

A NORMATIVE APPROACH TO BROADBAND REGULATION: CURBING THE ANTI- COMPETITIVE BEHAVIOR OF INTERNET SERVICE PROVIDERS

Laura Ashley Harris*

CITE AS: 3 GEO. L. TECH. REV. 426 (2019)

I. INTRODUCTION

Policy makers have sought to ensure that Internet access is cost-effective, not unduly discriminatory, and of sufficient quality. To this end, the Federal Communications Commission (FCC) passed the *Open Internet Orders* and the *Restoring Internet Freedom Order*. But has the FCC truly succeeded in meeting its goals? This paper argues primarily no. In place of prior regulation, this paper suggests a normative approach in light of antitrust considerations and recommends conduct-focused broadband regulation that addresses these public interest concerns—an approach not unlike the *2015 Open Internet Order*. The *Open Internet Orders*¹ and the *Restoring Internet Freedom Order* are used as source material to arrive at a recommendation because these orders provide valuable insights into what type of conduct produces performance consistent with the public interest, serving as actual test cases for whether these regulations succeed in the objective of effectively regulating Internet service providers (ISPs).

A new conduct-focused regulation or a reversion back to the *2015 Open Internet Order*, on its own, is insufficient to further the public interest. The current statute from which the FCC derives its authority to

* Georgetown University Law Center, J.D. Candidate 2019; California Polytechnic State University San Luis Obispo, M.S. Engineering with a concentration in Integrated Technology Management, B.S. Industrial Engineering 2013. Thank you to the wonderful editors of GLTR, without whom this piece would not have been possible. Thank you also to Scott Hempling for teaching the class that inspired the work.

¹ Two regulations with similar rules were both coined Open Internet Orders: the *Open Internet Order of 2010* and the *Open Internet Order of 2015*. See *infra* Section III.B.

regulate ISPs is whittled with conflicting judicial and executive agency interpretations rendering the distinction between information services and telecommunications services, as applied to ISPs, arbitrary. Yet, how to classify broadband—as either an information or telecommunications service—is a critical question because it determines the scope of authority the FCC has to regulate broadband providers. To avoid further political, market, and public confusion as to the classification of ISPs, Congress must first make a policy decision and answer this threshold question.

ISPs are the entities that deliver broadband to consumers. Broadband is a general term that encompasses all services that provide high-speed Internet, but not all Internet services are broadband.² Broadband is the most common form of Internet service used in the United States today.³ This paper focuses on the regulation of broadband providers, also known as ISPs, because net neutrality principles primarily apply to high speed Internet access; lower speed Internet providers do not exhibit the same discriminatory behaviors.⁴

First, this paper defines the public interest to establish the purpose of a regulation directing ISP conduct. Second, the paper demonstrates that the current market structure for broadband is not effectively competitive; nor is the current regulatory framework appropriately addressing the conduct of ISPs, leading to the conclusion that the current status quo does not produce performance consistent with the public interest. Finally, the paper recommends that Congress amend the Telecommunications Act of 1996 to provide more explicit guidance on the scope of the FCC's authority to regulate ISPs and that the FCC pass a new regulation that directs ISP conduct to better serve the public interest.

II. REGULATION IS NECESSARY TO ACHIEVE THE PUBLIC INTEREST IN BROADBAND PERFORMANCE

The public interest in broadband service includes four primary aspects: quality, universality, non-discrimination, and affordability. This interest is derived from the purpose of the Communications Act of 1934 (later revised as the 1996 Telecommunications Act) to “regulat[e] interstate and foreign commerce in communication . . . to all people of the

² For example, dial-up is an Internet service, but dial-up is not a broadband service.

³ For the same reason, the terms Internet Service Providers and Broadband Providers will be used interchangeably.

⁴ For example, a dial-up service provider would be hard-pressed to stream videos or significantly prioritize data transmission at all.

United States, without discrimination⁵ . . . [and with] a rapid, efficient, Nation-wide . . . communication service with adequate facilities at reasonable charges.”⁶

Historically, the net neutrality debate focused on *how* to achieve statutory public interest. “Net Neutrality means that [I]nternet service providers should enable access to all content and applications regardless of the source, without favoring or blocking particular products or websites.”⁷ While the debate is not merely two-sided, two primary views have arisen from the most recent FCC broadband orders, the *Open Internet Orders* and the *Restoring Internet Freedom Order*, which provide context for understanding some of the most common concerns with broadband regulation. On one side, supporters of “net neutrality” hold that an open Internet—meaning, free from blocking, throttling, and paid prioritization—stimulates economic growth by removing barriers to entry⁸ and preventing or penalizing unduly discriminatory behavior.⁹ The opposing position believes regulation of ISPs is “unnecessary”¹⁰ and that

⁵ Telecommunications Act of 1996, 47 U.S.C. 151. Under the purposes of the Act, discrimination is prohibited “on the basis of race, color, religion, national origin, or sex” Further into the Act, under § 202, discrimination is defined even more broadly in the following way:

(a) It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to *any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality* to any undue or unreasonable prejudice or disadvantage (emphasis added).

⁶ *Id.*

⁷ Net Neutrality is an ambiguous term and is extremely broad. In this paper, Net Neutrality will adhere to the definition provided by Fergus O’Sullivan, *What Is Net Neutrality and Why Is It Important?*, CLOUDWARDS (Mar. 7, 2018), <https://www.cloudwards.net/net-neutrality/> [<https://perma.cc/56UM-BHD5>].

⁸ See Ryan Singel, *Expect Fewer Great Startups if the FCC Kills Net Neutrality*, WIRED (Dec. 12, 2017, 7:00 AM), <https://www.wired.com/story/expect-fewer-great-startups-if-the-fcc-kills-net-neutrality/> [<https://perma.cc/7B9D-PTPL>].

⁹ Klint Finley, *Here’s How the End of Net Neutrality Will Change the Internet*, WIRED (Nov. 22, 2017, 5:00 AM), <https://www.wired.com/story/heres-how-the-end-of-net-neutrality-will-change-the-internet/> [<https://perma.cc/H4RE-XTQ7>]; see also SCOTT HEMPLING, *REGULATING PUBLIC UTILITY PERFORMANCE: THE LAW OF MARKET STRUCTURE PRICING AND JURISDICTION* 288 (2013) (“The prohibition against undue discrimination distills to this golden rule: Treat similar customers similarly; dissimilar customers dissimilarly.”).

¹⁰ FCC, *Restoring Internet Freedom*, FCC INITIATIVES, <https://www.fcc.gov/restoring-internet-freedom> [<https://perma.cc/MY8U-SLKE>] [hereinafter *FCC Restoring Internet*].

the removal of “heavy-handed” regulations will lead to “a free and open Internet, and Americans will have access to better, faster, and cheaper broadband.”¹¹

These two positions represent two different viewpoints on how to achieve the public interest. But before deciding how to regulate an industry’s actors, the question of whether to regulate must be answered by considering the market structure and the desired conduct of the market participants.¹² In other words, regulation is necessary to the extent that the “deregulated markets are likely to fail [to achieve performance consistent with the public interest] even in the presence of reasonably strict antitrust enforcement.”¹³

III. THE STATUS QUO IS NOT PRODUCING PERFORMANCE CONSISTENT WITH THE PUBLIC INTEREST

Effective regulation is intended to “align private behavior with the public interest.”¹⁴ The structure of the broadband market and current regulations promote certain private interests, rather than the public interests described in Part II. ISPs do not behave consistently with the public interest because (A) absent regulation, broadband’s anti-competitive market structure encourages ISPs to pursue private interests and (B) the current broadband regulation does not promote conduct consistent with the public interest.

A. Unregulated, the Broadband Market Promotes Anti-Competitive Conduct

“Effective competition describes a market structure where the sellers and buyers lack ‘market power.’”¹⁵ Market power is the “power to control prices and exclude competition.”¹⁶ Because ISPs operate as either a

Freedom Initiative] (explaining the FCC’s reasoning for the *Restoring Internet Freedom Order*).

¹¹ *Id.* (quoting FCC Chairman Ajit Pai).

¹² See HEMPLING, *supra* note 9, at 120–22.

¹³ NICHOLAS ECONOMIDES, *Telecommunication Regulation: An Introduction*, in THE LIMITS OF MARKET ORGANIZATION 48, 48 (Richard R. Nelson ed., 2005), http://www.stern.nyu.edu/networks/Economides_Telecommunications_Regulation.pdf [<https://perma.cc/3P94-8QLK>].

¹⁴ HEMPLING, *supra* note 9, at 3.

¹⁵ *Id.* at 120.

