TITLE II IN REGULATORY AND ECONOMIC CONTEXT: WHY THE FCC'S RECENT “NET NEUTRALITY” MOVES WILL HARM, NOT HELP, AMERICA’S INTERNET FUTURE

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Introduction

The Internet is important. Therefore, the government must regulate it.¹ This is the argument put forth by the net neutrality movement,² whose proponents have persistently lobbied the FCC to impose categorical limitations on broadband providers’ business practices. Net neutrality advocates fear broadband providers’ theoretical ability to act as gatekeepers³ between their customers and edge providers,⁴ favoring some of these providers’ content—or their own—over others’. To that end, net neutrality advocates promote policies

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¹ See, e.g., Communicators with Michael Powell, C-SPAN (Dec. 18, 2015), https://www.c-span.org/video/?401727-1/communicators-michael-powell (6:44-7:15) (“Look, I think what’s happened unfortunately and a lot of lazy thinking is common carriage or utility regulation is the same thing as saying something’s important and indispensable. It’s really important to me, so why wouldn’t it be a utility?”).


³ Tim Wu, Network Neutrality, Broadband Discrimination, 2 J. TELECOMM. & HIGH TECH. L. 141, 148-49 (2003) (“[T]he operator is ultimately the gatekeeper of quality of service for a given user, because only the broadband operator is in a position to offer service guarantees that extend to the end-user’s computer (or network).”); Net Neutrality in the US: Now What?, V1 HART (Mar. 7, 2014), http://vihart.com/net-neutrality-in-the-us-now-what/.

⁴ Companies on the “edge” of the Internet, directly opposite consumers, who send data to and receive data from retail broadband customers via the Internet. Edge providers include entertainment companies like Netflix, blogs and news websites, as well as social media providers. See In re Preserving the Open Internet, 25 F.C.C.R. 17905 ¶ 4 n.2 (2010) [hereinafter 2010 Order].
limiting broadband providers’ ability to block, throttle, or prioritize certain content traveling along their networks.\(^5\)

The FCC tried to impose these and similar regulations on the broadband industry.\(^6\) The courts largely struck down these attempts, finding that such regulatory efforts exceeded the FCC's statutory authority as argued.\(^7\) Lately, though, the FCC's luck has changed.\(^8\) When the D.C. Circuit Court of Appeals recently upheld the FCC’s reclassification of residential and mobile broadband services, it upheld the FCC's ability to regulate broadband providers under Title II of the Telecommunications Act.\(^9\) Net neutrality advocates hailed the ruling as a “victory for the people of the Internet over special interests,”\(^10\) ensuring “the internet [sic] remains a platform for unparalleled innovation, free expression, and economic growth.”\(^11\) Opponents, meanwhile, vowed to appeal the ruling,\(^12\) fearing Title II regulation

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\(^7\) See generally Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014); Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010).


\(^9\) See 47 U.S.C. §§ 153(51) and (53), 201-276.


will stifle innovation and investment in American broadband. Legal experts believe that a successful appeal is unlikely, leaving congressional action as FCC opponents’ likely last resort for immediate regulatory reform.\(^\text{14}\)

Historically, the FCC’s longtime stance was that the best way to encourage broadband deployment was to apply a regulatory “light touch” that promoted competition and innovation.\(^\text{15}\) Indeed, in the absence of heavy-handed government regulation, American broadband demonstrated explosive growth,\(^\text{16}\) benefitting industry and consumers alike.\(^\text{17}\) Unfortunately, the FCC’s recent efforts change this trajectory. By adopting a regulatory framework largely designed to police monopoly railroad and telephone

\(^{13}\) Harris and Shields, supra note 12. Note, however, that on July 29, 2016, various groups filed multiple separate petitions with the D.C. Circuit Court of Appeals seeking en banc review. See Jon Brodkin, Broadband Industry Tries Again to Kill Net Neutrality and Title II, ARS TECHNICA (July 29, 2016), http://arstechnica.com/tech-policy/2016/07/broadband-industry-tries-again-to-kill-net-neutrality-and-title-ii/.


\(^{15}\) See generally 47 U.S.C. § 230(a)(4) (“The Internet and other interactive computer services have flourished, to the benefit of all Americans, with a minimum of government regulation.”) (emphasis added); 47 U.S.C. § 230(b)(2) (“It is the policy of the United States— to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.”) (emphasis added); 47 U.S.C. § 1302(a) (“The Commission . . . shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing . . . measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.”) (emphasis added); In re Inquiry Concerning High-Speed Access to Internet Over Cable and Other Facilities, 17 F.C.C.R. 4798 (2002) [hereinafter 2002 Cable Modem Deregulation]; In re Second Computer Inquiry, 77 F.C.C.2d 384 (1980) [hereinafter Computer II].

\(^{16}\) For example, 87% of Americans now use the Internet, compared to 14% in 1995. Internet Use Over Time, PEW RESEARCH CENTER, http://www.pewinternet.org/data-trend/internet-use/internet-use-over-time/.

networks, the FCC is putting the future of American broadband in peril. The Commission's categorical bans on broadband providers’ business practices will ultimately raise the cost of Internet service, prevent broadband providers from crafting innovative services for low-income and high-priority customers, and strain future broadband innovation and investment by creating an environment of regulatory uncertainty. Moreover, under its current regulatory regime, the FCC fails to recognize that the expanding market for broadband providers is increasingly, not decreasingly competitive, and that edge providers can act as gatekeepers too. In the end, the FCC’s recent regulatory moves will harm, not help, America’s Internet future.

I. The FCC’s Light Touch: Computer I through Brand X

When Congress wrote the original Communications Act in 1934, it hardly could have imagined, let alone regulated, the Internet. Understandably, then, when early computer networks arose in the middle of the twentieth century, the FCC struggled to classify them under its existing regulatory regime. The FCC’s First Computer Inquiry, otherwise known as Computer I, was its first attempt at doing so. Finding the market for

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19 See infra section IV-A.

20 See infra section IV-B-1.

21 See infra section IV-B-2.

22 See infra section IV-C-1.

23 See infra section IV-C-2.

24 See infra section IV-D.

25 That is, the Internet is a multisided market. With sufficient market power and incentives, either a broadband provider or an edge provider may theoretically act as a gatekeeper between a customer and her desired edge content. See infra section IV-E.
“data processing” over computer networks highly competitive, the FCC opted largely to refrain from regulation of these services in order to ensure continued industry investment and growth. The FCC established a regulatory boundary between these newer data processing services and traditional “message-switching” common carriers, whereby the former would be largely unregulated and the latter would retain its existing Title II regulatory burden. In the instances of “hybrid services” wherein a service offered elements of both data processing and traditional message-switching, the service would be regulated depending upon “the primary thrust of the service offered.”

Over time, however, this regulatory structure broke down due to the “confluence of communications and data processing” services offered by carriers. Consequently, the FCC took another bite at the apple with its Computer II proceedings. The result of this effort was another regulatory separation, this time between “basic services” and “enhanced services.” Basic services were defined as “the common carrier offering of transmission capacity for the movement of information,” such as a traditional telephone service. Enhanced services,

26 See In re Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities, Tentative Decision, 28 F.C.C.2d 291 at ¶¶ 20-22, 24 (1970) [hereinafter Computer I Tentative Decision] (“In view of all of the foregoing evidence of an effective competitive situation, we see no need to assert regulatory authority over data processing services whether or not such services employ communications facilities in order to link the terminals of the subscribers to centralized computers. We believe the market for these services will continue to burgeon and flourish best in the existing competitive environment.”) (emphasis added).

27 See id. at ¶¶ 28-29.


29 Id.; Computer I Tentative Decision at ¶¶ 39-42.

30 See Computer II at ¶ 2.

31 Id. at ¶ 5.

32 Id.

by contrast, were services available via common carrier transmission facilities whereby the service provider computationally processed the contents of a customer's communications during the course of transmission.\textsuperscript{34} The key difference in this definitional dichotomy, similar to that of the \textit{Computer I} era, was in the regulatory burden placed on each of the services. The FCC continued to regulate basic services under Title II, while leaving enhanced services largely unregulated.\textsuperscript{35} Similar to its conclusions in the \textit{Computer I} era, the FCC found this deregulatory approach the best way to ensure continued growth and innovation in the still-nascent computer networking industry.\textsuperscript{36}

Yet another regulated-unregulated dichotomy was crafted when Congress passed and then-President Bill Clinton signed into law the landmark Telecommunications Act of 1996.\textsuperscript{37} The main goal of this legislation was to deregulate the American telecommunications industry,\textsuperscript{38} with much of the debate focused on the issue of media cross-ownership.\textsuperscript{39} Perhaps the Act's most significant contribution to modern communications

\textsuperscript{34} 47 C.F.R. § 64.702(a) (“For the purpose of this subpart, the term enhanced service shall refer to services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information.”); \textit{Computer II} at ¶ 5.

\textsuperscript{35} 47 C.F.R. § 64.702(a) (“Enhanced services are not regulated under title II of the Act.”); \textit{Computer II} at ¶ 7.

\textsuperscript{36} \textit{Computer II} at ¶¶ 7, 100, 116-18 (“For computer vendors and entrepreneurs \textit{the momentum is away from basic communications services}, rather than toward it. As a result, the types of enhanced services they may provide is limited only by their entrepreneurial ingenuity and competitive market constraints. Services \textit{need not be artificially structured or limited so as to avoid transgressing a regulatory boundary.”} (emphasis added).


