustaining challenges to the FCC's net neutrality rules. Such an outcome would be a setback for those who seek enforceable net neutrality rules.

Worse yet, the courts may uphold the FCC's decision to impose Title II on broadband providers but overturn its decision to forbear from the vast majority of Title II's requirements. Such a determination could have devastating consequences as the full brunt of Title II is thrust upon the Internet marketplace.

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[31] 47 U.S.C. § 230(b)(2).

[32] Steve Lohr, *In Net Neutrality Push, F.C.C. Is Expected to Propose Regulating Internet Service as a Utility,* N.Y. TIMES, Feb. 2, 2015, available at *http://nyti.ms/1wXgOoe* (noting that Chairman Wheeler may suggest imposing regulations on "companies that manage the backbone of the Internet").

[33] *See, e.g.,* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Docket No. FCC–02–77, 17 FCC Rcd 4798, ¶ 40 (2002) (noting the increasing difficulty in distinguishing between "transmission" and "information" services).

[34] VCXC Ex Parte, *Protecting and Promoting the Open Internet,* GN Docket No. 14–28 (Jan. 23, 2015), available at *http://apps.fcc.gov/ecfs/comment/view?id=60001010900.*

[35] *Id.*

On the other hand, Congressional action—such as the proposed legislation—has the ability to provide the protections net neutrality proponents want, while shielding the Internet from harmful regulatory overreach or prolonged regulatory uncertainty during the inevitable legal challenges. This approach would provide far more certainty for businesses and consumers because it would allow the Internet to flourish without the risk of being overturned in court.

Finally, the proposed legislation would not eliminate the FCC's ability to interpret and enforce the law in adjudications involving particular circumstances. Courts have upheld the FCC's ability to adopt new interpretations in adjudicatory proceedings,[36] and the FCC presumably could similarly enforce the proposed legislation through adjudication if necessary.

Question 2a. What opportunities would businesses and consumer groups have to weigh-in on the FCC's application of these rules going forward?

Answer. Because the legislation allows for complaints to be filed with the FCC, any enforcement or adjudicatory proceedings at the Commission would provide an opportunity for public input on how to interpret and apply the rules going forward.

Question 2b. How could any changes, however small, even be made to reflect the specific concerns of entrepreneurs or small businesses with the explicit prohibition on expanding Internet openness obligations included in Subsection (b) the draft bill?

Answer. No changes are necessary because the draft legislation will provide businesses and entrepreneurs the certainty they need to innovate and invest.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO PAUL MISENER

Question 1. Mr. Misener—Would the FCC or FTC be a more appropriate regulator of Amazon's privacy, data security, and data breach notification practices?

Answer. Amazon's guiding concern in navigating privacy issues is customer trust. We use our customer data to innovate and improve the customer experience. We strive to focus on privacy throughout our business, and uphold our promise to our customers through our publicly available Privacy Policy. The FTC already has enforcement authority over that promise to our customers through Section 5 of the Federal Trade Commission Act.

Question 2. To All Witnesses—While the FCC is in the process of ensuring net neutrality, some want the FCC to impose all of these obligations under the guise of ensuring consumer protection. Some argue that common carrier requirements on broadband providers should include almost most all of Title II, in addition to Sections 201, 202, and 208. Specifically, some activists have suggested the following parts of Title II must be applied to the broadband industry:

UNIVERSAL SERVICE
Sec. 214. [47 U.S.C. 214] Extension Of Lines
Sec. 225. [47 U.S.C. 225] Telecommunications Services for Hearing-Impaired and Speech-Impaired Individuals.
Sec. 254. [47 U.S.C. 254] Universal Service.
Sec. 255. [47 U.S.C. 255] Access by Persons With Disabilities.

CONSUMER PROTECTION
Sec. 217. [47 U.S.C. 217] Liability of Carrier for Acts and Omissions of Agents.
Sec. 222. [47 U.S.C. 222] Privacy Of Customer Information.
Sec. 230. [47 U.S.C. 230] Protection for Private Blocking and Screening of Offensive Material.
Sec. 258. [47 U.S.C. 258] Illegal Changes in Subscriber Carrier Selections.

COMPETITION
Sec. 224. [47 U.S.C. 224] Regulation of Pole Attachments.
Sec. 253. [47 U.S.C. 253] Removal of Barriers to Entry.
Sec. 251. [47 U.S.C. 251] Interconnection
Sec. 256. [47 U.S.C. 256] Coordination for Interconnectivity.
Sec. 257. [47 U.S.C. 257] Market Entry Barriers Proceeding.

Do you agree or disagree that these sections of Title II common carrier regulation are needed? If you agree, please explain why.

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[36] *Cassell* v. *FCC,* 154 F.3d 478, 486 (D.C. Cir. 1998) ("It is well settled that an agency 'is not precluded from announcing new principles in an adjudicative proceeding." (quotation omitted)).

Answer. At Amazon, we are focused on ensuring implementation of strong net neutrality rules for our customers. If full net neutrality protections—including a ban on paid prioritization, discrimination, and throttling, applied to fixed and wireless broadband, and at every point in the network—are pursued under Title II, only Sections 201, 202, and 208 are necessary. Congress may of course, create a new statute, or update existing statute to achieve these full net neutrality protections, as well.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BRIAN SCHATZ TO PAUL MISENER

Question. I believe that the FCC needs to have ongoing, flexible authority over broadband. I am concerned that the draft legislation does not preserve that type of authority. What changes can—or should—be made to the draft that would address this concern?

Answer. Amazon believes the FCC should be empowered to create adequate legal certainty and detail through effective enforcement tools and notice and comment rulemaking. As I outline in my testimony, statutes are necessarily less detailed than agency-written rules. Such details—including the factors that would be considered during formal complaint procedures—are essential for businesses and consumers to have the confidence to make informed choices about investments and purchases, and the FCC's ability to define these details should be preserved.

If the intent of the draft legislation is to create a statutory ceiling for obligations on Broadband Internet Service providers (BIAS), this can be accomplished without rescinding the FCC's authority to regulate below the ceiling. We believe that the FCC's Title II authority should be maintained to ensure the effectiveness of Internet openness, subject to any reasonable substantive ceiling on Internet openness obligations.