¹⁶ *Id.* (quoting *United States v. E.I. Du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956)).

monopoly or an oligopoly depending on the region,¹⁷ the market is not effectively competitive. Thus, these ISPs have market power that allows them to partake in conduct inconsistent with the public interest.

1. *The Broadband Market Structure Is Not Effectively Competitive*

Historically, Internet technologies evolved out of telecommunications technologies, giving telephone and cable companies an advantage in market participation¹⁸ as incumbents because they owned the underlying infrastructure required for Internet access. This incumbency initiated the monopolistic broadband market, giving consumers limited options to choose between ISPs.¹⁹ Additionally, high infrastructure costs for new Internet technologies create barriers to entry, limiting the ability for new market participants to provide effective competition.²⁰

To understand why the broadband market is not effectively competitive, this paper first defines the market participants and the underlying technologies of broadband. The market consists of four participants: backbone networks, broadband providers, edge providers, and end users.²¹ Backbone networks are the physical infrastructure of the Internet, including fiber optics, copper wiring, and routers that enable the transmission of large amounts of data.²² Broadband providers “are the businesses and organizations that provide users with Internet access and related services.”²³ Edge providers, also known as content providers, are

¹⁷ HEMPLING, *supra* note 9, at 11.

¹⁸ *See id.* (“Market structure, describes (a) the geographic area in which transactions occur; (b) the products and services being sold in the geographic area; (c) the characteristic and market shares of the sellers and buyers of those products and services in the geographic area; and (d) the entry costs and entry barriers.”).

¹⁹ *See* Kate Cox, *Why Starting a Competitor to Comcast is Basically Impossible*, CONSUMERIST (May 10, 2014), <https://consumerist.com/2014/05/10/why-starting-a-competitor-to-comcast-is-basically-impossible/> [<https://perma.cc/E6JK-MJYW>] (discussing how regulatory history in the broadband market has created barriers to entry for new market participants, leaving consumers with limited choices between ISPs).

²⁰ *Id.*

²¹ *Verizon v. FCC*, 740 F.3d 623, 628 (D.C. Cir. 2014).

²² *Id.*; Robert D. Doverspike, K.K. Ramakrishnan & Chris Chase, *Structural Overview of ISP Networks*, in *GUIDE TO RELIABLE INTERNET SERVICES AND APPLICATIONS* 19, 21 (Springer-Verlag London Limited 2010).

²³ *What Are Internet Service Providers?*, XFINITY (July 6, 2017), <https://www.xfinity.com/hub/internet/internet-service-providers> [<https://perma.cc/7C3H-SWKR>]. Examples of broadband providers include Verizon, Comcast, Charter, and AT&T.

entities that “provide content, services and applications over the Internet.”²⁴ End users are individuals or entities that “consume [or use] the content, services, and applications.”²⁵ In some circumstances, participants may fall into more than one category. For example, a blogger may be both an end user and an edge provider because he or she uses the applications on the Internet while providing content to the Internet. Data travels across the backbone of the Internet through an ISP from an edge provider or end user to other users by breaking down the “messages . . . into ‘packets’ . . . and . . . reassembl[ing]” them on the other side.²⁶

Broadband is available through a number of different technologies: cable modem,²⁷ digital subscriber line (DSL), fiber-to-the-home (FTTH),²⁸ and wireless satellite services.²⁹ DSL started using the existing telephone wiring to homes to deliver broadband service in the early 1990s.³⁰ Cable-modem is delivered to homes mostly on hybrid fiber coax (HFC) cables which is in turn delivered to neighborhood nodes using existing cable networks.³¹ FTTH does not rely on existing in-home connections. Instead, FTTH requires a provider to complete the “last-mile” infrastructure from the Internet backbone to each individual home using a fiber optic cable.³²

Existing public utilities had fewer barriers to entry because

²⁴ *Verizon*, 740 F.3d at 629.

²⁵ *Id.*

²⁶ EV EHRLICH, A BRIEF HISTORY OF INTERNET REGULATION 11 (Progressive Policy Inst., Mar. 2014), https://progressivepolicy.org/wp-content/uploads/2014/03/2014.03-Ehrlich_A-Brief-History-of-Internet-Regulation.pdf [<https://perma.cc/R3XC-U4NA>].

²⁷ Cable Internet is provided by local TV operators. *See, e.g.*, Gabor Molnar & Scott J. Savage, *Market Structure and Broadband Internet Quality*, 65 J. INDUS. ECON. 73, 76 (2016), <https://onlinelibrary.wiley.com/doi/full/10.1111/joie.12106> [<https://perma.cc/F77F-Z96W>].

²⁸ *Id.* (noting that DSL and FTTH are typically provided by local telephone companies; a primary difference between DSL and FTTH is the underlying technology, which allows FTTH “virtually unlimited bandwidth” by running fiber directly to a customer’s home).

²⁹ *Id.* at 77 (indicating that wireless services typically offer lower speeds than wired connections but allow for greater mobility and greater access to Internet services where wired connections may be unavailable, such as in rural areas).

³⁰ Lou Frenzel, *What’s the Difference Between Cable and DSL Broadband Access?*, ELEC. DESIGN (Feb. 19, 2013), <https://www.electronicdesign.com/communications/what-s-difference-between-cable-and-dsl-broadband-access> [<https://perma.cc/KTW3-Y4ZC>].

³¹ *Id.*; *see also* Duane Anderson, *Fiber-Optic Internet in the United States at a Glance*, BROADBANDNOW (Feb. 21, 2019), <https://broadbandnow.com/Fiber> [<https://perma.cc/BG3J-RMJ6>].

³² The speed across each type of service varies based on the underlying technology. For example, wireless, typically the slowest form of broadband, is delivered over airwaves; DSL and cable are delivered over copper wiring; and fiber is delivered by transmitting light over fiber-optic cables. *See* Anderson, *supra* note 31.

they owned the underlying Internet infrastructure.³³ Because the technology behind high-speed Internet relies on telephone and cable lines, the companies that owned this infrastructure for these existing technologies were functionally incumbents with fewer barriers to entering the broadband market.³⁴ Absent regulation requiring ISPs to share the underlying infrastructure, the high infrastructure cost of laying new cable or telephone lines creates barriers to entry for potential new broadband providers.

High infrastructure costs create barriers to entry.³⁵ While DSL and cable were enabled through the existing infrastructure of telephone and cable, FTTH does not have a complete built-in infrastructure. Exorbitant costs for completing the FTTH infrastructure across the U.S. creates barriers to entry that few entities can risk investment in, as evidenced by two of the primary providers competing in this market—Verizon and Google. For example, analysts estimate the cost of Google Fiber’s nationwide expansion plan to be \$3,000–\$8,000 per home.³⁶ With 127.59 million households in the United States,³⁷ the total cost of installation would equate to a \$378,660,000,000 infrastructure investment.³⁸

There is no meaningful choice for consumers to choose between ISPs.³⁹ The lack of competition between ISPs in a particular

³³ Cox, *supra* note 19.

³⁴ FCC, 2016 BROADBAND PROGRESS REPORT 12 (Jan. 29, 2016), <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report> [<https://perma.cc/KW3B-B354>] (finding, from a 2016 survey, that 88% of people in the U.S. who have broadband subscribe to DSL or Cable-Modem). The report found that fifty-nine percent of broadband subscriptions are cable-modem (*Id.* at para 26), and twenty-nine percent of subscriptions are DSL (*Id.* at 12, n.79).

³⁵ Cox, *supra* note 19.

³⁶ Anderson, *supra* note 31.

³⁷ *Number of Households in the U.S. from 1960 to 2018 (in Millions)*, STATISTA (Nov. 2018), <https://www.statista.com/statistics/183635/number-of-households-in-the-us/> [<https://perma.cc/F4JK-74FW>].

³⁸ This estimate and analysis assumes that no household today has FTTH and that one entity would be responsible for the entire investment of connecting all U.S. households. Neither assumption is likely, but the extrapolation of cost demonstrates the extreme investment required to connect each home across the U.S. Even assuming that half of the homes in the United States have fiber, fiber rollout to the remaining half would nonetheless be a multi-billion dollar investment.