\textsuperscript{38} S. REP. NO. 104-23, at 1 (1995) (“The purposes of the bill are to revise the Communications Act of 1934 (the 1934 Act) to provide for a \textit{pro-competitive, de-regulatory national policy framework} designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by \textit{opening all telecommunications markets to competition}, and for other purposes.”) (emphasis added).

\textsuperscript{39} \textit{See id.} at 12, 35, 61-62; \textit{Presidential Statement on Signing the Telecommunications Act of 1996}, 32 \textit{WEEKLY COMP. PRES. DOC.} 218 (Feb. 8, 1996) (“In the world of the mass media, this Act seeks to remove unnecessary regulation and open the way for freer markets. I support that philosophy. At the same time, however, my Administration has opposed measures that would allow undue concentration in the mass media. I am very

In 2002, the FCC utilized this statutory framework when it opted to classify cable broadband service as an information service.\footnote{See \textit{2002 Cable Modem Deregulation} at ¶¶ 7, 38. \textit{The FCC later classified DSL as an information service in 2005, following the \textit{Brand X} decision. See Marguerite Reardon, \textit{FCC Changes DSL Classification}, C\textit{NET} (Dec. 11, 2005, 3:02PM), http://www.cnet.com/news/fcc-changes-dsl-classification/.}} In doing so, the FCC continued to recognize the important role of a regulatory light touch in fostering innovation and competition in the advanced communications market.\footnote{\textit{2002 Cable Modem Deregulation} at ¶¶ 4-5. (“[W]e seek to \textit{remove regulatory uncertainty} that in itself may discourage investment and innovation. And we consider how best to \textit{limit unnecessary and unduly burdensome regulatory costs.}”) (emphasis added).} Opponents challenged the classification, but the Supreme Court ultimately upheld\footnote{\textit{See Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.}, 545 U.S. 967, 974 (2005).} the FCC’s efforts via \textit{Chevron} administrative deference.\footnote{\textit{See Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.}, 545 U.S. 967, 974 (2005).}
The Court, largely adopting the FCC’s own reasoning, found that the proper classification of cable broadband depended upon customers’ perception of the service. Ultimately, the Court found the FCC’s conclusion—that customers perceived broadband access as an integrated, single service containing elements of both transmission and computation—to be a reasonable conclusion pursuant to the FCC’s statutorily-granted authority.

II. Net Neutrality Emerges: Tim Wu, Michael Powell, and the FCC's Regulatory Creep

As seen above, the FCC repeatedly revised its regulatory regime throughout its various attempts to classify and regulate what would eventually become broadband Internet providers. While its usage of specific statutory and regulatory language may have varied over the years, the FCC was nevertheless steadfast in its belief that the best way to promote growth and innovation in the burgeoning broadband industry was through the application of a regulatory light touch.

In the mid-2000s, however, this deregulatory mindset began to change. Broadband Internet connections became the norm, not the exception. Consequently, a new thinking...

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51 See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 843-44 (1984) (“If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation. Such legislative regulations are given controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute. Sometimes the legislative delegation to an agency on a particular question is implicit rather than explicit. In such a case, a court may not substitute its own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency.”).

52 2002 Cable Modem Deregulation at ¶ 38 (“Consistent with the analysis in the Universal Service Report, we conclude that the classification of cable modem service turns on the nature of the functions that the end user is offered . . . . As currently provisioned, cable modem service is a single, integrated service that enables the subscriber to utilize Internet access service through a cable provider’s facilities and to realize the benefits of a comprehensive service offering.”) (emphasis added).

53 That is, the “offering” of the broadband provider. See Brand X, 545 U.S. at 969, 976, 988-92.

54 See id. at 974; Chevron, 467 U.S. at 843-44.

55 As of 2005, there were over 42 million broadband subscribers in the United States. 33% of adult Americans subscribed to broadband services, compared to just 28% still subscribed to dial-up. This gulf continued to increase over time. See OECD Broadband Statistics, June 2005, OECD: BROADBAND AND TELECOM (October
emerged, wherein the FCC viewed broadband providers as potentially wielding market power sufficient to manipulate and distort an increasingly important means of communication and commerce. On the academic front, perhaps the most touted of these thinkers was Tim Wu, a net neutrality folk hero who authored what some net neutrality advocates consider the foundational document of their movement.\textsuperscript{56} In his journal article, \textit{Network Neutrality, Broadband Discrimination}, Wu began to lay the foundation for what would become the net neutrality movement’s gatekeeper argument.\textsuperscript{57} Concerned about broadband providers’ potential ability to discriminate between different forms of content sent over their networks, Wu proposed a general concept of “network neutrality,” wherein “networks should be neutral as among applications.”\textsuperscript{58} At the time, Wu and others were troubled by broadband providers’ categorical prohibitions on certain types of user activities, such as the use of a VPN or home networking.\textsuperscript{59}

Perhaps the biggest step toward FCC regulation of the Internet, though, resulted from a speech then-FCC Chairman Michael Powell delivered in 2004 at the University of Colorado School of Law.\textsuperscript{60} Recognizing the Internet as an increasingly important means of communication and commerce,\textsuperscript{61} Powell laid out what he considered four fundamental

\textsuperscript{56} See Tim Wu, supra note 3.

\textsuperscript{57} Id. at 148-49.

\textsuperscript{58} Id. at 145, 166-67.

\textsuperscript{59} Id. at 156-58.


\textsuperscript{61} Id.
“Internet Freedoms” for broadband customers. Crucially, Powell did not believe that the FCC should enforce these “freedoms” via regulation. Instead, he reasoned that industry self-enforcement would be in broadband providers’ self-interest and that the FCC should avoid “intrusive regulation” of the Internet to ensure continued industry growth.

Yet, one year later, the FCC co-opted, with modifications, Powell’s “freedoms” in its 2005 Policy Statement, wherein it asserted broad ancillary authority under Title I of the Telecommunications Act to “ensure that providers of telecommunications for Internet access of Internet Protocol-enabled (IP-enabled) services are operated in a neutral manner.” To that end, the FCC proposed that consumers had the right to 1) “access . . . lawful Internet content of their choice;” 2) “run applications and use services of their choice, subject to the needs of law enforcement;” 3) “connect their choice of legal devices that do not harm the network;” and 4) “competition among network providers, application and

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62 Id. at 3-4, 6.

63 Id. at 3 (“These general conditions suggest that many, if not most, in the industry recognize that providing such access and information is in their own self-interest, particularly as infrastructure providers and developers struggle to discover valuable uses that will enable them to recoup their substantial investments in high-speed Internet technologies.”).

64 Id. at 4, 6 (Based on what we currently know, the case for government imposed regulations regarding the use or provision of broadband content, applications and devices is unconvincing and speculative . . . . Such interference should be undertaken only where there is weighty and extensive evidence of abuse . . . . [I]f we secure a reasonable balance between the needs of network providers and internet freedom, consumers will reap the benefits of broadband without intrusive regulation, while preserving industry’s incentives to deploy more high-speed broadband platforms.”) (emphasis added).

65 Powell’s second “freedom” was modified to include a law enforcement exception. The third “freedom” was modified with a harm exception. Powell’s fourth “freedom” was replaced entirely. See id. at 5; 2005 Policy Statement at ¶ 4.

66 See 47 U.S.C. §§ 151-61; Brand X, 545 U.S. at 975-76 (“[T]he Commission has jurisdiction to impose additional regulatory obligations under its Title I ancillary jurisdiction to regulate interstate and foreign communications.”); 2005 Policy Statement at ¶ 4.

68 2005 Policy Statement at ¶ 4-5.
service providers, and content providers.” The FCC explicitly characterized these four proposals as merely a statement of policy, rather than an official declaration of federal rulemaking authority. Moreover, the proposals gave tremendous discretion to broadband providers regarding network management. Consequently, the proposals generated scant industry criticism or rebuke at the time of their release.

The enforceability of these proposals, however, came under intense scrutiny when in 2008 the FCC attempted to block Comcast from interfering with peer-to-peer application use on its networks. One year earlier, the Associated Press discovered widespread throttling of peer-to-peer customer data traveling over Comcast’s network, something the FCC later deemed to be beyond the reasonable network management exception contained within its 2005 Policy Statement. In the end, against the advice of dissenting commissioners, the FCC forged ahead in its attempts to prohibit Comcast’s interference with peer-to-peer activity, asserting broad ancillary authority to do so under various sections of the original Communications Act of 1934, as well as sections of the 1996 Act.

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69 Id. at ¶ 4.

70 Id. at ¶ 5 n.15. (“[W]e are not adopting rules in this policy statement. The principles we adopt are subject to reasonable network management.”). Nevertheless, in 2005, as a result of public statements made conflicting with concepts of network neutrality, AT&T was pressured into agreeing to abide by “net neutrality” standards for two years following its acquisition of BellSouth. See Patricia O’Connell, *Online Extra: At SBC, It’s All About “Scale and Scope,”* BLOOMBERG (Nov. 7, 2005), http://www.bloomberg.com/news/articles/2005-11-06/online-extra-at-sbc-its-all-about-scale-and-scope; Grant Gross, *Net Neutrality Advocates Cheer AT&T Concessions,* INFOWORLD (Dec. 29, 2006), http://www.infoworld.com/article/2659636/security/net-neutrality-advocates-cheer-at-t-concessions.html.


73 2008 Comcast Order at ¶ 1; 2005 Policy Statement at ¶ 5 n.15.