The draft legislation, at a minimum, should be amended (Subsection e) to ensure that the FCC retains its Title II tools, subject to a substantive ceiling on Internet openness obligations, such as included in Subsection (b)(1), which itself should be clarified to allow the FCC to provide, through notice and comment rulemaking, adequate legal detail and certainty to consumers and businesses.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO PAUL MISENER

Question 1. One aspect largely absent from the debate on Chairman Thune's proposed neutrality legislation is the issue of interconnection. Interconnection is not covered under current legislation. Do you believe that interconnection points can be choke points to the Internet highway?

Answer. A consumer will not care where in her service provider's network any interference with net neutrality occurs, only whether it occurs. Providers should not be allowed to accomplish blocking, throttling, or paid prioritization further upstream in the network either, as the Discussion Draft bill appears to address only the network facilities closer to consumers, such as the "last mile."

Question 1a. Under the proposed legislation, how would interconnection issues be addressed?

Answer. The Discussion Draft bill is lacks any clarity on interconnection. The proposed legislation should be modified to ensure that the Internet openness of net neutrality is maintained and effective at every point in the network.

Question 2. Students, health care providers, and entrepreneurs have benefited greatly from innovative online platforms and the free flow of information. I fear that, without strong net neutrality rules, a "tiered Internet" could emerge, creating barriers for innovators and small businesses.

In the absence of strong anti-discrimination protections provided under Title II, and without Section 706 authority, what tools does the FCC have to prevent discriminatory practices and differential treatment we all agree should be prohibited?

Answer. If the FCC's authority under Title II and Section 706 to prevent discriminatory practices and differential treatment by Broadband Internet Access Service Providers (BIASP) is eliminated, new statutory obligations will have to be codified that ensure strong protections against paid prioritization, discrimination, and differential treatment by BIASP.

Question 3. As currently drafted, what protections does the legislation provide that broadband reclassification would not?

Answer. As currently drafted, the proposed legislation embodies several of the same principles that would be enforced through broadband reclassification; however,

some of the exemptions included in the Discussion Draft could undermine the effectiveness of those principles. For example, the "specialized services" exemption could create a loophole that would allow the prioritization of content and services from a BIASP's affiliate.

Question 4. Do you believe, as the draft legislation suggests, the FCC should not be able to claim any authority under Section 706 of the Telecommunications Act of 1996?

Answer. Amazon is focused on strong, enforceable net neutrality protections, and we have concluded that reinstating three provisions of Title II –all or parts of Sections 201, 202, and 208—plus relying on other existing statute, including Section 706, would be adequate to maintain net neutrality without creating unintended consequences.

The draft legislation creates a statutory ceiling on BIAS obligations, and it is not necessary to rescind the FCC's authority under Title II of the Communications Act, as in Subsection (e). Summarily blocking the FCC's use of existing statutory enforcement authority could leave the agency helpless to address improper behaviors well within its authority under the ceiling created in Subsection (b), and would leave consumers and businesses in the Internet ecosystem without adequate certainty about the FCC's enforcement powers. With so much at stake for consumers and businesses, this very real possibility should not be left to chance.

Question 5. I am proud to have a leading company like Amazon provide more than 3,000 jobs in my home state. Indeed, Internet companies like Amazon that benefit from a free and open Internet drive innovation and strengthen local economies in states across the country. Can you describe how net neutrality has allowed your business to thrive and what that means for growth and future employment?

Answer. At Amazon, our consistent business practice is to start with customers and work backwards. That is, we begin projects by determining what customers want and how we can innovate for them. Here, in the context of net neutrality public policy, we have done the same: we take our position from our customers'—consumers'—point of view.

Net neutrality is core to the customer's experience, and the customer will know if their net neutrality has been taken from them. The customer experience drives what we call at Amazon the "Flywheel". By creating a great customer experience, we drive more traffic to our properties. This allows us to increase the number of sellers and selection while bringing down prices, which creates a better customer experience, and enables the Flywheel to expand. It is a virtuous cycle that enables Amazon to invest in great products and services for our customers in businesses that we have such as Audible.

Question 6. Amazon has a long-standing history in support of net neutrality principles. Can you describe what principles your company believes need to be in place to achieve true net neutrality?

Answer. At Amazon, we are customer obsessed, and focused on results that will preserve the customer experience. We have long supported strong, enforceable rules to protect an open Internet; and, would like to see a path forward that achieves this. True net neutrality includes a ban on paid prioritization, blocking, and discrimination, applied to both mobile and fixed broadband, and to every point in the network, including at interconnection.

Question 6a. Does the Chairman's draft legislation cover those principles?

Answer. The Chairman's draft covers the principles of a ban on paid prioritization, blocking, and discrimination, and applies to both fixed and wireless broadband. The draft lacks clarity on the application of the principles to interconnection, and contains exemptions that may undermine the strength of these principles.

Question 6b. What changes would you recommend to the draft legislation?

Answer. First, in Subsection (d), while requiring "Consumer Choice," the bill would explicitly exempt "specialized services" from that requirement. This could create a huge loophole if, for example, specialized services involved the prioritization of some content and services, just like proscribed "paid prioritization," the only difference being that the content or service prioritized came from the broadband Internet access service provider itself, instead of a third party.

Furthermore, if the purpose of Subsection (d) is to ensure that consumers are allowed to choose among various, non-discriminatory plans based on bit rates or monthly data volumes, then there are ways to say that more clearly: Something along the lines of, "Nothing in this section should be construed to limit the ability of consumers to choose to pay for higher or lower data rates or volumes of broadband Internet access service based on their individual needs." We agree that it makes no sense to require an infrequent e-mail user to pay the same for Internet

access as a 24/7 gamer and, if such a clarification is needed, we would support it. But the current language of Subsection (d) does not accomplish this goal and introduces the other shortcomings that we have noted.

Second, in Subsection (f), the Discussion Draft bill would permit broadband Internet access providers to engage in "reasonable network management." This is a standard caveat to net neutrality, and we support it, at least in theory. But particularly with the inclusion of wireless broadband in the ambit of net neutrality protections, any claim of reasonable network management should be viewed very suspiciously if, in practice, it undermines prohibitions of blocking, throttling, paid prioritization, etc., or if it tends to favor content or services offered by the broadband provider itself.