³⁹ Vinhcent Le, *The FCC Has It All Backwards on Competition and Consumers Will Pay the Price*, GREENLINING INST. (Feb. 28, 2017), <http://greenlining.org/blog/2017/fcc-backwards-competition-consumers-will-pay-price/> [<https://perma.cc/VR3R-BERF>].

geographic area⁴⁰ leaves consumers with no meaningful opportunity to choose between broadband providers, giving ISPs more market power to control prices⁴¹ and to unduly discriminate.⁴² In 2015, only twenty-two percent of households had an option between two or more ISPs with a 25Mbps download speed and a 3Mbps upload speed.⁴³ Two years later, using FCC data, a survey “found that 129 million Americans only have one option for broadband internet service in their area, which equals about 40 percent of the country.”⁴⁴ As one article ironically states, “You can pick any ISP you want . . . as long as it’s Comcast.”⁴⁵

Where barriers to entry limit the number of retail providers of broadband to one or two sellers, these sellers have less incentive to act in the public interest. Instead, broadband providers have more incentive to act in an anti-competitive manner and/or exclude new competitors from the broadband market. Such behavior is prominent where the public interest is in tension with the private interests of ISPs, edge providers, and

⁴⁰ The geographic area for a particular set of consumers is defined by the area served by sellers that are accessible to those consumers.

⁴¹ Le, *supra* note 39 (finding that ISPs “make an estimated 97 cents in profit for every dollar they charge”).

⁴² HEMPLING, *supra* note 9, at 288 (“Undue discrimination includes rate differences not justified by cost differences and rate differences with anti-competitive effect.”).

⁴³ Jon Brodtkin, *US Broadband: Still No ISP Choice for Many, Especially at Higher Speeds*, ARS TECHNICA (Aug. 10, 2016, 11:43 AM), <https://arstechnica.com/information-technology/2016/08/us-broadband-still-no-isp-choice-for-many-especially-at-higher-speeds/> [<https://perma.cc/CA82-RQWE>]; see also James K. Willcox, *Is Your Internet Service Fast Enough for Streaming*, CONSUMER REPORTS (June 17, 2015, 4:20 PM), <https://www.consumerreports.org/cro/news/2015/06/is-your-internet-service-fast-enough-for-streaming/index.htm> [<https://perma.cc/7BFA-7SXB>] (“The FCC considers 10Mbps to 25Mbps reasonable for households that stream video, but heavy data users might want even more robust connections of up to 50Mbps or more.”); FCC, 2016 BROADBAND PROGRESS REPORT, *supra* note 34 (listing the key findings of the report on the website’s homepage page for the report).

⁴⁴ Kaleigh Rogers, *More than 100 Million Americans Can Only Get Internet Service from Companies that Have Violated Net Neutrality*, MOTHERBOARD (Dec. 11, 2017, 2:30 PM), https://motherboard.vice.com/en_us/article/bjdjd4/100-million-americans-only-have-one-isp-option-internet-broadband-net-neutrality [<https://perma.cc/5DAC-J26Q>]; *Internet/Broadband Fact Sheet*, PEW RESEARCH CTR. (Feb. 5, 2018), <http://www.pewinternet.org/fact-sheet/internet-broadband/> [<https://perma.cc/CB4G-W2ZB>] (“Today, roughly two-thirds of American adults have broadband internet service at home.”).

⁴⁵ Grant Brunner, *Woe is ISP: 30% of Americans Can’t Choose Their Service Provider*, EXTREME TECH (Mar. 14, 2014, 12:00 PM), <https://www.extremetech.com/internet/178465-woe-is-isp-30-of-americans-cant-choose-their-service-provider> [<https://perma.cc/F3ST-GTRF>].

end users. The proposal outlined in Section IV seeks to account for the inherent conflict of interests present as a result of this market structure.

2. *Given the Non-Competitive Market Structure for Broadband Service, Unregulated ISP Conduct Does Not Produce Public Interest Performance*

ISPs have historically participated in conduct that does not conform to the public interest. As explained above, this conduct is not a shocking conclusion given the significant market power ISPs hold. The public interest—defined as a universal, high-quality, not-unduly-discriminatory Internet service available to consumers at a reasonable cost—requires a competitive broadband market. A competitive market would create incentives for ISPs to conform to the public interest because unsatisfied customers would have the ability to shop for a service that most closely conforms to their wants and needs.

The most commonly discussed and desired aspects of ISP conduct—at least by proponents of net neutrality—are transparent operations, no blocking, and no throttling.⁴⁶ Absent regulation, ISPs have demonstrated their ability and intent to engage in behaviors antithetical to these goals. Transparency⁴⁷ is the requirement that ISPs disclose their behavior towards end users thereby giving consumers the knowledge necessary to make a meaningful choice in selecting an ISP. Yet, transparency is only an effective tool to promote competition when users

⁴⁶ See, e.g., Joe Carter, *The FAQs: What You Should Know About Net Neutrality*, GOSPEL COALITION (Dec. 16, 2017), <https://www.thegospelcoalition.org/article/faqs-know-net-neutrality/> [<https://perma.cc/3RSF-7JHB>]; Klint Finley, *The Wired Guide to Net Neutrality*, WIRED (May 9, 2018, 7:00 AM), <https://www.wired.com/story/guide-net-neutrality/> [<https://perma.cc/X5BK-P23J>]; Brandon Vigliarolo, *Net Neutrality: A Cheat Sheet*, TECHREPUBLIC (May 12, 2017, 7:42 AM), <https://www.techrepublic.com/article/net-neutrality-the-smart-persons-guide/> [<https://perma.cc/K7ZS-EJFP>].

⁴⁷ 47 C.F.R. § 8.1 (2018).

Any person providing broadband internet access service shall publicly disclose accurate information regarding the network management practices, performance characteristics, and commercial terms of its broadband internet access services sufficient to enable consumers to make informed choices regarding the purchase and use of such services and entrepreneurs and other small businesses to develop, market, and maintain internet offerings. Such disclosure shall be made via a publicly available, easily accessible website or through transmittal to the Commission.

already have a meaningful choice between services.⁴⁸ As previously discussed, consumers lack this meaningful choice.

Blocking is any means of preventing end user access to legal content, applications, services, or non-harmful devices.⁴⁹ Throttling means degrading or impairing access to lawful Internet traffic based on its content, application, service, users, or use of a non-harmful device.⁵⁰ For example, in 2008 Comcast was sued both for throttling and blocking.⁵¹ The Electronic Frontier Foundation and the Associated Press independently found that Comcast interfered with the Internet traffic from BitTorrent and Gnutella.⁵² In this case, Comcast took specific steps to prioritize—or conversely, discriminate against—certain types of content when it degraded the Internet protocols used to deliver this traffic. Around the same time, Comcast was also sued in a class action for blocking certain traffic in peer-to-peer (P2P) file transfers.⁵³ Further, certain ISPs

⁴⁸ *Gulf States Util. Co. v. La. Pub. Serv. Comm'n*, 578 So. 2d 71, 85, n.6 (La. 1991) (quoting *In Re Long Island Lighting Co.*, 71 P.U.R. 4th 262, 1985 WL 258217 (N.Y. Pub. Serv. Comm'n 1985)) (“If a competitive enterprise tried to impose on its customers costs from imprudent actions, the customers could take their business to a more efficient provider. A utility’s ratepayers have no such choice. A utility’s motivation to act prudently arises from the prospect that imprudent costs may be disallowed.”).

⁴⁹ Restoring Internet Freedom, 83 Fed. Reg. 21927, 21928 (May 11, 2018) (to be codified at 47 C.F.R. pts. 1, 8, 20).

⁵⁰ *Id.*

⁵¹ Press Release, FCC, Commission Orders Comcast to End Discriminatory Network Management Practices, FCC (Aug. 1, 2008), <https://www.fcc.gov/document/commission-orders-comcast-end-discriminatory-network-management> [<https://perma.cc/WC7Y-FUWA>] (“[T]he Commission concluded that Comcast has unduly interfered with Internet users’ right to access the lawful Internet content and to use the applications of their choice.”). While more recent examples of ISP’s discriminatory behavior has occurred, this pre-2010 Open Internet Order example demonstrates an ISP’s ability and incentive to act in a manner contrary to the public interest. While an ISP’s private interest to discriminate does not change with new regulations, their incentive to discriminate may be curtailed by an appropriate regulation that holds them accountable for such discriminatory acts.

⁵² See Ryan Paul, *EFF Study Confirms Comcast’s BitTorrent Interference*, ARS TECHNICA (Nov. 29, 2007, 12:26 AM), <https://arstechnica.com/uncategorized/2007/11/eff-study-reveals-evidence-of-comcasts-bittorrent-interference/> [<https://perma.cc/646F-9WGH>].

⁵³ Eric Bangeman, *Comcast Hit with Class-Action Lawsuit Over Traffic Blocking*, ARS TECHNICA (Nov. 14, 2007, 5:57 PM), <https://arstechnica.com/tech-policy/2007/11/comcast-hit-with-class-action-lawsuit-over-traffic-blocking/> [<https://perma.cc/R9VC-L3RP>].

have expressed their intent to promote pay-to-play prioritization and promote data limits on users.⁵⁴

This conduct by ISPs runs counter to the identified public interest identified above. For example, when information online becomes more or less accessible due to throttling or is not accessible at all due to blocking, the quality of the user's experiences is impacted. Additionally, the prohibition against undue discrimination⁵⁵ was violated in the BitTorrent example when ISPs, without reasonable justification, throttled data arbitrarily favoring some Internet traffic over others.