74 See, e.g., *Dissenting Statement of Commissioner Robert M. McDowell* at 13089-90.

Unsurprisingly, Comcast challenged the FCC’s Order in federal court. In the end, the court sided with Comcast. Distilling the FCC’s argument down to an assertion of ancillary authority pursuant to Section 4(i) of the 1934 Communications Act, the court found this assertion of authority unrelated to “statutorily mandated responsibility,” and thus unlawful.

Still undeterred by defeat, the FCC issued a new Order in December 2010, continuing what would become its long march toward Internet regulation. Adopting the broadband-provider-as-gatekeeper argument, the FCC crafted three new rules “imposing disclosure, anti-blocking, and anti-discrimination requirements on broadband providers.” However, rather than conduct a thorough economic analysis regarding these concerns, the FCC cited theoretical threats of vertical foreclosure of edge providers offering VoIP or video streaming services that compete with broadband providers’ own offerings. It also highlighted a handful of historical instances of net neutrality violations. Ultimately, the

76 See generally Comcast, 600 F.3d 642 (D.C. Cir. 2010).
77 Id. at 661.
78 47 U.S.C. § 154(i); Comcast, 600 F.3d at 644.
79 Comcast, 600 F.3d at 654 (“[P]olicy statements alone cannot provide the basis for the Commission’s exercise of ancillary authority.”).
80 Id. at 661 (citing American Library Ass’n v. FCC, 406 F.3d 689, 692 (D.C. Cir. 2005)).
81 See generally 2010 Order.
83 See Verizon, 740 F.3d at 628; 2010 Order at ¶ 1, 53-79.
84 See 2010 Order at ¶¶ 22 n.49, 32 n.87. The closest the FCC came to a cost-benefit analysis was its unsubstantiated assertion that the “virtuous circle of innovation” resulting from the “Internet’s openness” more than outweighs any concerns of “significant [regulatory] compliance costs.” See also 2010 Order at ¶ 14, 38-39.
85 Id. at ¶ 21-22.
86 Id. at ¶¶ 35-36. Note that these previous infractions were resolved under existing law enacted prior to the 2010 Order. See Dissenting Statement of Commissioner Robert McDowell at 151.
FCC concluded that the existence of customer switching costs,\textsuperscript{87} regardless of market power, justified FCC prohibition of such business practices. Abandoning its previous ancillary authority justification, the FCC sourced its authority for the 2010 Order in Section 706 of the 1996 Telecommunications Act.\textsuperscript{88}

Just like the FCC’s 2008 effort, opponents challenged this newfound attempt at broadband regulation in the D.C. Circuit Court of Appeals.\textsuperscript{89} The court ultimately upheld the Order’s transparency provision, but vacated the anti-blocking and anti-discrimination rules.\textsuperscript{90} While finding the FCC did have the authority to promote investment in broadband pursuant to Section 706 via \textit{Chevron} deference,\textsuperscript{91} the court concluded that the FCC’s anti-blocking and anti-discrimination proposals were effectively common carrier regulations.\textsuperscript{92} Moreover, because broadband service was still classified as an information service,\textsuperscript{93} the FCC was forbidden from subjecting broadband providers to telecommunications-style common carriage restrictions. Consequently, the court vacated the anti-blocking and anti-discrimination rules.\textsuperscript{94}

\begin{itemize}
\item \textsuperscript{87} 2010 Order at ¶¶ 27, 34.
\item \textsuperscript{88} See 47 U.S.C. § 1302(a), (b); 2010 Order at ¶¶ 115-120.
\item \textsuperscript{89} See generally Verizon, 740 F.3d 623 (D.C. Cir. 2014).
\item \textsuperscript{90} Id. at 659.
\item \textsuperscript{91} Id. at 636-40.
\item \textsuperscript{92} Id. at 655-56.
\item \textsuperscript{93} See generally Brand X, 545 U.S. 967 (2005).
\item \textsuperscript{94} Verizon, 740 F.3d at 659.
\end{itemize}
III. Here Comes Title II: President Obama, the 2015 Order, and Privacy Regulation

One might think that following two back-to-back defeats, the FCC would end its quest to regulate broadband providers. It did not. This is largely due to the specific holding in *Verizon v. FCC*, in which the D.C. Circuit Court of Appeals recognized the FCC’s asserted authority under Section 706 of the 1996 Telecommunications Act, yet ultimately thwarted the no-blocking and no-discrimination rules due to broadband’s status as an information service. In doing so, the court implicitly crafted a clear, albeit at the time unthinkable path toward Internet regulation—reclassification of broadband as a telecommunications service, which would allow the FCC to apply Title II common carriage regulations to broadband providers.

For many legal and industry analysts, such a move was unthinkable. While some net neutrality partisans aggressively promoted this reclassification tactic, many viewed it as political suicide for the FCC, suggesting the FCC might advance its net neutrality agenda via common law, not statutory Title II, common carriage restrictions. When considering

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95 Id. at 636-40.
96 See generally id. at 659; *Brand X*, 545 U.S. 967 (2005).
97 47 U.S.C. §§ 153(50), (51), (53).
99 Kevin Werbach, *The Court’s Net-Neutrality Ruling Isn’t Actually That Bad*, THE ATLANTIC (Jan. 15, 2014), http://www.theatlantic.com/technology/archive/2014/01/the-courts-net-neutrality-ruling-isnt-actually-that-bad/283094/ (“You may have read some of the macho posturing that current FCC Chairman Tom Wheeler just needs to show that he’s ‘man enough’ to go the Title II route. Would that policy-making were that simple . . . Republicans and pro-telco Democrats in Congress will grind the FCC to a standstill, starve its budget, and do everything in their power to inflict permanent harm on the agency. Neither this White House nor the leaders of Silicon Valley have shown they would have the FCC’s back.”).
100 *Telecommunications Law – Internet Regulation – D.C. Circuit Holds That Federal Communications Commission Violated Communications Act in Adopting Open Internet Rules. – Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014), 127 HARV. L. REV. 2565, 2752-54. (“The historical distinction between statutory common-carrier regulatory schemes and common law common-carrier obligations, the deference owed to agency interpretations of
the FCC’s path forward beyond Verizon, Wheeler’s majority was open to Title II reclassification. Nevertheless, the majority principally focused on the FCC’s Section 706 authority recognized by the Verizon court as the legal foundation for future net neutrality regulations, in combination with various legal contortions meant to ameliorate concerns that the FCC was still regulating broadband providers in a common carriage per se manner. Indeed, in its 2014 NPRM, the FCC aimed to revive the 2010 rules primarily via Section 706 authority.

This strategy changed, however, later that year when President Obama entered the debate. Controversially intruding on the FCC’s supposedly independent authority, the President publicly recommended that the FCC reclassify broadband Internet service as a telecommunications service, and in doing so subject broadband providers to Title II ambiguous statutes under Chevron, and Supreme Court precedent all support an interpretation of sections 153(51) and 332(c)(2)’s common carrier “under this [Act]” language as barring the FCC only from subjecting broadband providers to Title II’s explicit common-carrier regulatory scheme—without barring the FCC from adopting Open Internet rules under section 1302 that subject broadband providers to the lesser nondiscrimination requirements traditionally imposed on common carriers by state common law.” (emphasis added).

Statement by FCC Chairman Tom Wheeler on the FCC’s Open Internet Rules, Feb. 19, 2014, available at: https://apps.fcc.gov/edocs_public/attachmatch/DOC-325654A1.pdf (“[A]s long as Title II – with the ability to reclassify Internet access service as a telecommunications service – remains a part of the Communications Act, the Commission has the ability to utilize it if warranted. Accordingly, the Commission’s docket on Title II authority remains open.”).

Statement of Chairman Tom Wheeler, In re Protecting and Promoting the Open Internet, Notice of Proposed Rulemaking, FCC 14-61, GN Docket No. 14-28, 87 (May 15, 2014) [hereinafter 2014 NPRM] (“The D.C. Circuit’s ruling in January of this year upheld our determination that we need rules to protect Internet openness, and upheld our authority under Section 706 to adopt such rules . . . . In response, I promptly stated that we would reinstate rules that achieve the goals of the 2010 Order using the Section 706-based roadmap laid out by the court. That is what we are proposing today.”) (emphasis added).

common carrier regulations. Eventually, Chairman Wheeler fell in lockstep with the President's guidance, penning an op-ed for Wired mere weeks before the FCC's release of its new Order. In the op-ed, the Chairman indicated a newfound focus by the FCC on reclassifying broadband as a telecommunications service, rather than pursuing Section 706 regulation of broadband as an information service.

Soon thereafter, the FCC issued its 2015 Order, wherein Wheeler’s 3-2 majority adopted the President's agenda. In the Order, the FCC explicitly cited the Verizon decision as a roadmap to reclassification. To justify this move, the FCC argued that customers now perceive, and providers advertise broadband access as, a common carrier service connecting customers to a wide array of third-party edge provider content without any intermediary services or advanced processing by the broadband provider. The end regulatory result was the creation of three categorical rules prohibiting blocking,


107 Chairman Wheeler rationalized the FCC’s acquiescence to President Obama’s Title II recommendation as stemming from a gradual evolution on the subject. See Tom Wheeler, This is How We Will Ensure Net Neutrality, WIRED (Feb. 4, 2015, 11:00AM), http://www.wired.com/2015/02/fcc-chairman-wheeler-net-neutrality/ (“Originally, I believed that the FCC could assure internet [sic] openness through a determination of “commercial reasonableness” under Section 706 of the Telecommunications Act of 1996. While a recent court decision seemed to draw a roadmap for using this approach, I became concerned that this relatively new concept might, down the road, be interpreted to mean what is reasonable for commercial interests, not consumers. That is why I am proposing that the FCC use its Title II authority to implement and enforce open internet [sic] protections.”).