Third, the Discussion Draft bill is unclear or silent on an important point of clarification: Which parts of a broadband Internet access service provider's network are covered by the net neutrality protections? Providers should not be allowed to accomplish blocking, throttling, paid prioritization, etc., further upstream in the network, just because the bill could be construed to address only the network facilities closer to consumers, such as the "last mile." If, by this possible omission and limitation of FCC powers, net neutrality were made ineffective by allowing the otherwise prohibited behaviors to occur further upstream, consumers would rightly judge their net neutrality to have been taken away.

In addition, the Discussion Draft should be modified to provide adequate legal detail and certainty to consumers and businesses in the Internet ecosystem. Although the Discussion Draft would require, in Subsection (a)(5), broadband Internet providers to disclose their practices, these disclosures would merely reflect what providers currently are doing, not what they would be legally permitted to do.

We believe that the FCC should be empowered to create adequate legal certainty and detail through effective enforcement tools and notice and comment rulemaking. But the Discussion Draft bill would limit the FCC in several ways. Subsection (b) says that the FCC "may not expand . . . Internet openness obligations . . . beyond the obligations established" in the bill "whether by rulemaking or otherwise." The word "expand" is vague, but if the intention here is to establish a ceiling for these obligations, *i.e.,* a cap on the FCC's authority respecting the substantive provisions of the bill, this is Congress's prerogative and reasonable expectation. However, with such a ceiling in place, it is not necessary to rescind the FCC's authority under Title II of the Communications Act, as in Subsection (e). Summarily blocking the FCC's use of existing statutory enforcement authority could leave the agency helpless to address improper behaviors well within its authority under the ceiling created in Subsection (b), and would leave consumers and businesses in the Internet ecosystem without adequate certainty about the FCC's enforcement powers. We believe that the FCC's Title II authority should be maintained to ensure the effectiveness of Internet openness, subject to any reasonable substantive ceiling on Internet openness obligations.

Also, in part because Subsection (b) directs the FCC to establish "formal complaint procedures" and "enforce the obligations [of the bill] though adjudication of complaints," this provision could be interpreted to bar the FCC from notice and comment rulemaking in this area. We believe it would be a mistake to prohibit the Commission from providing, through notice and comment rulemaking, adequate legal detail and certainty to consumers and businesses. Outlining the parameters around permissible forms of "reasonable network management" is but one example of where the FCC could provide important detail to consumers and businesses through notice and comment rulemaking.

Thus, at a minimum, Subsection (e) should be amended to ensure that the FCC retains its Title II tools, subject to a substantive ceiling on Internet openness obligations, such as included in Subsection (b)(1), which itself should be clarified to allow the FCC to provide, through notice and comment rulemaking, adequate legal detail and certainty to consumers and businesses.

Question 7. Amazon has proven to be a successful and innovative company. It has most recently found great success in providing over-the-top online video service. As consumers increase their use of online video, do you agree that the interconnection point is a choke point between an ISP and a consumer?

Answer. Without strong enforceable rules, interconnection can certainly become a choke point, regardless of what traffic is being routed through the network. A bit is a bit, and consumers should not have their net neutrality thwarted at any point in the network whether they are streaming video or browsing a retail site.

Question 7a. Does it concern you that the proposed legislation would not provide Amazon or others with interconnection protections, and could prevent the FCC from regulating in those areas?

Answer. Without strong enforceable rules that apply to every point in the network, true net neutrality cannot be achieved. The draft legislation should be modified to clarify this point.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. TOM UDALL TO PAUL MISENER

Question. Mr. Misener, I think everyone agrees that any potential regulation touching the Internet should use a light approach. What then do you see as the best way for Congress to help ensure that there is meaningful competition, continued investment, and consumer choice across the Internet ecosystem?

Answer. Consumers certainly will be results-oriented in their assessment of what particular legal authority the United States Government uses to ensure that net neutrality is maintained: The authority will either work, or it won't. We believe that the FCC has ample existing statutory authority to maintain net neutrality, and we welcome Chairman Wheeler's attention to this issue and his efforts to use his statutorily-granted authority in a measured, focused way. We would not want discussions of new statutory authority to derail or delay Chairman Wheeler's work, but just as Mr. Wheeler recently noted that he would welcome additional statutory direction from Congress, we are also open to such legislation.

We have concluded that reinstating only a few provisions of Title II—particularly all or parts of Sections 201, 202, and 208—plus relying on other existing statute, including Section 706, would be adequate to maintain net neutrality without creating unintended consequences. But, of course, these approaches are within the confines of existing statutory authority. Congress has the power to set new policies for net neutrality, either entirely through a new statute, or through a mix of new and existing statutory authority.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOE MANCHIN TO PAUL MISENER

Question 1. During the hearing, I received conflicting information about how the Chairman's proposed legislation would impact Universal Service Fund (USF) broadband programs like the Connect America Fund (CAF) that help private companies make investments and expand their network into rural, underserved areas. Due to the importance of these programs to my state and the communities I represent, I am requesting a written explanation of the anticipated impacts this bill would have on USF programs from each of the witnesses, specifically:

Question 1a. What authority or authorities does the Federal Communications Commission currently rely on to operate and execute USF programs like the Connect America Fund?

Question 1b. Without either Section 706 of the Telecommunications Act of 1996 authority or Title II of the Communications Act of 1934 authority, as proposed in the draft legislation, under what authority, if any, could the FCC incentivize broadband deployment?

Question 1c. What would happen to the Connect America Fund and similar programs should this legislation pass in its current form?

Answer. Amazon does not have any expertise with the operation or execution of USF programs.

Question 2. One of the primary concerns I have about the proposal we are discussing today is the removal of all rulemaking authority. Businesses need certainty, and rulemaking allows businesses to understand how the general goals and standards Congress establishes in law—such as affordable and accessible Internet—will be specifically applied before they make investment decisions. The proposed bill removes all the transparency requirements included in rulemaking and replaces them with a new, retroactive, case-by-case rulemaking process that could be very difficult for small start-up businesses to understand. Without rulemaking, how would entrepreneurs understand how the FCC would apply the mandates of this bill to particular circumstances?

Answer. The Discussion Draft should be modified to provide adequate legal detail and certainty to consumers and businesses in the Internet ecosystem. Although the Discussion Draft would require, in Subsection (a)(5), broadband Internet providers

to disclose their practices, these disclosures would merely reflect what providers currently are doing, not what they would be legally permitted to do.