In a competitive market, engaging in these activities may offend customers, and customers may leave behind the services that they are unsatisfied with. But because broadband is not a competitive market and ISPs' unregulated conduct conflicts with the public interest, a regulation is "necessary to align private behavior with the public interest."⁵⁶

B. Regulations Directed at ISPs Fail to Curb Anti-Competitive Conduct.

The Telecommunications Act of 1996 attempted to address technological advances in the telecommunications industry,⁵⁷ and subsequent regulations have attempted to appropriately regulate ISP behavior in accordance with the public interest. However, the FCC's interpretation of this statute has proven problematic. Instead of one consistent position, the FCC has routinely flip-flopped its categorization of Internet service between an "information service" and a "telecommunication service"—services that have completely different statutory obligations and different statutory limitations. By continually redefining its stance across various regulations in such a stark way, the FCC's regulation of ISPs has become inconsistent and unpredictable. Furthermore, the current regulation is ineffective because it does not promote behavior consistent with the public interest. Thus, the current

⁵⁴ Ryan Singel, *FCC Wants to Kill Net Neutrality. Congress Will Pay the Price*, WIRED (Dec. 3, 2017, 8:00 AM), <https://www.wired.com/story/fcc-wants-to-kill-net-neutrality-congress-will-pay-the-price/> [<https://perma.cc/FRL7-UDWX>].

⁵⁵ HEMPLING, *supra* note 9, at 288 ("[D]iscrimination can be lawful or unlawful, depending on whether it is 'due' or 'undue.'").

⁵⁶ *Id.* at 3.

⁵⁷ See ECONOMIDES, *supra* note 13, at 48. The "dot-com boom" represented a time in the mid 1990s to early 2000s, which saw a dramatic increase in the use of the Internet, bringing the Internet into an era where Internet access is both vital to the U.S. economy and to individuals in order to participate in the economy. This dependence is the reason universal access is necessary to the public interest.

regulation is both administratively improper, in that it is arbitrary, and practically unsuccessful, in that it fails to properly support the public interest.

1. The FCC's Statutory Authority for Regulating Broadband Is Impermissibly Vague.

The statutory grant of authority to regulate ISPs grew out of the authority to regulate telecommunications services.⁵⁸ The Telecommunications Act of 1996 hoped “to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.”⁵⁹ To carry out this goal, the 1996 Act created two categories of services: telecommunication services and information services. The classification of broadband as either an information or telecommunication service has now become a central question as to what regulatory authority the FCC has over ISPs because it determines what and how much authority the FCC has to impose obligations on broadband providers.

Telecommunication services, but not information services, may be subject to Title II common carrier requirements.⁶⁰ Title II grants the FCC authority to impose, among other things, obligations on common carriers “to interconnect with other carriers and to establish through-routes,”⁶¹ to charge “just and reasonable” prices for all services and products in

⁵⁸ The Communication Act of 1934 created the Federal Communication Commission to serve as the regulatory body to enforce the provisions of the Act. The Act was constitutionally permissible under the Commerce Clause to regulate the interstate telecommunications industry. See generally Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

⁵⁹ *Id.*; see also U.S. H. COMM. ON ENERGY AND COMMERCE, MODERNIZING THE COMMUNICATIONS ACT 1 (2014), http://www.npstc.org/download.jsp?tableId=37&column=217&id=2917&file=Communications_Act_White_Paper_140108.pdf [<https://perma.cc/G4U3-QRDH>] [hereinafter MODERNIZING THE COMMUNICATIONS ACT WHITE PAPER] (stating that the Act was intended to increase competition, reduce regulatory barriers, and advance information services technologies).

⁶⁰ A common carrier is “any person engaged as a common carrier for hire, in interstate or foreign radio transmission of energy, except where reference is made to common carriers not subject to this Act; but a person engaged in radio broadcasting shall not, insofar as such person is so engaged, be deemed a common carrier.” 47 U.S.C. § 153(11) (2012).

⁶¹ G. Hamilton Loeb, *The Communications Act Policy Toward Competition: A Failure to Communicate*, 1978 DUKE L.J. 1, 20 (1977) (paraphrasing 47 U.S.C. § 201(a)).

connection with communication services,⁶² to avoid “unjust and unreasonable” discrimination,⁶³ and to “keep itself informed as to the manner and method” of business management and the “technical developments and improvements.”⁶⁴

Conversely, the FCC has substantially less authority to impose obligations on providers of information services.⁶⁵ According to the D.C. Circuit, the FCC has only “ancillary” jurisdiction to regulate information services under the broad language of the 1996 Act, which states “[t]he Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its function.”⁶⁶ But this authority does not permit the FCC to subject information services to common carrier obligations. Instead, § 706(a) and (b) of the Telecommunications Act “grant[s] the Commission affirmative authority to promulgate rules governing broadband providers.”⁶⁷ Such rules must be tailored to the “specific statutory goal of accelerating broadband deployment”⁶⁸ and should “encourage the deployment . . . of advanced telecommunications capability to all Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market or other regulating methods that remove barriers to infrastructure investment.”⁶⁹

Thus, the determination of whether broadband is an “information service” or a “telecommunications service” is central to crafting a regulation directing the conduct of ISPs. Given that this first assessment controls what the regulation may permissibly authorize and dictate, it is impractical to design a regulation without first establishing what type of service broadband constitutes. Yet, the FCC has repeatedly switched⁷⁰ its

⁶² 47 U.S.C. § 201(b).

⁶³ *Id.* § 202(a).

⁶⁴ *Id.* § 218.

⁶⁵ See MODERNIZING THE COMMUNICATIONS ACT WHITE PAPER, *supra* note 59, at 2.

⁶⁶ Verizon v. FCC, 740 F.3d 623, 632 (D.C. Cir. 2014) (citing 47 U.S.C. § 154(i)).

⁶⁷ *Id.* at 642.

⁶⁸ *Id.* at 641.

⁶⁹ 47 U.S.C. § 1302(a) (also referred to as § 706(a)). Section 706(d) defines “advanced telecommunication capabilities” as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.” *Id.* § 1302(d)(1) (also referred to as § 706(d)).

⁷⁰ Under the *Computer II* regime, the FCC classified Internet, delivered over telephone lines, as a basic service subject to Title II common carrier requirements. The passing of

answer to this threshold question,⁷¹ causing dramatically different policy and regulatory results.

a. The Classification of Broadband Is Ambiguous and Unpredictable

The FCC's inability to decide on how to classify broadband service has created a legal fiction as to what type of service broadband actually is, highlighting the ambiguous nature of the statute.⁷² With each reclassification, the FCC's authority to regulate ISPs changes overnight. Many judges⁷³ and scholars⁷⁴ have discussed ambiguous statutes as fundamentally flawed. That is, the ambiguous nature of a statute—paired with *Chevron* deference—grants an agency like the FCC an incredible

the Telecommunication Act of 1996 replaced the basic and enhanced service distinction with information service and telecommunication service distinction. Just like basic services were subject to Title II requirements, so too are telecommunications services under the new statute. After its enactment, the FCC classified DSL as a telecommunication service. But a “DSL provider could exempt its Internet access services . . . from Title II,” if, and only if, the provider operated the service in “a separate affiliate.” *Verizon*, 740 F.3d at 629–32. A few years later the FCC determined that cable broadband providers were entirely exempt from Title II. Then, in 2015, the FCC reclassified ISPs as telecommunications services, subject to Title II. Finally, in 2018, the FCC repealed this determination and re-categorized ISPs as an information service.

⁷¹ In the early years of broadband regulation, the FCC concluded that a “DSL provider could exempt its Internet access services . . . from Title II,” but only if the provider operated the service in “a separate affiliate.” *Verizon*, 740 F.3d at 631. A few years later the FCC determined that cable broadband providers were entirely exempt from Title II. *Id.* Then, in 2015 the FCC reclassified broadband as a telecommunication service subject to Title II. Finally, in 2018, the FCC repealed this determination and re-categorized ISPs as an information service. See, e.g., *Evolution of the FCC's Open Internet*, AM. BAR ASS'N (June 29, 2017), https://www.americanbar.org/groups/infrastructure-regulated-industries/publications/infrastructure/2014-15/summer/evolution_the_fccs_open_internet/ [<https://perma.cc/6725-9SUC>].