108 In addition to reclassifying broadband generally as a telecommunications service, the FCC also reclassified mobile broadband as a “commercial mobile service,” similarly subjecting it to Title II regulatory burden. See 47 U.S.C. § 332(d)(1); 2015 Order at ¶¶ 308, 338-90.

109 2015 Order at ¶¶ 307-08.

110 Id. at ¶¶ 347-52. (“Today, broadband service providers still provide various Internet applications, . . . but consumers are very likely to use their high-speed Internet connections to take advantage of competing services offered by third parties.”). Contra Brand X, 545 U.S. at 988.

111 2015 Order at ¶ 105.
throttling,\textsuperscript{112} and paid prioritization\textsuperscript{113} on broadband networks, as well as a broad “no-unreasonable interference/disadvantage” general conduct standard.\textsuperscript{114} To justify these new regulations, in the absence of substantive economic analysis,\textsuperscript{115} the FCC revived past specters of gatekeeping,\textsuperscript{116} anti-competitive incentives for vertically integrated cable providers,\textsuperscript{117} switching costs,\textsuperscript{118} and a handful of historical anecdotes.\textsuperscript{119} Batting down concerns that increased regulation would depress broadband investment,\textsuperscript{120} the FCC argued that the primary drivers of broadband investment are subscriber growth and edge provider competition,\textsuperscript{121} which the FCC claimed these regulations would promote.\textsuperscript{122}

\textsuperscript{112} Id. at ¶ 106.
\textsuperscript{113} Id. at ¶ 107.
\textsuperscript{114} Id. at ¶ 108 (“[T]he Commission can prohibit practices that unreasonably interfere with the ability of consumers or edge providers to select, access, and use broadband Internet access service to reach one another, thus causing harm to the open Internet. This no-unreasonable interference/disadvantage standard will operate on a case-by-case basis and is designed to evaluate other current or future broadband Internet access provider policies or practices—not covered by the bright-line rules—and prohibit those that harm the open Internet.”).
\textsuperscript{115} Id. at ¶ 84 (“Broadband providers have the ability to act as gatekeepers even in the absence of ‘the sort of market concentration that would enable them to impose substantial price increases on end users.’ We therefore need not consider whether market concentration gives broadband providers the ability to raise prices.”).
\textsuperscript{116} Id. at ¶ 80.
\textsuperscript{117} Id. at ¶ 82.
\textsuperscript{118} Id. at ¶¶ 84, 97-99.
\textsuperscript{119} Dissenting Statement of Commissioner Ajit Pai at 333 (“A small ISP in North Carolina allegedly blocked VoIP calls a decade ago. Comcast capped BitTorrent traffic to ease upload congestion eight years ago. Apple introduced FaceTime over Wi-Fi first, cellular networks later . . . . The bogeyman never had it so easy.”).
\textsuperscript{120} 2015 Order at ¶¶ 360, 415-16 (“As a factual matter, the regulatory status of broadband internet access service appears to have, at most, an indirect effect (along with many other factors) on investment.”).
\textsuperscript{121} Id. at ¶ 412.
\textsuperscript{122} See, e.g., id. at ¶ 77 (“[T]he Internet’s openness continues to enable a virtuous cycle of innovation in which new uses of the network—including new content, applications, services, and devices—lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses.”) (internal quotation marks omitted).
For the third time, the broadband industry contested the FCC’s attempts at broadband regulation in court. Yet, for the FCC, the third time was ultimately the charm. Indeed, the D.C. Circuit Court of Appeals upheld the 2015 Order in full. In addition to finding that the FCC was not in violation of either the Administrative Procedure or Regulatory Flexibility Acts and that its 2014 NPRM gave adequate notice of Title II reclassification, the court applied administrative deference to the FCC’s reclassifications under *Chevron*. Ultimately, the court agreed with the FCC’s contention that customers perceive broadband providers as offering common carrier services, and thus upheld broadband’s reclassification under Title II.

In upholding Title II reclassification of broadband providers, the D.C. Circuit Court of Appeals implicitly presaged a favorable review of the FCC’s subsequent regulatory efforts stemming from reclassification, including its recently proposed privacy regulations. To that end, the FCC announced its intention to institute new privacy regulations for broadband providers in a recent NPRM, asserting the authority to do so pursuant to, among others,

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123 See generally *U.S. Telecom Ass’n.*

124 *Id.* at 115.

125 *Id.* at 29-31.

126 *Id.* at 32. See also *id.* at 22-23 (“Our role in reviewing agency regulations is a limited one. Our job is to ensure that an agency has acted within the limits of Congress’s delegation of authority, and that its action is not arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. Critically, we do not inquire as to whether the agency’s decision is wise as a policy matter; indeed, we are forbidden from substituting our judgment for that of the agency. Nor do we inquire whether some or many economists would disapprove of the agency’s approach because we do not sit as a panel of referees on a professional economics journal, but as a panel of generalist judges obliged to defer to a reasonable judgment by an agency acting pursuant to congressionally delegated authority.”) (internal quotation marks and citations omitted).

127 *Id.* at 24-28.

128 The court also upheld the FCC’s reclassification of mobile broadband. *See id.* at 66-82.
Section 222\textsuperscript{129} of Title II of the 1934 Communications Act.\textsuperscript{130} In the NPRM, the FCC proposes to regulate broadband providers’ use of customer data, dependent upon the particular context of that data usage. Under the new rules, if a broadband provider wishes to use customer data to market “communications-related services” on its own or via an affiliate, the broadband provider must provide the customer “with notice and opportunity to opt-out” of such private data usage.\textsuperscript{131} If, however, a broadband provider wishes to use customer data for almost any other purpose, the broadband provider must seek affirmative opt-in consent from the customer in order to do so.\textsuperscript{132} Customer data subject to this latter opt-in requirement falls under two categories: 1) Customer Proprietary Network Information (“CPNI”), a statutory category already defined by existing FCC regulations;\textsuperscript{133} and 2) “personally identifiable information” (“PII”), a sweeping and vague new category proposed in the NPRM that may include such disparate data as one’s social security number, biometric information, religious affiliation, MAC address, and even browser cookies.\textsuperscript{134}

\textsuperscript{129} While the FCC primarily asserted regulatory authority via Section 222, it also asserted a litany of other sources of statutory authority for its regulations. \textit{See generally In re Protecting the Privacy of Customers of Broadband and Other Telecommunications Services}, Notice of Proposed Rulemaking, FCC 16-31, WC Docket No. 16-106, ¶¶ 296-310 (March 31, 2016) [hereinafter \textit{Privacy NPRM}].

\textsuperscript{130} These regulations were necessary in part because the FTC, the government agency that prosecuted broadband privacy violations deemed “unfair and deceptive acts,” is now, post-2015 Open Internet Order, barred from regulating broadband providers because of the 1914 FTC Act’s common carrier exemption. \textit{See} 15 U.S.C. §§ 45(a)(1) and (2); Maureen K. Ohlhausen, Commissioner, Federal Trade Commission, Remarks at 33rd Annual Institute on Telecommunications Policy & Regulation: FTC-FCC: When is Two a Crowd? (Dec. 4, 2015), available at: https://www.ftc.gov/system/files/documents/public_statements/893473/151204plispeech1.pdf.

\textsuperscript{131} \textit{Privacy NPRM} at ¶¶ 122-26.

\textsuperscript{132} \textit{Id.} at ¶¶ 127-33.

\textsuperscript{133} \textit{Id.} at ¶¶ 7, 38, 56.

\textsuperscript{134} \textit{Id.} at ¶¶ 60-66.
IV. The Economic Failures of Title II Internet Regulation

As elaborated above, Title II regulation of the Internet is economically unjustified, harming broadband providers and consumers alike. Its failures can be categorized into five sections, as discussed below: 1) raising broadband prices; 2) categorically banning low-cost and high-priority broadband plans; 3) threatening future innovation and investment with regulatory uncertainty; 4) failing to recognize increasing, not decreasing, competition amongst broadband providers; and 5) failing to recognize the documented abusive gatekeeping power of edge providers.

A. Title II Raises Broadband Prices

In 1997, in compliance with the 1996 Telecommunications Act, the FCC established a Universal Service Fund (“USF”) to further statutory principles of universal service. The FCC thereafter began mandating “contributions” from interstate telecommunications carriers in order to sustain this fund. It continues to do so today.

By classifying broadband providers as telecommunications carriers, the FCC effectively extends the “contributions” requirements on interstate telecommunications carriers.

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137 See generally 47 U.S.C. § 254(d) (“Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service.”).

services to American broadband providers. In doing so, the FCC raises the price of broadband access for American consumers. While requiring broadband customers (through their providers) to pay into the USF may lift some of the USF contribution burden from customers of legacy telecommunications services and bring increased stability to the USF, requiring these contributions will nevertheless increase retail broadband prices, potentially foreclosing some low-income broadband customers on the margin.

The FCC’s recently proposed privacy regulations will also increase broadband prices. By mandating opt-in consent for broadband providers’ use of customer data, changing course from previous opt-out rules, these regulations foreclose existing revenue streams for broadband providers. Ultimately, broadband providers, forced to recoup these

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139 Note that currently, the FCC is forbearing from requiring broadband providers to contribute to the Universal Service Fund. However, the FCC has made clear that such forbearance is only temporary, subject to future market conditions and industry comments it receives. 2015 Order at ¶¶ 488-89, 495 n.1487.