Like all businesses, Internet companies need confidence in the state of law and regulation in order to innovate and invest in products and services on behalf of their customers. They need to know, with a reasonable degree of certainty, whether a new product or service could be deployed without interference by broadband Internet access service providers. Certainty does not require legal certitude, but it does require confidence-inspiring transparency, predictability, stability, and fairness. Yet statutes are necessarily less detailed than agency-written rules. And such details—including the factors that would be considered during formal complaint procedures—are essential for businesses and consumers to have the confidence to make informed choices about investments and purchases.

We believe that the FCC should be empowered to create adequate legal certainty and detail through effective enforcement tools and notice and comment rulemaking.

Question 2a. What opportunities would businesses and consumer groups have to weigh-in on the FCC's application of these rules going forward?

Answer. As currently drafted, the Discussion Draft does not provide for notice and comment rulemaking or public comment. Businesses and consumer groups would have to rely on a case-by-case basis complaint system.

Question 2b. How could any changes, however small, even be made to reflect the specific concerns of entrepreneurs or small businesses with the explicit prohibition on expanding Internet openness obligations included in Subsection (b) the draft bill?

Answer. Subsection (b) says that the FCC "may not expand . . . Internet openness obligations . . . beyond the obligations established" in the bill "whether by rulemaking or otherwise." The word "expand" is vague, but if the intention here is to establish a ceiling for these obligations, *i.e.,* a cap on the FCC's authority respecting the substantive provisions of the bill, this is Congress's prerogative and reasonable expectation; we certainly don't support allowing an agency to act beyond its statutory authority, and would support a provision like this, if the bill went only so far.

However, with such a ceiling in place, it is not necessary to rescind the FCC's authority under Title II of the Communications Act, as in Subsection (e). Summarily blocking the FCC's use of existing statutory enforcement authority could leave the agency helpless to address improper behaviors well within its authority under the ceiling created in Subsection (b), and would leave consumers and businesses in the Internet ecosystem without adequate certainty about the FCC's enforcement powers. With so much at stake for consumers and businesses, this very real possibility should not be left to chance. We believe that the FCC's Title II authority should be maintained to ensure the effectiveness of Internet openness, subject to any reasonable substantive ceiling on Internet openness obligations.

At a minimum, Subsection (e) should be amended to ensure that the FCC retains its Title II tools, subject to a substantive ceiling on Internet openness obligations, such as included in Subsection (b)(1), which itself should be clarified to allow the FCC to provide, through notice and comment rulemaking, adequate legal detail and certainty to consumers and businesses.

Response to Written Questions Submitted by Hon. Deb Fischer to W. Tom Simmons

Question 1. Mr. Simmons and Mr. McDowell—can you please describe the impacts on a small cable operator in the state of Nebraska of having the FCC force heavy-handed Title II utility regulations. My understanding is the FCC currently has 1,000 active rules based on Title II, occupying nearly 700 pages in the Code of Federal Regulations and that the Progressive Policy Institute recently issued a report highlighting how Title II reclassification of the Internet would add about $15 billion in user fees to our economy, increasing annual levies on middle class families by $67 for wireline service and $72 for wireless broadband.

Answer. The regulatory burdens and costs associated with a Title II approach would have a significant and disproportionate impact on small-and medium-sized providers' ability to invest further in our broadband networks. The Federal Communications Commission's decision a decade ago to lightly regulate Internet service encouraged Midcontinent and other small providers to invest hundreds of millions of dollars in our networks to make those networks increasingly faster and more robust. In rural areas, those investments were risky, but we made them driven by the knowledge that we would not be limited in our ability to use that investment to create and develop the most compelling broadband service offerings possible, the type of service we believe all our customers deserve. Title II reclassification would harm

providers' ability to obtain the capital needed to invest and make obtaining that capital significantly more expensive. It could also open broadband service up to a number of Federal and state fees applied to telecommunications services, driving up the cost of broadband and making it more difficult for our subscribers to afford.

Question 2. To All Witnesses—While the FCC is in the process of ensuring net neutrality, some want the FCC to impose all of these obligations under the guise of ensuring consumer protection. Some argue that common carrier requirements on broadband providers should include almost most all of Title II, in addition to Sections 201, 202, and 208. Specifically, some activists have suggested the following parts of Title II must be applied to the broadband industry:

UNIVERSAL SERVICE
Sec. 214. [47 U.S.C. 214] Extension Of Lines
Sec. 225. [47 U.S.C. 225] Telecommunications Services for Hearing-Impaired and Speech-Impaired Individuals.
Sec. 254. [47 U.S.C. 254] Universal Service.
Sec. 255. [47 U.S.C. 255] Access by Persons With Disabilities.

CONSUMER PROTECTION
Sec. 217. [47 U.S.C. 217] Liability of Carrier for Acts and Omissions of Agents.
Sec. 222. [47 U.S.C. 222] Privacy Of Customer Information.
Sec. 230. [47 U.S.C. 230] Protection for Private Blocking and Screening of Offensive Material.
Sec. 258. [47 U.S.C. 258] Illegal Changes in Subscriber Carrier Selections.

COMPETITION
Sec. 224. [47 U.S.C. 224] Regulation of Pole Attachments.
Sec. 253. [47 U.S.C. 253] Removal of Barriers to Entry.
Sec. 251. [47 U.S.C. 251] Interconnection
Sec. 256. [47 U.S.C. 256] Coordination for Interconnectivity.
Sec. 257. [47 U.S.C. 257] Market Entry Barriers Proceeding.

Do you agree or disagree that these sections of Title II common carrier regulation are needed? If you agree, please explain why.

Answer. Generally, we disagree that these provisions should be applied to broadband service, although they should continue to apply to existing telecommunications carriers. Title II of the Communications Act was designed for the 1930s telephone monopoly era, and applying Title II regulations to today's broadband service would be highly disruptive and work against the government's policy goals of increasing broadband deployment and adoption. Importantly, however, while these considerations would support refraining from imposing the unnecessary and burdensome obligations and restrictions contained in Title II, there are a small number of provisions that happen to be codified in Title II and, far from imposing unnecessary restrictions or obligations, actually facilitate broadband investment and deployment goals. Section 224, which establishes a series of rights among different classes of carriers and non-carriers with respect to access to poles, conduits, and rights-of-way, and Section 230, which provides immunity from publisher-related liability for various classes of Internet intermediaries, including ISPs, would fall into this category.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BRIAN SCHATZ TO W. TOM SIMMONS

Question. I believe that the FCC needs to have ongoing, flexible authority over broadband. I am concerned that the draft legislation does not preserve that type of authority. What changes can—or should—be made to the draft that would address this concern?