⁷² See James Tuthill, *FCC Throws in Towel, But Public Has Right to Know Why*, BERKELEY L. (Feb. 25, 2014), <https://www.law.berkeley.edu/article/fcc-throws-in-towel-but-public-has-right-to-know-why/> [<https://perma.cc/Y8LR-MXX7>] (stating that the FCC's refusal to appeal a judgment by the court left the authority of the FCC to police the internet with the court or providers).

⁷³ See, e.g., *Egan v. Del. River Port Auth.*, 851 F.3d 263, 278–79 (3d Cir. 2017) (Jordan, J., concurring); *Gutierrez-Brizuela v. Lynch*, 834 F.3d 1142, 1149–58 (10th Cir. 2016) (Gorsuch, J., concurring); *Waterkeeper All., Inc. v. EPA*, 853 F.3d 527, 539 (D.C. Cir. 2017) (Brown, J., concurring); see also VALERIE C. BRANNON & JARED P. COLE, CONG. RESEARCH SERV., R44954, *CHEVRON DEFERENCE: A PRIMER* 23 n.232 (2017) (quoting *Gutierrez-Brizuela v. Lynch*, 834 F.3d 1142, 1154–55 (10th Cir. 2016)).

⁷⁴ See generally Christopher J. Walker, *Attacking Auer and Chevron Deference: A Literature Review*, 16 GEO. J.L. & PUB. POL'Y 103, 112–13 (2018); BRANNON & COLE, *supra* note 73.

amount of discretionary authority. Some judges have voiced concern with the amount of deference afforded to agencies when interpreting ambiguous statutory text. For example, Supreme Court Justice Neil Gorsuch explained, “[p]ermitt[ing] an agency to issue and reverse regulations affecting large aspects of the economy, including its own jurisdiction to regulate at all, may not satisfy the ‘intelligible principle’ test set forth by the Supreme Court in delegation cases.”⁷⁵ Supreme Court Justice Clarence Thomas has similarly warned of the of “extremely permissive” deference:

Perhaps there is some unique historical justification for deferring to federal agencies . . . but these cases reveal how paltry an effort we have made to understand it or to confine ourselves to its boundaries. Although we hold today that [the agency] exceeded even the extremely permissive limits on agency power set by our precedents, we should be alarmed that it felt sufficiently emboldened by those precedents to make the bid for deference that it did here. As in other areas of our jurisprudence concerning administrative agencies . . . we seem to be straying further and further from the Constitution without so much as pausing to ask why.⁷⁶

In other words, a statute that permits this much discretion to an agency is problematic because it allows the political agenda of a given administration to produce entirely different regulations.

Additionally, the ability to re-classify broadband so easily creates confusion among the public as to what, if any, rights they have. And it leads to confusion among ISPs as to their obligations. Furthermore, this wavering is a waste of the judicial and executive resources needed with each overhaul of the broadband regulation and the subsequent litigation. It is unreasonable and inefficient for a statute to be so malleable that ISPs and consumers must adjust their expectations based on political expectations. “Simply calling a rose by another name will not change what it is.”⁷⁷

⁷⁵ BRANNON & COLE, *supra* note 73.

⁷⁶ *Michigan v. E.P.A.*, 135 S. Ct. 2699, 2713-14 (2015) (Thomas, J., concurring).

⁷⁷ Tuthill, *supra* note 72.

b. Chevron Deference Should Not Be Granted

At the heart of this inquiry also lies the application of *Chevron* deference. *Chevron* deference requires courts to defer to an agency's reasonable interpretation of an ambiguous statute.⁷⁸ A statutory interpretation is unreasonable when the agency's interpretation is "arbitrary, capricious, or manifestly contrary to the statute" in question.⁷⁹ Normally, an agency rule would be arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise."⁸⁰ In other words, "if th[e] choice represents a reasonable accommodation of conflicting policies that were committed to the agency's care by the statute, we should not disturb it unless it appears from the statute or its legislative history that the accommodation is not one that Congress would have sanctioned."⁸¹

While the Supreme Court has stated, "*Chevron* allows agencies to choose among competing reasonable interpretations of a statute,"⁸² a reasonable interpretation should not result in diametrically different authority based on who does the interpretation. Proponents of applying *Chevron* deference to the FCC interpretation of the Telecommunications Act of 1996 will likely classify the dispute of how to classify broadband as a policy choice. "When a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail."⁸³ But even if the classification of broadband as an information or telecommunication service is a policy choice, and while multiple interpretations may be

⁷⁸ *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 845 (1984).

⁷⁹ *Chevron*, 467 U.S. at 844.

⁸⁰ *Motor Vehicle Mfgs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); see also *Arbitrary Definition Law: Everything You Need to Know*, UP COUNSEL, <https://www.upcounsel.com/arbitrary-definition-law> [https://perma.cc/3QZP-AJWF] (defining arbitrary and capricious as "an act . . . occurring with complete disregard for established facts and an overt willingness to abuse the power held by an agency, and is one of the most frequently applied rules for overturning an action by the executive branch of government.").

⁸¹ *Chevron*, 467 U.S. at 845.

⁸² *Michigan v. E.P.A.*, 135 S. Ct. 2699, 2708 (2015).

⁸³ *Chevron*, 467 U.S. at 866.

reasonable, to find reasonableness the statute must support the agency's interpretation. But, how can a statute reasonably be read to redefine the scope of the FCC's own authority? When the choice for interpretation is binary—e.g., an information service or a telecommunications service—and the resulting choice alters the agency's scope of authority to nearly opposite conclusions, both interpretations should not be reasonable. Justice Kennedy notes these concerns regarding reflexive judicial deference in *Pereira v. Sessions*, stating “when deference is applied to . . . questions of statutory interpretation, such as an agency's interpretation of the statutory provisions that concern the scope of its own authority . . . is more troubling still.”⁸⁴

Chevron requires judicial deference to an agency's interpretation of a statute when Congress has not “directly addressed the precise question at issue” and “the statute is silent or ambiguous with respect to the specific issue.”⁸⁵ However, in *King v. Burwell*, Chief Justice Roberts articulated an exception to *Chevron* deference for questions of deep “economic and political significance.”⁸⁶ As more than one source has suspected, “[c]ertainly there is a good argument, a la *King*, that a case involving utility-like regulation of Internet providers is one of deep economic and political significance that should be decided without resort to *Chevron* deference”⁸⁷ In other words, because ISP regulation has become a partisan issue and because the Internet supports large parts of the economy through online commerce, the ISP regulation is a question of deep economic and political significance. Thus, *Chevron* deference should not apply to the FCC's interpretation of the Act.⁸⁸ In this circumstance, the determination of how to interpret the 1996 Telecommunications Act—

⁸⁴ *Pereira v. Sessions*, 138 S. Ct. 2105, 2120 (2018) (Kennedy, J. concurring).

⁸⁵ *Chevron*, 467 U.S. at 843.

⁸⁶ *King v. Burwell*, 135 S. Ct. 2480, 2489 (2015).

⁸⁷ See, e.g., Randolph J. May, *Chevron and Net Neutrality at the FCC*, REGULATORY REVIEW (Feb. 14, 2018), <https://www.theregreview.org/2018/02/14/may-chevron-net-neutrality-fcc/> [<https://perma.cc/Q4RU-SRUG>]; Randolph J. May, *Chevron Decision's Domain May Be Shrinking*, HILL (July 7, 2015, 6:00 AM), <https://thehill.com/blogs/pundits-blog/the-judiciary/247015-chevron-decisions-domain-may-be-shrinking> [<https://perma.cc/BAR7-ZD68>]; Michael Sebring, *The Major Rules Doctrine* (Sept. 17, 2018), GEO. J.L. & PUB. POL'Y, <https://www.law.georgetown.edu/public-policy-journal/blog/the-major-rules-doctrine/> [<https://perma.cc/2WFG-42D4>].