140 2015 Order at ¶ 489 (“[N]ewly applying universal service contribution requirements on broadband Internet access service potentially could spread the base of contributions to the universal service fund, providing at least some benefit to customers of other services that contribute, and potentially also to the stability of the universal service fund through the broadening of the contribution base.”).


143 Id. at 21 (“The NPRM’s approach would force ISPs to absorb significant costs and would foreclose opportunities to develop important revenue streams. In other words, it would increase operation costs for ISPs, leading to increased retail prices.”).
lost revenues, will pass this cost onto their customers in the form of higher retail broadband prices.\textsuperscript{144}

The mandatory opt-in consent provision may also raise broadband prices through the prohibition of innovative, welfare-enhancing broadband plans. For example, AT&T's GigaPower service, a high-speed fiber offering in select markets, seeks to offset the high cost of fiber broadband by utilizing private customer data. In exchange for receiving targeted ads based upon their network usage, AT&T Gigapower customers can receive a $30 monthly discount.\textsuperscript{145} This option has been “resoundingly embraced by the vast majority of AT&T broadband customers.”\textsuperscript{146} This is not surprising, as these same customers routinely trade similar private data in exchange for free access to valuable, ad-supported online services and social media platforms.\textsuperscript{147} Yet, in its NPRM, the FCC “questions . . . whether this pro-competitive offering . . . should . . . be prohibited altogether.”\textsuperscript{148} Thus, the FCC’s new privacy rules may force customers of GigaPower and similar services, who happily trade their private data for a lower monthly bill, onto a more expensive service tier that is not in alignment with their economic preferences.

\textsuperscript{144} Id. at 22 (“[T]he NPRM would significantly curtail ISPs’ abilities to develop valuable revenue streams and would likely foreclose them from certain types of revenues altogether. These effects would translate to higher retail broadband (and other) prices for consumers.”).


\textsuperscript{146} See Wright, supra note 142 at 27; Privacy NPRM at ¶ 259.

\textsuperscript{147} See Wright, supra note 142 at 15-16 (“The NPRM likewise affords no consideration to the fact that consumers tremendously value the advertising model that dominates the Internet today and that is largely based on opt-out consent . . . . Indeed, one study found that, on average, Americans assigned a value of almost $12,000 per year to the package of free, ad-supported services and content currently available to them on computers and mobile devices.”) (internal citations omitted). See also Wright, supra note 142 at 19 (“75% of American consumers report they would decrease their online activity a great deal if they were forced to pay for services and content they receive for free today.”) (internal citations omitted).

\textsuperscript{148} Id. at 27.
In the end, by switching the default rule governing broadband privacy from opt-out to opt-in, the FCC is imposing significant transaction costs on consumers who would otherwise be interested in trading privacy for reduced broadband prices—ones they are unlikely to bear. Ultimately, this creates a de facto ban on broadband providers’ use of the vast majority of customer’s private data and consequently raises retail broadband prices. Thus, in the end, default rules matter. To make up lost revenue from lost customers who cannot trade off privacy for service, AT&T and other providers must raise prices for all their customers, not just those who value privacy over discounts.

B. Title II Categorically Bans Innovative Low-Cost and High-Priority Broadband Plans

1. Low-Cost Broadband Plans

In addition to raising broadband prices, the FCC’s 2015 Order wholesale bans innovative, low-cost, welfare-enhancing broadband offerings that utilize blocking, throttling, and/or prioritization techniques. Consider, for example, a 2011 MetroPCS smartphone plan, that for $40 per month offered users 1 GB of mobile Internet data that they could use for any purpose other than data-intensive services like video or VoIP. Net neutrality partisans were quick to label MetroPCS a “net neutrality violator” “looking to lay down new toll layers atop the mobile Internet,” exacting extra fees from customers for the

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149 Id. at 14. ("[F]or many consumers, it is simply not worthwhile to incur the transaction costs of opting in – devoting time and attention to understanding a privacy policy’s implications and taking the steps necessary to provide the required consent . . . . In those circumstances, most consumers will simply take the path of least resistance and make no decision at all – thereby failing to opt in by default under the NPRM’s scheme.").


152 Kim, supra note 150.
privilege of using its network in certain ways. In reality, though, MetroPCS was simply offering its customers a choice to receive a $20 per month discount in exchange for refraining from bandwidth-intensive use of its network.\footnote{Indeed, MetroPCS simultaneously offered customers a $60 per month plan with none of these aforementioned restrictions. \textit{Id}.} Such a discount equated to a significant cost savings when compared to the competition at the time,\footnote{The closest competitors, T-Mobile and Verizon, offered only 200MB and 150MB of data respectively at $59.99 per month, without MetroPCS's included unlimited minutes and texts. Nicole Lee, \textit{True Cost of a Smartphone: Price Plan Comparison}, CNET (Jan. 24, 2011, 7:08PM), http://www.cnet.com/news/true-cost-of-a-smartphone-price-plan-comparison/.} likely representing an attractive offer to low-income or price-sensitive customers eager to own their first smartphone. Yet, MetroPCS’s 2011 plan and ones like it are now prohibited by the 2015 Order’s no-blocking rules. Even if MetroPCS or others elected to merely throttle or prioritize certain data, such practices would likely also be prohibited or imperiled by the 2015 Order, even if such practices were not sponsored.\footnote{See infra section IV-B-1.}

More broadly, the FCC’s prohibitions against blocking, throttling, and prioritization schemes produce tremendous economic inefficiencies. Net neutrality advocates claim that incomplete or impaired access to certain portions of the Internet is inherently harmful, and that instead, unfettered access to the “complete Internet” produces positive externalities for both broadband and edge providers.\footnote{See 2010 Order at ¶ 14 (“The Internet’s openness is critical to these outcomes, because it enables a virtuous circle of innovation in which new uses of the network—including new content, applications, services, and devices—lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses.”); Joshua D. Wright, Commissioner, Federal Trade Commission, Net Neutrality Meets Regulatory Economics 101, Remarks at The Federalist Society Media and Telecommunications Practice Group Event: \textit{The Future of Media – Is Government Regulation in Today’s Media Landscape “Over-The-Top”?} at 12 (Feb. 25 2015), available at: https://www.ftc.gov/system/files/documents/public_statements/626591/150225wrightfedsoc.pdf (“The argument would seem to be that there is some social interest in egalitarian access to all broadband providers’ networks – in effect a one-size-fits-all contract between broadband providers and content providers – and that we cannot trust the marketplace to reach this outcome without regulatory intervention.”).} They also fear that if the FCC did not ban blocking,
throttling, and prioritization schemes, broadband providers would simply utilize these schemes to create artificial tiers of Internet service, wherein customers would be forced to pay higher prices in order to receive access to the same content that they currently enjoy today.\textsuperscript{157}

However, services offering varying tiers of service differentiated by quality, access, or speed have long been a mainstay in economic markets, to the benefit of countless low-income individuals. Such tiering allows customers to pay for only their desired level of service, and nothing more. Consider Amtrak.\textsuperscript{158} When taking a train with Amtrak, a customer is free to select from a variety of service levels.\textsuperscript{159} Price-sensitive customers can choose a coach train, time-sensitive customers can choose an Acela express train, and comfort-sensitive customers can choose a seat in either business or first class.\textsuperscript{160} Amtrak tailors the quality and price of these individualized service offerings to meet the unique preferences of these varying classes of customers. If it were instead to impose a one-size-fits-all regime on its customers, Amtrak would frustrate one or all of its customer classes. For example, if Amtrak constructed an all-coach train fleet, it would frustrate the comfort or speed preferences of express, first, and business class customers. Likewise, if Amtrak constructed an all-premium fleet, it would raise the average ticket price across all customer


\textsuperscript{158} The following builds upon some of the economic analysis of Judge Williams’ dissent. \textit{See U.S. Telecom Ass’n} at 153 (Williams, dissenting).


\textsuperscript{160} \textit{Id.}
classes, forcing would-be coach customers to subsidize customers with comfort and speed preferences.

With its anti-consumer choice 2015 Order, the FCC is imposing this exact kind of unfair subsidization on the broadband marketplace. Under the guise of protecting whole-Internet access, the FCC is forcing low-income and low-usage Internet customers to unfairly subsidize affluent bandwidth hogs.\footnote{This would be similar to the aforementioned theoretical world in which Amtrak only offered first class seats. Omri Ben-Shahar, \textit{The FCC’s Elitist Priorities in the Regulation of Net Neutrality and Privacy}, \textit{FORBES} (June 14, 2016, 11:22PM), http://www.forbes.com/sites/omribenshahar/2016/06/14/the-fccs-elitist-priorities-in-the-regulation-of-net-neutrality-and-privacy/print/ ("[H]eavy-data websites like Netflix or YouTube are the equivalent of premium TV channel[s]. Requiring that their content be included without extra charge in the basic package makes the subscription more expensive and less affordable . . . . Both the net neutrality and privacy rules will not make internet [sic] cheaper. If internet [sic] providers were allowed to profit from data collection or to charge for premium data usage, the basic package they offer would be low-use, low-privacy, and low-price.").} This is particularly troubling, considering that, as of 2015, the home broadband subscriber base has largely plateaued, with many minority, rural, elderly, and low-income users foregoing broadband entirely.\footnote{33\% cite cost as the major reason why they are foregoing home broadband service. \textit{See} John B. Horrigan and Maeve Duggan, \textit{Home Broadband 2015}, \textit{Pew Research Center} at 4 (Dec. 21, 2015), available at: http://www.pewinternet.org/files/2015/12/Broadband-adoption-full.pdf.} These are the exact kinds of consumers that would benefit from plans similar to MetroPCS’s inexpensive video and VoIP-blocking 2011 smartphone plan, who are instead being forced to subsidize, among others, affluent millennial cord-cutting bandwidth hogs.\footnote{\textit{Id.}; Ben-Shahar, \textit{supra} note 161.}