Answer. Under the draft legislation, the FCC retains significant authority to interpret and enforce the net neutrality rules, and the draft does not deprive the FCC of any basis of authority it has relied upon to regulate broadband.

With regard to net neutrality, the draft legislation specifically targets impermissible discriminatory behaviors that have been identified as threats to the open Internet, and the FCC would have authority to interpret those rules, as well as to pursue violations of those rules based on its interpretation of the law.

With regard to future broadband regulations, the draft does not remove the basis for any authority the FCC has relied upon to regulate broadband. Where the FCC has extended regulations to apply to broadband service—for example, by extending universal service support to broadband, it has explicitly stated that such authority

exists in provisions of the Communications Act, and has not relied on Section 706 as a primary basis of authority.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO W. TOM SIMMONS

Question 1. One aspect largely absent from the debate on Chairman Thune's proposed neutrality legislation is the issue of interconnection. Interconnection is not covered under current legislation. Do you believe that interconnection points can be choke points to the Internet highway?

Question 1a. Under the proposed legislation, how would interconnection issues be addressed?

Answer. Interconnection arrangements have never been covered by open Internet regulations, and are not covered by the proposed net neutrality legislation, because they are not part of broadband Internet access service. However, the draft legislation would not alter the FCC's authority over interconnection agreements; it simply prevents the FCC from creating a new regulatory scheme of its own design.

I do not believe that the very few high-profile complaints of interconnection abuse are representative of the actual interconnection marketplace, which has developed organically over the years in the absence of regulation. The interconnection market is healthy and thriving, and will continue to evolve along with the rest of the Internet ecosystem.

Question 2. Students, health care providers, and entrepreneurs have benefited greatly from innovative online platforms and the free flow of information. I fear that, without strong net neutrality rules, a "tiered Internet" could emerge, creating barriers for innovators and small businesses.

In the absence of strong anti-discrimination protections provided under Title II, and without Section 706 authority, what tools does the FCC have to prevent discriminatory practices and differential treatment we all agree should be prohibited?

Answer. By prohibiting blocking, paid prioritization and throttling, the draft specifically and strongly targets and prohibits impermissible discriminatory behaviors that have been identified as threats to the open Internet. Rather than relying on a nebulous non-discrimination standard, the draft provides clear rules that the FCC may interpret through case-by-case adjudication.

Question 3. As currently drafted, what protections does the legislation provide that broadband reclassification would not?

Answer. The draft legislation provides the substantial protection of legal and regulatory certainty for all parties involved. In the absence of legislation, it is clear that regardless of how the FCC rules, that decision will be challenged in court. While this third challenge to the FCC's net neutrality authority proceeds in the courts, broadband providers seeking to formulate business strategy, edge and content providers developing their business plans for new product and services, and consumers will be faced with several years of regulatory uncertainty, with no real prediction of, or ability to rely on, the outcome of the litigation.

Enacting legislation would avoid the need for yet another protracted litigation, set clear standards for ISP behavior, and establish unassailable authority for the FCC to prevent any anticompetitive behavior by ISPs that violates the rules—all without imposing monopoly telephone regulations on broadband Internet access service.

Question 4. Do you believe, as the draft legislation suggests, the FCC should not be able to claim any authority under Section 706 of the Telecommunications Act of 1996?

Answer. No. The D.C. Circuit upheld the FCC's use of Section 706 as a basis of authority for implementing net neutrality rules that it believed would spur broadband deployment, and I believe that the FCC could rely on Section 706 to formulate net neutrality rules.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOE MANCHIN TO W. TOM SIMMONS

Question 1. During the hearing, I received conflicting information about how the Chairman's proposed legislation would impact Universal Service Fund (USF) broadband programs like the Connect America Fund (CAF) that help private companies make investments and expand their network into rural, underserved areas. Due to the importance of these programs to my state and the communities I represent, I am requesting a written explanation of the anticipated impacts this bill would have on USF programs from each of the witnesses, specifically:

Question 1a. What authority or authorities does the Federal Communications Commission currently rely on to operate and execute USF programs like the Connect America Fund?

Answer. The FCC relies on section 254 of the Communications Act to operate and execute its USF programs, including in its 2011 decision to extend universal service support to broadband service. The Commission mentioned Section 706 as a secondary source of authority for extending USF support to broadband, but made clear that it believed that section 254 was sufficient and that it was only "relying on section 706(b) as an alternative basis to section 254 to the extent necessary."

Question 1b. Without either Section 706 of the Telecommunications Act of 1996 authority or Title II of the Communications Act of 1934 authority, as proposed in the draft legislation, under what authority, if any, could the FCC incentivize broadband deployment?

Answer. The draft legislation provides only that broadband service may not be classified as a Title II service; it does not deprive the FCC of all Title II authority. The Commission could continue to exercise all existing authority under Title II as it always has, authority it has exercised in the name of incentivizing broadband deployment.

Question 1c. What would happen to the Connect America Fund and similar programs should this legislation pass in its current form?

Answer. The draft legislation would have no effect on those programs.

Question 2. One of the primary concerns I have about the proposal we are discussing today is the removal of all rulemaking authority. Businesses need certainty, and rulemaking allows businesses to understand how the general goals and standards Congress establishes in law—such as affordable and accessible Internet—will be specifically applied before they make investment decisions. The proposed bill removes all the transparency requirements included in rulemaking and replaces them with a new, retroactive, case-by-case rulemaking process that could be very difficult for small start-up businesses to understand. Without rulemaking, how would entrepreneurs understand how the FCC would apply the mandates of this bill to particular circumstances?

Question 2a. What opportunities would businesses and consumer groups have to weigh-in on the FCC's application of these rules going forward?

Answer. The FCC itself has endorsed a case-by-case approach to adjudicating violations of open Internet rules as the best way to provide more detailed rulings, explaining that "the novelty of Internet access and traffic management questions, the complex nature of the Internet, and a general policy of restraint in setting policy for Internet access service providers weigh in favor of a case-by-case approach." In 2010, when it adopted a case-by-case approach to enforcement, the FCC noted that the proposal had met with almost universal support among commenters. And unlike in the Comcast-BitTorrent matter, the draft legislation does not raise any concerns of vagueness, because it provides generally applicable bright-line *ex ante* rules that will facilitate the swift adjudication of allegations and enable those making investment decisions to understand easily what types of ISP behavior is permissible. To the extent that private entities did not agree with the FCC's interpretation of the rules, they could meet with the Commission to discuss their concerns or seek a declaratory ruling on the permissibility of certain practices under the rules.