⁸⁸ Petitioner Brief for Writ of Certiorari at i, *Berninger v. FCC*, 139 S. Ct. 453, (Nov. 5, 2018) (No. 17–498) (cert. denied) (listing question #2 for the court as “[i]s the radical reinterpretation of the Act by the Commission entitled to deference under *Chevron*”).

specifically, whether broadband is a telecommunications service or an information service—should be left to Congress because in this unique set of circumstances, not only has the FCC flip-flopped in its classification of broadband, the court has as well. In *Verizon*, the court stated, albeit in dicta, “[w]e think it obvious that the Commission would violate the Communications Act were it to regulate broadband providers as common carriers.”⁸⁹ Yet, less than a year later, the FCC did exactly that in the *2015 Open Internet Order*, demonstrating a clear disregard for the court’s interpretation of the statute.⁹⁰ More confusing still, the D.C. Circuit later upheld the FCC’s classification of broadband as a telecommunication service subject to common carrier rules—contrary to their prior assertion.⁹¹ Given that the FCC’s interpretation of the statute has been inconsistent,⁹² that the court’s view of a reasonable interpretation has been inconsistent,⁹³ and that the D.C. Circuit has both sometimes overruled and sometimes upheld the FCC’s interpretation—all in the last five years—these political branches have demonstrated an inability to agree on the appropriate scope of FCC authority to regulate broadband providers. “When the political branches disagree with a judicial interpretation of existing law, the Constitution prescribes the appropriate remedial process. It’s called legislation.”⁹⁴

2. *The FCC’s Recent Attempts at Regulating Broadband Service Have Not Provided Adequate Rules to Discourage Improper ISP Conduct Counter to the Public Interest.*

The two most recent FCC regulations are exemplary of the FCC’s inconsistent position on broadband classification. These regulations, the

⁸⁹ *Verizon v. FCC*, 740 F.3d 623, 650 (D.C. Cir. 2014).

⁹⁰ The D.C. Circuit did, however, later accept the FCC re-classification of broadband as a telecommunication services, subject to common carrier rules in *U.S. Telecom Ass’n v. FCC*, 825 F.3d 674, 710–11 (D.C. Cir. 2016), demonstrating the court’s own inconsistency.

⁹¹ *Id.* at 689.

⁹² Compare *Open Internet Order of 2015 with Restoring Internet Freedom Order* (declaring that broadband is a telecommunications service under the 2015 Order but then re-defining it as an information service under the Restoring Internet Freedom Order).

⁹³ Compare *Verizon*, 740 F.3d at 650 with *U.S. Telecom Ass’n*, 825 F.3d at 689 (deferring to the FCC’s interpretation of broadband as an information service in *Verizon*, while conversely, deferring to the FCC’s interpretation of broadband as a telecommunications service under *U.S. Telecom Ass’n*).

⁹⁴ *Gutierrez-Brizuela v. Lynch*, 834 F.3d 1142, 1151 (10th Cir. 2016) (Gorsuch, J., concurring).

2015 Open Internet Order and the *Restoring Internet Freedom Order*, take opposing views on which type of service broadband is. This difference in classification has resulted in vastly different obligations on ISPs under each Order.

a. Open Internet Orders

The *Open Internet Orders* provide a case study on the limits of regulating broadband both as an information and telecommunication service because two different versions of the Order, with substantially similar rules, were adopted, each treating broadband as a different type of service. The *2010 Open Internet Order* first classified broadband as an information service.⁹⁵ The FCC then re-classified broadband as a telecommunication service in the *2015 Open Internet Order*, permitting ISPs to be treated as Title II common carriers.⁹⁶

The *2010 Open Internet Order* consists of four main requirements for ISPs: transparency, no unreasonable discrimination, no blocking, and reasonable network management.⁹⁷ Transparency requires ISPs to clearly “disclose accurate information regarding the network management practices, performance, and commercial terms of [their] broadband Internet access services.”⁹⁸ The anti-discrimination provision states that ISPs “shall not unreasonably discriminate in transmitting lawful network traffic.”⁹⁹ The anti-blocking requirement prohibits the “block[ing] of lawful content, applications, services, or non-harmful devices, subject to reasonable network management.”¹⁰⁰

Verizon v. FCC vacated the anti-blocking and anti-discrimination rules of the *2010 Open Internet Order* because the Order “subject[ed] broadband providers to common carrier treatment,” while broadband was still classified as an information service.¹⁰¹ In response, the FCC re-

⁹⁵ See generally FCC Open Internet Order, 25 FCC Rcd. 17905 (2010).

⁹⁶ Kimberlee Morrison, *Net Neutrality: FCC Reclassifies ISPs as Common Carriers*, ADWEEK (Feb. 26, 2015), <https://www.adweek.com/digital/net-neutrality-fcc-reclassifies-isps-as-common-carriers/> [https://perma.cc/49JG-PD3R].

⁹⁷ *Evolution of the FCC's Open Internet*, supra note 71.

⁹⁸ FCC Open Internet Order, 25 FCC Rcd. 17937 ¶ 54 (2010).

⁹⁹ *Id.* at 17944 ¶ 68.

¹⁰⁰ *Id.* at 17942 ¶ 63. “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 technology of the broadband Internet access service.” *Id.* at 17952 ¶ 82.

¹⁰¹ *Verizon v. FCC*, 740 F.3d 623, 650 (D.C. Cir. 2014).

classified broadband as a telecommunication service subject to Title II in the *2015 Open Internet Order* and re-drafted the rules prohibiting blocking and throttling. The *2015 Order* also added a new prohibition against paid prioritization. The new paid prioritization rule meant that edge providers could not pay for a “fast lane” allowing an ISP to favor some traffic from some sources over others.¹⁰² The transparency and reasonable network management practices remained intact. Thus, merely by re-classifying broadband as a telecommunication service, the FCC was able to re-instate the conduct-focused rules of the *2010 Order* that had been previously vacated as beyond the statutory authority of the FCC when broadband was classified as an information service.

Relying on *Chevron* deference, the D.C. Circuit upheld the FCC’s interpretation of the Telecommunications Act as allowing broadband to be classified as a telecommunication services.¹⁰³ The Supreme Court denied the petition for certiorari in 2018 because the promulgation of the *2018 Restoring Internet Freedom Order* rendered the case moot.¹⁰⁴ Thus, whether the FCC’s interpretation of the Telecommunications Act of 1996 in light of *Chevron* deference was proper may still be in question.

Regardless of the service classification, both versions of the *Open Internet Order* are problematic because they appear facially over-broad, while at the same time, they are actually under-inclusive, allowing loopholes for behavior that should be curtailed and making it difficult for ISPs to achieve conduct consistent with the rules.¹⁰⁵ The rules for blocking and throttling purport to create sweeping prohibitions against ISPs, while including within each rule an escape hatch—an exception for reasonable network management. The no paid prioritization rule from the *2015 Open Internet Order* is not subject to this exception and may actually be overbroad.¹⁰⁶

This exception allows ISPs to excuse harmful behavior through the reasonable network management loophole. A network management practice is a practice that has a primarily technical network management justification but does not include other business practices. A network management practice is reasonable if it is primarily used for and tailored to achieving a legitimate network management purpose, taking into

¹⁰² *Evolution of the FCC’s Open Internet*, *supra* note 71.

¹⁰³ U.S. Telecom Ass’n v. FCC, 825 F. 3d 674, 710–11 (D.C. Cir. 2016).

¹⁰⁴ U.S. Telecom Ass’n v. FCC, 139 S. Ct. 475 (2018) (Mem.).

¹⁰⁵ Richard Bennett, *Mysteries and Loopholes in the Open Internet Order*, HIGHTECH FORUM (Feb. 15, 2017), <http://hightechforum.org/mysteries-and-loopholes-in-the-open-internet-order/> [<https://perma.cc/QX5H-HQYY>].

¹⁰⁶ See *infra* Section IV.B.3.b.

account the particular network architecture and technology of the broadband Internet access service.¹⁰⁷

One example of the reasonable network management loophole is zero-rating. Zero-rating is the idea that ISPs can select which applications and/or websites count towards data-caps.¹⁰⁸ While ISPs likely select applications and websites for zero-rating to enhance user experience, other applications of zero-rating may be harmful or anticompetitive, such as when Comcast included their own “Stream TV” service in the zero-rating but excluded Netflix and Youtube.¹⁰⁹ In both cases, the selection of what is zero-rated and what is not is arbitrary from a technical perspective because how the packets of data are delivered between users does not change based on whether a particular packet counts towards the data cap or not. However, it is not arbitrary from an economic perspective for the ISP that chooses to promote their own services. Yet, an ISP may, and has, argued that both practices are permissible, presumably as a reasonable network management practice.¹¹⁰

Another example demonstrates that the reasonable network management exception to treat data differently in order “to protect [ISP] networks from malicious content and to relieve congestion”¹¹¹ may impose degradations of security. The Broadband Internet Technical Advisory Group reported, “Security of traffic has at times been downgraded to facilitate differentiation techniques.”¹¹² But when security

¹⁰⁷ FCC Protecting and Promoting the Open Internet, 80 Fed. Reg. 19738, 19741 (Apr. 13, 2015).

¹⁰⁸ Devin Coldewey, *WTF Is Zero-Rating*, TECH CRUNCH (Apr. 16, 2017), <https://techcrunch.com/2017/04/16/wtf-is-zero-rating/> [<https://perma.cc/K7RF-T8PL>] (Zero rating works by allowing ISPs to choose which packets of data count towards data caps, then when these packets of data are sent/received, the packet of data is either entered onto a ledger towards the user’s data cap or not.).