\section*{2. Data Prioritization and Critical Connectivity}

Bans on paid prioritization are particularly pernicious as Internet users increasingly rely on real-time Internet applications. Unlike their on-demand brethren, real-time Internet applications require low latency and extreme responsiveness, and cannot rely on caching or
buffering.\footnote{164} This is especially true for the burgeoning field of telehealth, which aims to connect individuals living in remote rural areas to faraway healthcare professionals.\footnote{165} Responsiveness will likely also be an issue for Internet-connected autonomous cars, relying on up-to-the-minute weather updates to calculate life or death driving decisions.\footnote{166} Customers would likely be better off if the FCC allowed businesses offering real-time services over the Internet to pay broadband providers for prioritized connections to their customers.\footnote{167} Yet, by banning such prioritization arrangements, the FCC is subjecting these innovative and critical network uses to the same types of congestion suffered by less critical network uses.\footnote{168}


\footnote{165}Lea Skorin-Kapov and Maja Matijasevic, Analysis of QoS Requirements for e-Health Services and Mapping to Evolved Packet System QoS Classes, available at: http://www.hindawi.com/journals/ijta/2010/628086/ (“In the case of robotic tele-surgery, a key requirement is a minimal delay time from when a surgeon's hand movement is initiated, the remote manipulator actually moves, and images are shown on the surgeon's monitor. Studies have shown that the limit of the acceptable time delay in terms of a surgeon's perception of safety was roughly 330 ms.”).


\footnote{168}Telecom providers recently expressed similar concerns as they relate to European regulation of 5G services. See Michael Carroll, European Telcos Claim Net Neutrality is Major Barrier to 5G Investment, FIERCEWIRELESS (July 8, 2016), http://www.fiercewireless.com/europe/story/european-telcos-claim-net-neutrality-major-barrier-5g-investment/2016-07-08 (“The nub of their argument appears to be that net neutrality rules would not enable them to prioritise [sic] key services expected to be enabled by 5G, including automated driving, smart grid control, virtual reality, and public safety services. Such services require a ‘flexible and elastic configuration of resources in networks and platforms, on a continuous basis’ . . . ”). Note that while the FCC acknowledges that it may waive the paid prioritization ban, it “anticipate[s] granting such relief only in exceptional cases.” 2015 Order at ¶ 130-32. It is unclear what the FCC will consider “exceptional” in this regard.
C. Title II Creates Regulatory Uncertainty, Threatening Innovation and Investment

1. Zero Rating

While the 2015 Order does not outright ban zero rating\(^{169}\) like it does the aforementioned practices of blocking, throttling, and paid prioritization, it nevertheless places zero rating squarely within the FCC’s regulatory sights.\(^{170}\) Opponents of zero rating fear that preferential treatment of certain Internet content will distort competition between edge providers, artificially pointing users towards select pre-approved content.\(^{171}\)

Proponents, meanwhile, view zero rating as an innovative way for providers to compete in the broadband marketplace, while simultaneously balancing the competing interests of network use and network management.

In order to examine how zero rating has actually played out in the real world, consider the case of T-Mobile. In 2014, T-Mobile made headlines by introducing a zero rating scheme called “Music Freedom,” which exempted select music services from its users’ data caps.\(^{172}\) A little over a year later, it enacted a similar zero rating scheme for


\(^{170}\) 2015 Order at ¶¶ 151-53 (“We are mindful of the concerns raised in the record that sponsored data plans have the potential to distort competition by allowing service providers to pick and choose among content and application providers to feature on different service plans. At the same time, new service offerings, depending on how they are structured, could benefit consumers and competition. Accordingly, we will look at and assess such practices under the no-unreasonable interference/disadvantage standard, based on the facts of each individual case, and take action as necessary.”); Dissenting Statement of Commissioner Ajit Pai at 5923; Ina Fried, A Huge Win on Net Neutrality Could Embolden the FCC to Tighten Regulations in Other Areas, RECODE (June 16, 2016, 4:17PM), http://www.recode.net/2016/6/16/11950064/fcc-net-neutrality-privacy-regulation.

\(^{171}\) See Susan Crawford, Zero for Conduct, BACKCHANNEL (Jan. 7, 2015) (“Zero-rating, by contrast, is absolutely inappropriate. It makes certain kinds of traffic exempt from any data cap at all, or creates a synthetic ‘online’ experience for users that isn’t the Internet. Traffic that is ‘approved’ is allowed; other traffic won’t flow to users.”).

video providers with “Binge On.” Critics immediately pounced, decrying T-Mobile’s moves as an existential threat to the Internet as we know it. At first, these critics were primarily concerned with the broadband-provider-as-gatekeeper net neutrality argument. T-Mobile subsequently opened its zero rating schemes to all edge providers at no cost. Still, critics found fault with Binge On’s technical requirements, arguing they served as a barrier to certain kinds of secure video content, especially from smaller providers. Yet, T-Mobile worked with edge providers to ameliorate these concerns as well. In all, T-Mobile’s combined zero rating schemes now include over 100 content providers, incorporating such diverse offerings as a Spanish-language religious video network (ESNE),

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175 Ziegler, supra note 174 (“[I]t’s a terribly slippery slope: T-Mobile has decided, arbitrarily, that some of the data traveling over its pipes should count against a cap, while other data should not.”).


an Indian-centric music streaming service (Saavn), and adult entertainment services (MiKandi, Streamate).\(^{180}\)

Given critics’ substantial hand wringing, one might think Music Freedom and Binge On have been disasters for T-Mobile customers and the broader Internet ecosystem. Yet, nothing could be further from the truth. Instead, T-Mobile’s combined zero rating efforts have been a tremendous boon for T-Mobile customers, edge providers, and even customers of other mobile providers. Since the inception of Binge On, video viewership on T-Mobile’s network has more than doubled; combined with Music Freedom, the two schemes have allowed T-Mobile customers to use 350 petabytes\(^{181}\) of data without such use counting against their data caps.\(^{182}\) Moreover, 24 key mobile apps saw a 55% increase in user engagement mere months after Binge On began.\(^{183}\) Such increased usage benefits edge providers too—especially providers of ad-supported content who derive additional revenues from increased viewership and/or listenership. More broadly, Music Freedom and Binge On, in conjunction with T-Mobile’s other “Un-carrier” initiatives,\(^ {184}\) have forced mobile providers to aggressively compete on price, international use, data cap allotment, and even the traditional two-year contract model,\(^ {185}\) much to the average mobile customer’s benefit.\(^ {186}\)


\(^{181}\) For a sense of scale, one petabyte equals one thousand terabytes, or one million gigabytes. See Nate, How Much is a Petabyte, THE MOZY BLOG (July 2, 2009), https://mozy.com/blog/misc/how-much-is-a-petabyte/.

\(^{182}\) Press Release, supra note 179.


Zero rating critics imperil the fruits of this fierce competition. By championing zero rating bans, they seek to prohibit T-Mobile and others from offering innovative and competitive consumer products\textsuperscript{187} that increase consumer welfare. Academics and the press are not the only zero rating critics, though. Just this year, the FCC shook down T-Mobile, with the purported aim of ensuring that its zero rating schemes complied with the 2015 Order’s general conduct standard.\textsuperscript{188} Such regulatory uncertainty threatens not only T-Mobile, but also the overall industry and consumer gains from competitive zero rating schemes by discouraging these innovative forms of competition.


2. Broadband Investment

As stated above, Wheeler’s majority at the FCC has shown little concern for the effects of its 2015 Order on broadband investment,189 arguing that broadband providers will nevertheless continue to build out their networks in response to subscriber growth190 and edge provider competition fueling a “virtuous cycle” of broadband investment.191 Given broadband providers’ conflicting needs to reassure investors, appease regulators, but also rally against burdensome regulations, attempts to parse their executives’ public comments on this issue predictably prove to be less than192 illuminating.193

189 Supra note 120.

190 Supra note 121.

191 Supra note 122.


Recent anecdotes of broadband investment are similarly unhelpful. Despite the FCC’s 2015 Order and subsequent privacy regulations, AT&T, Comcast, and Google have all announced plans to invest in expanding their networks. Yet, these specific expansions may have been years in the making, especially considering the often-lengthy right-of-way and permitting processes broadband providers typically endure.