Question 2b. How could any changes, however small, even be made to reflect the specific concerns of entrepreneurs or small businesses with the explicit prohibition on expanding Internet openness obligations included in Subsection (b) the draft bill?

Answer. The draft legislation sets forth *Congress's* expectations of how ISPs should behave and bans behavior that Congress believes would threaten an open Internet, while still allowing ISPs to innovate. The FCC would have full power to regulate ISPs that are violating the prohibitions Congress has established. It appropriately would not allow the FCC to substitute its own judgment—or that of any private entity—for that of Congress. As noted above, to the extent that private entities did not agree with the FCC's interpretation of the rules, they could meet with the Commission to discuss their concerns or seek a declaratory ruling on the permissibility of certain practices under the rules.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO NICOL E. TURNER-LEE, PH.D.

Question 1. To All Witnesses—While the FCC is in the process of ensuring net neutrality, some want the FCC to impose all of these obligations under the guise of ensuring consumer protection. Some argue that common carrier requirements on

broadband providers should include almost most all of Title II, in addition to Sections 201, 202, and 208. Specifically, some activists have suggested the following parts of Title II must be applied to the broadband industry:

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Sec. 256. [47 U.S.C. 256] Coordination for Interconnectivity.
Sec. 257. [47 U.S.C. 257] Market Entry Barriers Proceeding.

Do you agree or disagree that these sections of Title II common carrier regulation are needed? If you agree, please explain why.

Answer. I disagree that Title II is needed. The Internet has developed into the transformative medium it is today without the application of any of these provisions to broadband Internet access. Indeed, MMTC believes that the Internet's astounding rise over the past two decades is directly attributable to the light-touch regulatory approach taken by the FCC to broadband.[1]

Access to the Internet has provided so many great opportunities for Americans across the board. The Internet in America has become the marvel of the world as consumers benefit from telehealth, educational endeavors, civic engagement, and free speech opportunities that have empowered their lives and provided myriad opportunities to achieve and grow. Today's competitive broadband marketplace works well and has helped ensure those opportunities continue to be available to those who need it most.

The reason the Internet has become so dynamic and powerful in our lives is due to the decades-old bipartisan approach begun under President Clinton in which the government made the wise decision to allow the Internet to proliferate, innovators to create and consumers to benefit. It is this consumer-oriented and investment-focused approach that has brought us today's Internet.

A high quality broadband connection provides essential resources and tools for more vulnerable populations that include the poor, people of color, people with disabilities, those without a high school education and seniors. The Internet and Internet-enabled technologies, applications and services make it possible for these groups to leverage data, voice, video and social media to solve chronic and persistent problems. We need the Internet to be the aspiration for these communities, and avoid a collision course that is mired by years of legal and political disputes.

As technology advances and brings various new apps and online services that improve quality of life for so many people, it's important that regulators do their best to make these services available to as many people as people. I do not believe that Title II is the best regulation to ensure this happens.

MMTC, and our partnership of leading civil rights organizations, support the values of the open Internet, particularly those expressed by the Administration. The focus as we see it should be on how to close the digital divide and how to bring advanced, high-speed broadband to all Americans. We believe that the enactment of Title II regulations will exacerbate the problem that we all should be attempting to solve.

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[1] *See* David Honig, Esq. & Nicol Turner-Lee, Ph.D., MMTC, *Refocusing Broadband Policy: The New Opportunity Agenda for People of C*olor 7–8 (Nov. 21, 2013) ("MMTC White Paper"); Comments of the National Minority Organizations, GN Docket Nos. 14–28 and 10–127 (July 18, 2014).

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BRIAN SCHATZ TO NICOL E. TURNER-LEE, PH.D.

Question. I believe that the FCC needs to have ongoing, flexible authority over broadband. I am concerned that the draft legislation does not preserve that type of authority. What changes can—or should—be made to the draft that would address this concern?

Answer. The Multicultural Media, Telecom and Internet Council ("MMTC") urges Congress to preserve the Federal Communications Commission's Section 706 authority to regulate advanced communications capabilities, including broadband. The FCC is the expert agency; as such, the Commission regularly examines the state of the industry and creates benchmarks for our current and future success. The Commission should retain the authority to set standards to regulate the broadband industry in a flexible and responsive manner, and institute the appropriate consumer enforcement. Specifically, the legislation should set forth the appropriate statutes that support open Internet rules that can be enforced through Section 706 authority. This authority to regulate broadband will impact the Commission's ability to prohibit redlining, protect universal service reform, and ensure a robust public safety network.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO NICOL E. TURNER-LEE, PH.D.

Question 1. One aspect largely absent from the debate on Chairman Thune's proposed net neutrality legislation is the issue of interconnection. Interconnection is not covered under current legislation.

Answer. The fact that the bill does not specifically mention interconnection is not surprising or troubling. Policymakers have long viewed interconnection issues as fundamentally distinct from regulatory initiatives aimed at promoting Internet openness—which have always focused on the mass-market, retail broadband service offered to *end users,* not on the longstanding, commercial traffic-exchange relationships among network providers upstream. The *2010 Open Internet Order* expressly excluded interconnection from the scope of its rules, and the NPRM proposes to maintain that approach going forward. FCC Chairman Wheeler likewise has expressed the view on numerous occasions that interconnection is not the same issue as net neutrality and should be considered separately. President Obama's statement also signaled a preference for addressing interconnection by requiring additional disclosures and network transparency, and I believe that the draft bill appears to follow this same approach.

Question 1a. Do you believe that interconnection points can be choke points to the Internet highway?

Answer. Yes, there can be congestion at interconnection points, but it is highly unlikely that they could be used as choke points to the Internet highway. It is my understanding that network congestion can be caused by either the ISP or the edge content provider that decides how and when it sends traffic to the interconnection points. The FCC record establishes that those who want to put content online have more ways to get that content to end users than ever before. There are multiple routes onto the major ISPs' networks, so anyone can get their content delivered to an ISP's customers without any direct commercial relationship with that ISP. And larger Internet content providers that do want direct connectivity now appear to be arranging for such connections.[1] In addition, Internet interconnection points have always occurred through non-regulated, commercial arrangements. This approach has allowed the Internet to grow rapidly and support increasing access speeds. The competitive marketplace for interconnection—whether via backbone transit providers, content delivery networks and direct peering arrangements—has resulted in the rapid decline in the cost of Internet transit which has, in turn, enabled high-bit-rate applications, such as streaming video.