¹⁰⁹ *Id.*

¹¹⁰ Comcast’s argument appears to be “other services came over the cable-powered internet, while Stream TV came over the internet-powered cable.” *Id.* An argument that is skeptical at best.

¹¹¹ FCC Protecting and Promoting the Open Internet, 80 Fed. Reg. 19738, 19833 (Apr. 13, 2015).

¹¹² TECHNICAL WORKING GROUP, BROADBAND INTERNET TECHNICAL ADVISORY GROUP, DIFFERENTIATED TREATMENT OF INTERNET TRAFFIC 29 (October 2015), https://www.bitag.org/documents/BITAG_Differentiated_Treatment_of_Internet_Traffic.pdf [<https://perma.cc/YU6Z-ADJH>]; *see also id.* at 8-9 (Differentiated treatment of network traffic is a two-part process: (1) traffic is classified into traffic streams, and (2) a prescribed set of actions is applied to each stream. . . . Traffic classification can be performed in most layers of the network model, though the available classification elements differ at each layer.).

conflicts with efficiency,¹¹³ a person's, or an ISP's, interpretation on which reasonable network management practice should prevail—efficiency or security—may and likely will differ.

Admittedly, it is not practical to draw out every exception for “reasonable networking management” practices in a regulation—especially, given the rapidly-changing nature of the Internet and the possibility that articulating a very specific set of rules would allow ISPs to side-step regulations in another manner by crafting and performing other discriminatory behavior not articulated in what would become a compliance checklist. Yet, drafting more precise language will allow ISPs to have more control over their network management practices and will provide more clarity on what types of network management practices are “unreasonable.”

b. Restoring Internet Freedom Order

In June 2018, not long after the Trump Administration took Office, the FCC once again classified broadband as an information service in the *Restoring Internet Freedom Order*.¹¹⁴ This order removed all of the conduct-focused rules of the *Open Internet Order* except for the transparency requirement.¹¹⁵ The FCC promoted the *Restoring Internet Freedom Order* as a “framework for an open Internet, while paving the way for better, faster, and cheaper Internet access for consumers,”¹¹⁶ and determined these goals can be achieved by focusing on consumer protection, transparency, and the removal of unnecessary regulations.¹¹⁷ Each of these three mechanisms is problematic to achieving conduct consistent with the public interest.

¹¹³ For example, ViaSat decrypted data to optimize performance and Gogo InFlight Internet “forged TLS certificates in order to shape traffic or block high-bandwidth uses.” *Id.* at 27.

¹¹⁴ See generally FCC Restoring Internet Freedom Order, 33 FCC Rcd. 311 (2018).

¹¹⁵ In fact, the conduct-focused rules are not permissible under the *Restoring Internet Order* because, as Verizon v. FCC explained, while broadband is classified as an information service, the “specific rules imposed by the Open Internet Order fall outside the scope [of the ancillary authority of § 706(a) and (b).” Verizon v. FCC, 740 F.3d 623, 642 (D.C. Cir. 2014). In other words, while classified as an information service, the FCC may not impose the conduct-specific rules of the 2010 and 2015 orders; it is first necessary to classify broadband as a telecommunication to re-impose the conduct-specific rules. This demonstrates the difference between the scope of authority under Title II and under § 706.

¹¹⁶ FCC Restoring Internet Freedom Initiative, *supra* note 10.

¹¹⁷ *Id.*

First, to achieve consumer protection, the FCC abdicated its authority and purported to return oversight over broadband providers to the Federal Trade Commission (FTC) authority to “police and take action against Internet Service Providers for anticompetitive acts or unfair and deceptive practices.”¹¹⁸ This grant of authority is problematic because “FTC enforcement processes are by nature *reactive* and can take years.”¹¹⁹ Further, enforcement of § 5 of the FTCA,¹²⁰ from which the FTC derives its authority to police unfair and deceptive acts, is rare.¹²¹ The likely result of repealing the proactive preemptive rules of the *Open Internet Orders*, in exchange for the reactive enforcement authority granted to the FTC, is less consumer protection.¹²²

Second, the removal of “heavy-handed regulations,”¹²³ including the removal of the anti-blocking, anti-throttling, and no paid prioritization rules, is problematic because it returns the regulation of ISPs to the status quo discussed in Section III.A above. The return to the status quo would lead to ISP conduct inconsistent with the public interest, given the anti-competitive nature of ISP conduct in the broadband market. The FCC premises the need for de-regulation on a desire to promote investment in high-speed networks.¹²⁴ Increased investment has the potential to increase access to broadband, supporting the universality element of the public interest, and innovation, which furthers the quality and cost-effectiveness elements of public interest. The FCC argues that investment decreased by 5.6% under the *Open Internet Order*,¹²⁵ but this data is actually inconclusive. The FCC relies on a report for this finding that actually determines that investment may have increased by up to 5.3% or decreased by as much as 5.6%, depending on how the underlying data is

¹¹⁸ *Id.*

¹¹⁹ Nati Hyojin Kim, *FTC v. AT&T: 9th Circuit Broadens FTC’s Regulatory Authority with Regards to the Common Carrier Exemption*, JOLT DIGEST (Mar. 13, 2018), <https://jolt.law.harvard.edu/digest/ftc-v-at-t-9th-circuit-broadens-ftcs-regulatory-authority-with-regards-to-the-common-carrier-exemption> [<https://perma.cc/M4JY-2VKJ>] (emphasis added).

¹²⁰ 15 U.S.C. § 45(a)(1) (2012).

¹²¹ William E. Kovacic & Marc Winerman, *Competition Policy and the Application of Section 5 of the Federal Trade Commission Act*, 76 ANTITRUST L.J. 929, 933–34 (2010) (“One would be hard-pressed to come up with a list of ten adjudicated decisions that involved the FTC’s application of § 5 in which the FTC prevailed and the case can be said to have had a notable impact, either in terms of doctrine or economic effects.”).

¹²² Kim, *supra* note 119.

¹²³ *FCC Restoring Internet Freedom Initiative*, *supra* note 10.

¹²⁴ *Id.*

¹²⁵ *Id.*

interpreted and analyzed.¹²⁶ Further, the report correctly reminds readers of the difference between correlation and causation:

Whether investment is up or down after Title II classification doesn't necessarily tell us much about to what extent . . . Federal Communication Commission (FCC) policy is to thank (or blame) for those changes. Not only is the time period far too short, investment overall could very well be up, but not up as much as it otherwise would be without Title II (same if there was a decline).¹²⁷

Even with these cautions of statistical analysis, another report affirmatively concludes that “[p]ublicly-traded broadband internet access service providers' own investment data shows an aggregate increase of 5.3 percent when we compare the two years preceding the Commission's February 2015 vote to adopt open internet rules and Title II classification with the two years following that vote.”¹²⁸ Thus, at best, the FCC's current statement that investment decreased during the Open Internet Order is inconclusive. At worst, it is flat out incorrect.

Finally, as discussed previously, transparency is an ineffective tool when consumers have no meaningful choice to shop between ISPs, even though the FCC “anticipates that the . . . disclosures will empower consumers and businesses with information about their broadband internet access service.”¹²⁹ Transparency without additional action is an insufficient means to foster meaningful choice in the market; thus, the *Restoring Internet Freedom Order* falls short by simply mandating that ISPs report this conduct without pairing it with other requirements.

In sum, the *Restoring Internet Freedom Order*, which eliminated conduct-focused rules, failed to address concerns about monopolization of the broadband market. Instead, this rule merely returned the ISP market to the pre-2010 status quo.

¹²⁶ Doug Brake, *Broadband Myth Series, Part 1: What Financial Data Shows About the Impact of Title II on ISP Investment*, INFO. TECH. & INNOVATION FOUND. (June 2, 2017), <https://itif.org/publications/2017/06/02/broadband-myth-series-part-1-what-financial-data-shows-about-impact-title-ii> [<https://perma.cc/46UK-D837>].

¹²⁷ *Id.*

¹²⁸ *Broadband Invest Basics Fact Sheet*, FREE PRESS (May 15, 2018), https://www.freepress.net/sites/default/files/2018-06/fpaf_broadband_investment_basics.pdf [<https://perma.cc/E6E5-NCG8>].

¹²⁹ *Restoring Internet Freedom*, 83 Fed. Reg. 21927, 21928 (May 11, 2018).

IV. PROACTIVE LEGISLATION AND REGULATION ARE NECESSARY TO PROMOTE THE PUBLIC INTEREST AND TO BALANCE THE EFFICIENCIES INHERENT TO THE BROADBAND INDUSTRY WITH CONCERNS OF UNDUE DISCRIMINATION.