Ultimately, looking toward broader economic trends and projections reveals a bleaker reality in stark contrast with these notable instances of broadband expansion. Broadband providers’ capital expenditures rose 8.7 percent in 2013. Following the FCC’s 2014 NPRM, however, this growth slowed to just four percent. In 2015, following the FCC’s Order, broadband capital expenditures actually declined by 0.4 percent, despite first and second quarter GDP growth and growing cable TV revenues alleviating cord-cutting concerns. Economists predict that this decline will culminate in an average reduction in

196 See Mark Bergen, Google Fiber is Buying High-Speed Internet Provider Webpass to Expand its Reach in Cities, RECODE (June 22, 2016, 7:46PM), http://www.recode.net/2016/6/22/12009040/google-fiber-buys-webpass-high-speed-city-internet.
199 Id.
200 Id.
broadband investment of between 17.8 and 31.7 percent per year.\textsuperscript{202} Current data on capital expenditures compiled by economist Hal Singer, in combination with recent moves by broadband providers like Verizon to divert investment dollars away from broadband infrastructure and towards IP acquisition like Yahoo!, potentially support such a decline.\textsuperscript{203} Thus, despite the FCC’s contention that broadband investment will continue, driven by the supposed virtuous cycle, it will likely do so at an increasingly decreasing rate because of the 2015 Order.\textsuperscript{204} This result mirrors the European broadband market, which, due to stricter regulations, receives significantly fewer investment dollars, resulting in lower average speeds for European broadband customers.\textsuperscript{205}

D. Imposing Title II on Broadband Providers Subjects an Increasingly Expanding and Competitive Market to Antiquated Monopoly Regulations

Title II regulation of the Internet subjects broadband providers to a regulatory framework originally designed for nationwide monopolist railroad and telephone


\textsuperscript{204} See John W. Mayo et. al, *Assessing the Economic Benefits and Costs of the FCC’s Imposition of Title II Regulation*, Georgetown University McDonough School of Business Center for Business & Public Policy (Aug. 2015) at 8, available at: http://www.gcbpp.org/files/EPV/EPV_FCCsTitleIIOrder_82015.pdf (“[T]he Commission argues that demand and competition are key drivers of investment and that these factors will continue to drive demand even in the presence of Title II regulation. This argument is misplaced. The relevant policy question is not whether some economic factors will continue to drive investment, but whether the proposed regulation will reduce baseline levels of investment.”).

\textsuperscript{205} For example, in 2014, 82% of American households had access to 25 Mbps or faster broadband, while the similar figure for European households was 54%. Moreover, while 86% of American households had access to mobile 4G LTE coverage, only 27% of European households had similar access. See generally Christopher S. Yoo, Univ. of PA. Ctr. For Tech., Innovation, & Competition, *U.S. vs. European Broadband Deployment: What Do the Data Say?* (2014), available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2510854.
companies. Perhaps this would be reasonable if the broadband market was actually a Ma Bell-style national monopoly. A case may have been made for, at worst, the existence of a cable-DSL duopoly near the time of the 2010 Order, when an FCC report found that 72 percent of American households had access to two or fewer Internet options offering at least 3 Mbps download and 768 Kbps upload speeds. Moreover, at this time, mobile broadband was still a nascent industry, with 3G coverage limitations and inferior speeds preventing mobile from truly competing with fixed residential broadband.

Yet, over just a brief window of time, customer choice in fixed broadband grew tremendously. As of 2013, 65 percent of American households had access to at least 3 fixed providers offering at least 10 Mbps download and 1.5 Mbps upload speeds. When expanded to include fixed wireless providers, this figure rises to 93 percent.

Improvements in mobile broadband technologies have been even more astonishing. In 2011, Verizon and AT&T began adopting LTE technologies on a mass scale.

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206 *Supra* note 18.


208 See, e.g., *id.* at 30.


210 Fixed wireless broadband providers, sometimes referred to as WISPs, or wireless ISPs, connect customers’ homes to the Internet via LTE and other mobile technologies more typically used to connect smartphones and tablets to the Internet. While often subject to harsher data caps than wired broadband, such services typically offer connection speeds that are faster than traditional DSL services. For example, Verizon advertises average download speeds of between 5 and 12 Mbps on its LTE-powered fixed wireless service. See LTE Internet (Installed) FAQs, Verizon Support, http://www.verizonwireless.com/support/lte-internet-installed-faqs/ (last accessed July 18, 2016).

211 *Id.* at 10.

T-Mobile followed suit soon thereafter in 2013. This was a crucial development, because LTE is a substantially superior technology even compared to HSPA+. In a recent nationwide survey, the real-world 3G speeds of America’s top four mobile providers averaged between 0.64 and 3.48 Mbps. By comparison, their real-world LTE speeds averaged between 6.56 and 12.26 Mbps.

Contrary to the FCC’s claims in the 2015 Order, recent data suggests that some customers have recognized the increasing parity between mobile and broadband providers and consequently opted to “cut the cord” of residential broadband service. On average, these customers tend to fall in more price-conscious demographics when compared to the

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217 2015 Order at ¶ 9 (“[M]obile broadband is not a full substitute for fixed broadband connections.”).

218 See Home Broadband 2015, supra note 162 at 9 (“Today 13% of adults rely on their smartphone for online access at home (that is, they have a smartphone but no home broadband subscription), compared with 8% in 2013 . . . . The increase in the ‘smartphone-only’ phenomenon largely corresponds to the decrease in home broadband adoption over this period.”); Giulia McHenry, Evolving Technologies Change the Nature of Internet Use, NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION (Apr. 19, 2016), https://www.ntia.doc.gov/blog/2016/evolving-technologies-change-nature-internet-use (“[T]hree-quarters of American households using the Internet at home in 2015 still used wired technologies for high-speed Internet service, including cable, DSL, and fiber-optic connections. However, this represents a sizable drop in wired home broadband use, from 82 percent of online households in July 2013 to 75 percent two years later. Over this same period, the data also shows that the proportion of online households that relied exclusively on mobile service at home doubled between 2013 and 2015, from 10 percent to 20 percent. The growth in online households that reported only using mobile Internet service to go online at home appears to have come at the expense of wired broadband connections.”).
average residential broadband subscriber.\textsuperscript{219} The increasing parity between fixed residential and mobile broadband, despite existing limitations like data caps,\textsuperscript{220} affords price-sensitive users access to the Internet both at home and on the go, which they may not have otherwise chosen or been able to afford.\textsuperscript{221}

This increasingly expanding understanding of what constitutes the total broadband market, in addition to the aforementioned increase in choice among residential broadband providers, illustrates that the market for broadband services is increasingly, not decreasingly, competitive. Yet as explained previously, the FCC did not rely on market power analysis in its 2015 Order to justify its regulation of potentially user-hostile activity that would otherwise be rooted out by competition.\textsuperscript{222} Instead, it cited excessive switching costs, which, it contends, prevent broadband customers from switching providers even when experiencing unsatisfactory service.\textsuperscript{223}

Yet, actual data shows significant real-world evidence of customers switching between broadband providers. Average monthly churn across the top four mobile

\textsuperscript{219} McHenry, supra note 218 (“The data shows 29 percent of online households with family incomes below $25,000 only used mobile Internet service at home, compared with 15 percent of those households with incomes of $100,000 or more.”).

\textsuperscript{220} For example, Verizon offers varying data caps ranging from 2 GB at $35 per month to 24 GB at $110 per month. See Verizon Plan, VERIZON, http://www.verizonwireless.com/landingpages/verizon-plan/ (last accessed July 18, 2016).

\textsuperscript{221} Home Broadband 2015, supra note 162 at 10 (“The increase in ‘smartphone-only’ adoption, along with the corresponding decline in home broadband subscriptions, captures two facets of contemporary society: rapid innovation in the information technology space and stagnant household incomes . . . . At the same time that innovation in information technology has transformed people’s communications patterns in the past decade, household incomes have declined relative to year 2000 levels . . . . Smartphones help fill the access gaps for some of these households, particularly as people increasingly see home broadband access as crucial in a variety of areas.”).

\textsuperscript{222} Supra note 115.

\textsuperscript{223} See 2015 Order at ¶ 98 (“That many customers stay with their mobile wireless providers, despite expressing dissatisfaction with their current provider and despite the availability of alternate plans from other providers, suggests the presence of significant barriers to switching.”).
broadband providers was 1.56 percent during the first three quarters of 2014, representing only a slight drop from 1.83 percent during all of 2007. During the fourth quarter of 2014 alone, “approximately 10 million Americans changed their wireless provider.” Indeed, according to the FCC’s own 2014 Mobile Competition Report, switching costs for mobile broadband customers may have decreased in recent years, thanks in part to recent moves by mobile providers to, amongst other things, pay a customer’s early termination fee at a competitor.

E. Edge Providers Can Act and Have Acted as Gatekeepers

The FCC’s primary concern with broadband providers throughout its 2010 and 2015 Orders was the theoretical capacity of broadband providers to act as gatekeepers between their customers and edge providers. Consequently, in its 2015 Order, the FCC elected to reclassify broadband service as a telecommunications service, subjecting broadband providers to Title II regulations. Crucially, however, the FCC did not opt to apply the same

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224 Id. at ¶ 98 n.211.


226 See In re Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Radio Services, Seventeenth Report, WT Docket No. 13-135, ¶ 69 (“In the past, contract length, handset exclusivity, lack of interoperability were some factors that were highlighted as barriers to switching. Recently, the advent of no-contract plans, . . . newer premium models such as the new iPhone versions being available to more providers, and the FCC 700 MHz interoperability Order, may have eased some of the switching barriers, and somewhat reduced switching cost[s].”) (emphasis added), available at: https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1862A1.pdf.


228 See, e.g., supra note 116.
level of regulatory burden to edge providers. The resulting regulatory asymmetry of this choice is inherently unfair and does not accurately reflect the power dynamics between large edge providers and small broadband providers.

Indeed, large edge providers can act and have on numerous occasions acted as gatekeepers, blocking broadband providers’ customers from desired Internet content. Such gatekeeping largely blocked customers of small broadband providers from accessing desired streaming video content—even customers who did not subscribe to cable TV and opted to view video exclusively on streaming platforms like Hulu. Beyond selectively blocking access to video content, edge providers have also tampered with news-gathering and news-

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229 See generally 2014 NPRM at ¶¶ 54-60.