Question 1b. Under the proposed legislation, how would interconnection issues be addressed?

Answer. As explained above, I read the bill as correctly declining to impose affirmative restrictions on interconnection. The FCC could also adopt disclosure requirements relating to interconnection from both ISPs and content providers.

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[1] *See e.g.,* Edward Wyatt and Noam Cohen, Comcast and Netflix Reach Deal on Service, *The New York Times* (Feb. 23, 2014), available at *http://www.nytimes.com/2014/02/24/business/media/comcast-and-netflix-reach-a-streaming-agreement.html?_r=0* (last visited Feb. 4, 2015).

Question 2. Students, health care providers, and entrepreneurs have benefited greatly from innovative online platforms and the free flow of information. I fear that, without strong net neutrality rules, a "tiered Internet" could emerge, creating barriers for innovators and small businesses.

Answer. All of these segments mentioned, and many more, have exponentially benefitted from broadband and the platforms that private investment and build out have enabled. It is apparent that clear rules on open Internet are required, but they also need to be flexible enough to accommodate new businesses models that may help low-income communities realize the relevance of broadband services and increase adoption. For example, MMTC, along with a host of other civil rights organizations, have advocated against "paid prioritization" if it results in a "tiered Internet." However, MMTC has also worked with companies, like T-Mobile, to increase service offerings for low-income consumers that might make it more attractive—and less expensive—for their low-income customers to adopt the technology.[2] Further, it is unclear how Title II rules will impact small businesses, as the Commission has not undertaken sufficient small business economic impact studies. For example, the Wireless Internet Service Providers Association (WISPA) recently reiterated its concern over deficiencies in the FCC's handling of its Regulatory Flexibility Act requirements and the resulting lack of economic impact analysis for open Internet regulations on small businesses, stating, "the significant economic impact of any new open Internet regulations has not been given full, fair and appropriate consideration by the Commission."[3]

Question 2a. In the absence of strong anti-discrimination protections provided under Title II, and without Section 706 authority, what tools does the FCC have to prevent discriminatory practices and differential treatment we all agree should be prohibited?

Answer. MMTC has strongly advocated for the use of Section 706 authority with a Title VII enforcement mechanism, modeled after the Civil Rights Act, to ensure an open Internet. MMTC has argued that these policy tools, coupled with a presumption against paid prioritization, and a strong enforcement program, will facilitate the Commission's adoption of *smart net neutrality* rules that meet the goals of transparency and equity, while fostering broadband adoption and informed use. In our July filing with the FCC, MMTC, in partnership with 45 national civil rights organizations ("collectively, National Minority Organizations"), proposed a straightforward approach exercising Section 706 authority that included:[4]

- The immediate reinstatement of no-blocking rules to protect consumers.
- The creation of a new rule barring commercially unreasonable actions, while affording participants in the broadband economy, particularly minority entrepreneurs, the opportunity to enter into new types of reasonable commercial arrangements and, through monitoring by the FCC's Office of Communications Business Opportunities (OCBO), ensuring that minority entrepreneurs are never overlooked by carriers seeking to develop these new commercial arrangements.
- The establishment of a rebuttable presumption against paid prioritization that protects against "fast lanes" and any corresponding degradation of other content, while ensuring that such presumption can be overcome by business models that sufficiently protect consumers and have the potential to benefit consumer welfare (*e.g.,* telemedicine applications). Any prioritized service that overcomes the presumption would remain subject to enforcement, and consumers would be able to obtain rapid relief by working with the Ombudsperson and/or through the complaint process based on Title VII of the 1964 Civil Rights Act, discussed in more detail at the end of this response.
- The need to underscore the need for transparency. Enforceable disclosure requirements are the key to consumer protection online.
- Section 706 can also be used to punish bad actors, especially those engaged in blocking, as the D.C. Circuit Court confirmed in *Verizon* v. *FCC,* the Commission has the authority to do.

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[2] *See e.g.,* Statement of David Honig, President and CEO, Minority Media and Telecommunications Council, RE: T-Mobile's Music Freedom Program (Aug. 27, 2014), available at *http://mmtconline.org/wp-content/uploads/2014/08/MMTC-Statement-TMobile-Music-Freedom-082714.pdf* (last visited Feb. 4, 2015).

[3] *See* Wireless Internet Service Providers Association, Ex Parte Presentation, GN Docket No. 14–28 (Feb. 3, 2015).

[4] *See* Comments of the National Minority Organizations, GN Docket Nos. 14–28 and 10–127 (July 18, 2014).

MMTC has also proposed that Section 706 look to stronger enforcement mechanisms to effectively resolve consumer complaints. Drawing from the U.S. Equal Employment Opportunity Commission (EEOC), Title VII of the Civil Rights Act of 1964 ("Title VII") could be imported into the FCC's Internet regulatory process under Section 706 of the Telecommunications Act of 1996. The EEOC's complaint process serves a vital role in resolving most employment discrimination complaints before they reach the court system. By encouraging voluntary mediation and informal settlement, the EEOC reduces the strain on judiciary while promoting swift resolution of discrimination claims. At the same time, the EEOC retain the ability to investigate and pursue legal action against employers that have violated Title VII. If no action is taken, individuals can pursue their legal claims privately through civil law suits. In doing so, the EEOC complaint process acts as a first line of defense against Title VII violations, guaranteeing that individuals will have their complaints heard by the EEOC or will be free to proceed on their own.

In the same way, this process, if adapted to open Internet enforcement, could be the first line of defense for consumers who believe they are aggrieved by an apparent violation of Internet openness. The Title VII framework would provide the FCC with a flexible and enforceable legal framework, a clearly established set of factors and guidance, and mechanism to allow the FCC to evaluate challenged practices on a case-by-case affordably, efficiently and expeditiously. Such a procedure should help alleviate any misimpression that Section 706 is insufficiently muscular to preserve Internet openness, while at the same time building consumer confidence in the FCC's stewardship of the open Internet.[5]

Instead of relying on a more formal complaint process under Section 208, the Title VII model would allow a complaint to provide the Commission with enough information to make out a prima facie case of specific or systemic harm, allowing the Commission to conduct an initial screening and, if the Commission's staff issues a non-precedential finding of probable cause, the agency may institute expedited enforcement or mediation. This model would provide consumers with an efficient, affordable and expedited means of pursuing alleged rule violations and other claims against providers.[6]

Question 3. As currently drafted, what protections does the legislation provide that broadband reclassification would not?