230 Comments of NTCA–The Rural Broadband Association, In re Protecting and Promoting the Open Internet, GN Docket No. 14-28 at 15-16, available at: http://www.ntca.org/2014-federal-filings/071814-ntca-files-comments-on-net-neutrality-nprm-gn-14-28.html ("[I]t is difficult to see a difference between a retail broadband ISP’s “incentive and ability to limit openness” and a Content/Edge Provider’s withholding of access to certain services, applications, or content. In fact, Content/Edge Provider blocking of otherwise freely available content upon an unduly discretionary whim is nothing less than a limitation on users’ access to the content of their choice, and as such, has as much adverse impact on consumer demand for broadband service as the theoretical behavior that triggered this proceeding. Consumers displeased with the prospect that the online content of their choice may not be available due to a dispute between a retail ISP and a Content/Edge Provider may see less need to keep, or utilize, their broadband subscription. This resulting depression in “end user demand, which then threatens broadband deployment,” is at the very heart of this proceeding.").

231 Comments of American Cable Association, In re Protecting and Promoting the Open Internet, GN Docket No. 14-28, 10-127 at 18-19, available at: https://ecfsapi.fcc.gov/file/7521683230.pdf ("In the past five years, . . . there have been several examples of Internet video programming providers blocking or threatening to block access to content otherwise made freely available to Internet users to those Internet users served by select broadband ISPs where the programmers were simultaneously engaged in carriage disputes with the same providers in their capacity as MVPDs. In 2009, Viacom threatened to block access to Time Warner Cable broadband subscribers from accessing its web-based content, including such popular sites as MTV.com and Nick.com. In 2010, News Corp. threatened to block access to Cablevision Internet users from accessing Fox websites, including Hulu.com, which News Corp. partially owned, as part of Fox’s on-going retransmission dispute with Cablevision . . . . Similarly, in 2013, CBS elected to block Time Warner Cable and Bright House Network broadband subscribers in New York as part of their dispute over retransmission rights . . . . Most recently, in 2014, following unsuccessful cable programming carriage negotiations, Viacom retaliated with the punitive action of denying access to content otherwise made freely available on its websites to those broadband Internet subscribers served by dozens of smaller cable and broadband providers who refused to sign onto renewal contracts seeking exorbitant price increases for Viacom cable programming networks with low ratings and minimal viewer interest. Viacom moved to block a select group of broadband Internet subscribers regardless of whether they subscribed to the operator’s video offerings or not."). (citations omitted) (emphasis added).

232 Id.
displaying algorithms in order to muzzle disfavored political speech.\textsuperscript{233} This is especially worrisome given the hyper-concentration of power in just a few dominant edge providers on the Internet.\textsuperscript{234}

Ultimately, the resulting regulatory asymmetry of the 2015 Order does not prohibit Internet gatekeeping outright. Instead, it only serves to prohibit the theoretical gatekeeping ability of large national broadband providers, leaving smaller broadband providers subject to the whims of increasingly powerful edge providers’ documented throttling,\textsuperscript{235} blocking,\textsuperscript{236} and other abusive tactics.

Conclusion

In a recent book, Adam Thierer of the Mercatus Institute championed the idea of “permissionless innovation.”\textsuperscript{237} He argued that technological entrepreneurs should be free


\textsuperscript{237} See \textsc{Adam Thierer}, \textit{Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom} 9 (revised ed. 2016), available at: http://mercatus.org/sites/default/files/Thierer-Permissionless-revised.pdf (“How is it that in the span of just a few decades we have witnessed the greatest explosion in information availability and human connectedness that the world has ever known? The answer comes down to two words: permissionless innovation . . . . Permissionless innovation is about the creativity of the human mind to run wild in its inherent curiosity and inventiveness. In other words, permissionless innovation is about freedom.”).
to experiment and to innovate, unbounded by regulatory pessimists\textsuperscript{238} and their innovation-stymieing regulations. He demonstrated how deregulatory FCC policy in the 1990s unleashed such innovation, jump-starting the vibrant and competitive Internet ecosystem we enjoy today.\textsuperscript{239} Ultimately, he posited that regulation of innovative businesses must be supported by evidence of actual demonstrable harm,\textsuperscript{240} not theoretical boogeymen, and that the fruits of these regulations—positive or negative—should be the measure by which we judge their successfulness.\textsuperscript{241}

Sadly, such thinking has not transpired at the current FCC. In an ideal world, the FCC, taking a cue from modern antitrust, would only impose regulations on broadband providers when doing so prevents clear consumer harm.\textsuperscript{242} The FCC would consequently allow consumer welfare-enhancing innovation and competition in the broadband marketplace to flourish, reserving regulation for only those specific instances wherein market intervention would prevent actual harm.\textsuperscript{243}

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{238}] See id. at 28 ("The precautionary principle generally holds that, because new ideas or technologies could pose some theoretical danger or risk in the future, public policies should control or limit the development of such innovations until their creators can prove that they won’t cause any harms.").
\item[\textsuperscript{239}] See id. at 12-15.
\item[\textsuperscript{240}] Id. at 8 ("Policymakers should not impose prophylactic restrictions on the use of new technologies without clear evidence of actual, not merely hypothesized, harm.").
\item[\textsuperscript{241}] Id. at 13 ("[P]ublic policies should never be judged by intentions but rather by their actual real-world results.") (citing Notable & Quotable: Milton Friedman, \textit{The Wall Street Journal} (Oct. 6, 2015, 6:07PM), http://www.wsj.com/articles/notable-quotable-milton-friedman-1444169267).
\item[\textsuperscript{242}] See Joshua D. Wright, \textit{NN House Antitrust Hearing} at 9 ("Consumer welfare is the lodestar of competition policy and antitrust, and it guides decision-making at the FTC."); United States v. Baker Hughes, 908 F.2d 981, 990 n.12 (D.C. Cir. 1990).
\item[\textsuperscript{243}] See Joshua D. Wright, \textit{NN House Antitrust Hearing} at 87 ("The case for antitrust over regulation is as simple as this: The general economic view is these types of contracts across many industries help consumers. What the antitrust \textit{ex post} approach allows you to do is have the benefits of those contracts when they help consumers and reserve enforcement for those instances where we can find, and we do, abuses of market power. It allows consumers to have both.").
\end{enumerate}
\end{footnotesize}
Yet, by issuing its 2015 Order, the FCC charted a starkly different course. In accordance with President Obama’s request,244 the FCC reclassified broadband as a telecommunications service,245 exposing it to a barrage of antiquated regulations originally designed to police monopoly industries of yore.246 Under the authority of this newfound classification, the FCC prohibited blocking, throttling, and paid prioritization of content traveling over broadband networks; enacted an exceedingly vague247 new general conduct standard; and announced sweeping new privacy regulations, turning the traditional pro-consumer opt-out privacy model on its ear.248

Will the FCC improve the American broadband market by imposing these regulations? The available evidence tells us no. The FCC will raise broadband prices through new USF contributions and burdensome privacy regulations.249 It will prevent broadband providers from offering valuable low-cost250 and high-priority plans251 by prohibiting content blocking, throttling, and prioritization. It will imperil innovative competition like zero rating252 and suppress network investment253 through regulatory

244 Supra note 105.
245 2015 Order.
246 Supra note 18.
247 February 2015 Open Commission Meeting, FEDERAL COMMUNICATIONS COMMISSION (Feb. 26, 2015), available at: https://www.fcc.gov/news-events/events/2015/02/february-2015-open-commission-meeting (166:12-166:32) (“As I said in my statement, you know, we don’t really know [what the general conduct standard will be]. No blocking, no throttling, no fast lanes—those can be bright-line rules because we know about those issues. But we don’t know where things go next.”).
248 See supra section III.
249 See supra section IV-A.
250 See supra section IV-B-1.
251 See supra section IV-B-2.
252 See supra section IV-C-1.
253 See supra section IV-C-2.
uncertainty. It will treat the competitive broadband industry like a collection of regional monopolists, ignoring evidence of growing residential broadband choice and mobile parity.\textsuperscript{254} Finally, it will establish a system of regulatory asymmetry, wherein a myopic focus on large national broadband providers’ theoretical gatekeeping abilities will leave smaller broadband providers prey to the documented abuses of increasingly powerful edge providers.\textsuperscript{255}

In its 2014 NPRM, the FCC noted, “the Internet has been, and remains to date, the preeminent 21st century engine for innovation and the economic and social benefits that follow.”\textsuperscript{256} Yet, rather than unleash American broadband, this same FCC would instead prefer to restrict it by chasing theoretical harms. In doing so, the FCC endangers the innovation, investment, and competition\textsuperscript{257} that helped make early American broadband the envy of the world. In the end, through its recent regulatory moves, the FCC will harm, not help, America’s Internet future.

\textsuperscript{254} See supra section IV-D.
\textsuperscript{255} See supra section IV-E.
\textsuperscript{256} 2014 NPRM at ¶ 1.
\textsuperscript{257} U.S. Telecom Ass’n at 184 (Williams, dissenting) (“The ultimate irony of the Commission’s unreasoned patchwork is that, refusing to inquire into competitive conditions, it shunts broadband service onto the legal track suited to natural monopolies. Because that track provides little economic space for new firms seeking market entry or relatively small firms seeking expansion through innovations in business models or in technology, the Commission’s decision has a decent chance of bringing about the conditions under which some (but by no means all) of its actions could be grounded—the prevalence of incurable monopoly.”).