Answer. The legislation would significantly establish an outright ban on paid prioritization—one that the FCC likely could not adopt under Title II of the Communications Act. According to several experts, service differentiation will not be entirely banned under Title II. Sections 201 and 202 of the Communications Act—the two provisions of Title II that some have cited as support for rules addressing paid prioritization—each require the FCC to engage in a highly fact-specific, contextual analysis of whether particular conduct is "just and reasonable," and thus could not be used to adopt the sort of categorical ban on paid prioritization appearing in the legislation.

Question 4. Do you believe, as the draft legislation suggests, the FCC should not be able to claim any authority under Section 706 of the Telecommunications Act of 1996?

Answer. No. The FCC is the expert agency and, as such, should be able to exercise flexible authority that is responsive to our changing information needs. We believe that there should be movement towards a legislative compromise that preserves FCC's Section 706 Authority to ensure the implementation and enforcement of net neutrality rules.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOE MANCHIN TO NICOL E. TURNER-LEE, PH.D.

Question 1. During the hearing, I received conflicting information about how the Chairman's proposed legislation would impact Universal Service Fund (USF) broadband programs like the Connect America Fund (CAF) that help private companies make investments and expand their network into rural, underserved areas. Due to the importance of these programs to my state and the communities I rep-

[5] *See* FCC Filing Dockets 14–28 and 10–27, "Application of the EEOC Complaint Process to 1996 Telecommunications Act Section 706 Complaints Regarding the Open Internet," September 18, 2014.

[6] *See* FCC Filing Dockets 14–28 and 10–27, "Application of the EEOC Complaint Process to 1996 Telecommunications Act Section 706 Complaints Regarding the Open Internet," September 18, 2014.

resent, I am requesting a written explanation of the anticipated impacts this bill would have on USF programs from each of the witnesses, specifically:

Question 1a. What authority or authorities does the Federal Communications Commission currently rely on to operate and execute USF programs like the Connect America Fund?

Answer. The FCC's USF and CAF programs principally rely on Section 254 of the Communications Act, which governs contributions to and disbursements from these programs, and Section 214 of the Act, which establishes eligibility criteria for carriers seeking support.

Question 1b. Without either Section 706 of the Telecommunications Act of 1996 authority or Title II of the Communications Act of 1934 authority, as proposed in the draft legislation, under what authority, if any, could the FCC incentivize broadband deployment?

Answer. The legislation would not change the status quo regarding the FCC's USF and CAF programs. Those programs today play a vital role in promoting broadband deployment—and do so *without* classification of broadband Internet access services as a Title II service. The obligation of telecommunications carriers to contribute to those programs, and the ability of those programs to support broadband deployment, would remain the same.

Question 1c. What would happen to the Connect America Fund and similar programs should this legislation pass in its current form?

Answer. I believe that nothing will happen to these programs if the legislation passed. As noted above, since the CAF was established, the program has been successful at promoting broadband deployment, and all the while broadband Internet access service has been classified as an information service. The legislation would leave that current classification in place, and thus would not affect CAF support going forward.

Question 2. One of the primary concerns I have about the proposal we are discussing today is the removal of all rulemaking authority. Businesses need certainty, and rulemaking allows businesses to understand how the general goals and standards Congress establishes in law—such as affordable and accessible Internet—will be specifically applied before they make investment decisions. The proposed bill removes all the transparency requirements included in rulemaking and replaces them with a new, retroactive, case-by-case rulemaking process that could be very difficult for small start-up businesses to understand. Without rulemaking, how would entrepreneurs understand how the FCC would apply the mandates of this bill to particular circumstances?

Answer. The D.C. Circuit Court made clear in *Verizon* v. *FCC* that "[S]ection 706 of the Telecommunications Act . . . furnishes the Commission with the requisite affirmative authority to adopt [open Internet] regulations." In 2012, the D.C. Circuit Court unanimously upheld the transparency rule as a valid exercise of the FCC's authority under Section 706. The D.C. Circuit Court also made clear that Section 706 would support the adoption of appropriately tailored rules prohibiting blocking of online content and requiring "commercial reasonableness" in business relationships between ISPs and edge providers. The "commercial reasonableness" standard can be likened to core Title II standards requiring just and reasonable terms and conditions, and prohibiting unreasonable discrimination without the substantial burdens and uncertainty created by common carrier regulations. We should be following the D.C. Circuit Court's roadmap for new open Internet rules under Section 706, whereas the FCC can preserve the flexibility needed for regulating Internet access without needlessly creating legal risk and uncertainty.

Question 2a. What opportunities would businesses and consumer groups have to weigh-in on the FCC's application of these rules going forward?

Answer. Businesses and consumer groups would have the opportunity to participate in any rulemaking proceeding that the FCC undertakes to adopt rules implementing the statutory requirements. In such a proceeding, the FCC likely would need to develop a clear understanding of certain concepts in the legislation (*e.g.,* what constitutes "blocking," what kinds of "network management" are "reasonable," etc.), and businesses and consumers groups would be able to share their insights on those matters. Moreover, businesses and consumer groups could weigh in on any future petitions seeking declaratory rulings or other guidance under the legislation. Such parties might also have the opportunity to provide input on adjudicatory proceedings, to the extent the FCC opens aspects of those proceedings to public comment.

Question 2b. How could any changes, however small, even be made to reflect the specific concerns of entrepreneurs or small businesses with the explicit prohibition on expanding Internet openness obligations included in Subsection (b) the draft bill?

Answer. Even if the FCC cannot *impose* substantive restrictions beyond those in subsection (b) of the draft bill, it still would be accorded deference in *interpreting* the restrictions in the legislation itself. And as the FCC considers how to interpret aspects of the legislation (*e.g.,* the meaning of "blocking" and "reasonable network management"), it will be obligated to consider the input of entrepreneurs, small businesses, consumer groups, and others who submit their views to the agency.

○