A. An Amendment to the Telecommunications Act of 1996 Is Required to Finally Determine the Classification of Broadband Service and the FCC's Scope of Authority in Regulating ISPs.

Congress should amend the 1996 Telecommunications Act to: (1) prohibit the political flip-flopping of broadband classification based on political agendas and (2) address technological differences that distinguish broadband from other areas of the telecommunications market. Congress, rather than the FCC or courts, remains best suited to resolve the policy issues raised in recent years by addressing the ambiguities and concerns through the legislative process. In amending the Telecommunications Act, Congress should provide more direction to the FCC, to ISPs, and to the public, particularly with regards to how to classify ISPs—thus determining the FCC's scope of authority to regulate ISPs.

Additionally, this newly amended statute should include specific instruction on the FCC's scope of authority to craft new regulatory rules for ISPs. This new category for "smart services" must take into account the unique characteristics of the Internet and the technological capabilities of ISPs that typify broadband service. When the 1996 Telecommunications Act was enacted, the prevailing means of communication in the general public were "dumb"¹³⁰ services, capable of "little more than . . . [connecting] an electrical circuit between a calling party and a called party. . . . If the system was overloaded, the caller got a busy signal and came back later."¹³¹ However, "smart services" require more than a binary connect or do not connect decision. Instead, they require decisions concerning *how* to connect. This new "smart services" category must grant more authority than § 706 of the Telecommunication Act of 1996 in order to avoid the same vacating judgment of *Verizon v. FCC*, which found that the FCC lacked statutory authority to create anti-blocking and anti-discrimination rules when broadband is classified as an information service.¹³² In addition, Congress could consider granting less authority to the FCC than that of common carriers under Title II, if, for

¹³⁰ EHRlich, *supra* note 26.

¹³¹ *Id.*

¹³² *Verizon v. FCC*, 740 F.3d 623, 659 (D.C. Cir. 2014).

example, the legislature determined it was inappropriate for the FCC to require ISPs to file rate schedules or submit contracts to the FCC for review.¹³³

B. A Regulation Is Needed to Draft the Specific Conduct-Focused Rules that Incentivize ISPs to Behave in Congruence with the Public Interest

Regardless of whether Congress chooses to amend the current telecommunications statute, a new regulation is required to address concerns with the broadband market structure and anticompetitive conduct of ISPs. Mere re-adoption of the *2015 Open Internet Order* remains insufficient. Instead, a new regulation should aim to facilitate market conditions that align business conduct with the public interest.¹³⁴ While the intent of the 2015 rules is essential to the furtherance of the public interest, more specific rules should be adopted to reduce the problem of over and under-inclusiveness of the rules. The FCC could also attempt to address the lack of competition by limiting the market power of ISPs by breaking up the market participants or by forcing ISPs to share access to the underlying Internet infrastructure. However, such market-based responses are beyond the scope of this paper.¹³⁵

Conduct-focused regulations are appropriate to achieve the public interest of ensuring that reliable Internet access is provided to all Americans in a manner that is not unduly discriminatory at a reasonable cost.¹³⁶ In addition to addressing the statutory public interest, clarity of

¹³³ Loeb, *supra* note 61, at 20-21.

¹³⁴ “Effective competition is, in contrast, some combination of market structure, seller and buyer conduct, and performance outcomes that achieves the goals sought by the policymaker.” HEMPLING, *supra* note 9, at 122.

¹³⁵ Where unbalanced market power creates anticompetitive behavior, at least two types of remedies can address these deficiencies: conduct-based regulations and market-based remedies (e.g., limiting market power by forcing the market participants to break up). The FCC has used both approaches to create competition in the telephone market. For example, in 1984, after the Department of Justice initiated an antitrust lawsuit against AT&T, AT&T split off and relinquished control over the Bell Operating Companies. This paper proposes conduct-focused rules, which when paired with ongoing oversight by the FCC and consumer rights of action, are likely sufficient to keep ISP behavior consistent with the public interest. A different approach to introducing competition to the broadband market may include limiting the market power of ISPs by addressing flaws in the market structure; for example, forcing ISPs to share access to the underlying Internet infrastructure. This paper does not purport to explore these solution comparisons in full; instead, it offers analysis on one possible approach to the issue through rules that are discussed below.

¹³⁶ See discussion *supra* Section II.

rules also benefits consumers. First, transparency provides consumers with the tools to identify practices that are and are not allowed, which empowers individuals to hold ISPs and the FCC accountable for reliable Internet access. Second, regulations that craft clearer lines between permissible and impermissible practices advance the public interest by facilitating confidence and trust between market participants. Thus, at a minimum, new rules should reinstate the transparency and anti-blocking rule of the *2015 Order*. Additionally, the FCC should provide more specific guidance under the anti-throttling and no paid prioritization rules, especially in defining what constitutes reasonable network management practices and what does not. In other words, the FCC should define what constitutes duly and unduly discriminatory treatment of data.

1. Transparency Is Necessary but Not Sufficient Without an Enforcement Mechanism for Improper Conduct

Transparency is necessary. This is something both the *Open Internet Orders* and the *Restoring Internet Freedom Order* agree on. Transparency provides both individuals and the FCC with a means by which to evaluate unduly discriminatory behavior, a key aspect in promoting public interests.

Even though transparency provides some inherent scrutiny of ISP practices, consequences for improper conduct are also necessary. While there are many possible means of building in a check on ISP behavior, one possible means may be to provide a formal complaint mechanism through the FCC with which individuals could report unduly discriminatory behavior.

Transparency is not a sufficient enforcement mechanism absent additional regulatory tools. While transparency provides users with more information to make choices, it does not generate effective competition that would give them meaningful options. For example, if only one broadband service provider exists in the area, the end user can be perfectly informed of the ISPs' choices but still lack an alternative to their service. As noted previously,¹³⁷ approximately 129 million Americans only have one option for broadband in their area.¹³⁸ Because of this market structure

¹³⁷ See discussion *supra* Section III.A.1.

¹³⁸ Kaleigh Rogers, *More than 100 Million Americans Can Only Get Internet Service from Companies that Have Violated Net Neutrality*, MOTHERBOARD (Dec. 11, 2017, 2:30 PM), https://motherboard.vice.com/en_us/article/bjdjd4/100-million-americans-only-have-one-isp-option-internet-broadband-net-neutrality [<https://perma.cc/GJ2Q-AYLZ>].

problem, the transparency requirement must be supplemented with other conduct-focused rules to direct the conduct of ISPs that they otherwise would not adhere to in order to promote the public interest.

2. *Blocking Legal Content Is Per Se Unreasonable*

Allowing ISPs to block lawful content would exclude ideas from the marketplace of ideas,¹³⁹ a prevailing paradigm in First Amendment theory and jurisprudence. Although the First Amendment is only implicated by government action,¹⁴⁰ new anti-blocking rule for ISPs should embrace the values that the First Amendment protects for three reasons.

First, while the “marketplace of ideas” was initially a metaphor, today ISPs provide the actual infrastructure to construct a real marketplace of ideas online. “While in the past there may have been difficulty in identifying the most important places (in a spatial sense) for the exchange of views, today the answer is clear. It is cyberspace—the ‘vast democratic forums of the Internet’”¹⁴¹ Second, the FCC, by promulgating rules, is effectively allowing or disallowing entry of ideas into the market place depending on whether they permit or prohibit blocking under a new broadband order. In other words, although ISPs are the actors in blocking legal content, the government sanctions this censorship by not crafting a rule prohibiting blocking.¹⁴² Additionally, this government-sanctioned censorship has significant effects on the press, which is generally granted

¹³⁹ *U.S. v. Rumley*, 345 U.S. 41, 56 (1953) (Douglas, J., concurring); *cf.* *Brandenburg v. Ohio*, 395 U.S. 444, 456 (1969) (“The line between what is permissible and not subject to control and what may be made impermissible and subject to regulation is the line between ideas and overt acts.”).

¹⁴⁰ AJ Willingham, *The First Amendment Doesn’t Guarantee You the Rights You Think It Does*, CNN (Sept. 6, 2018, 7:36 PM), <https://www.cnn.com/2017/04/27/politics/first-amendment-explainer-trnd/index.html> [<https://perma.cc/L4AX-K9MR>]. Additionally, individuals have First Amendment rights in quasi-public spaces. *See Marsh v. Alabama*, 326 U.S. 501 (1946) (holding private owners of a town could not infringe on First Amendment rights); *Food Emps. Union v. Logan Valley Plaza*, 391 U.S. 308 (1968) (holding that the First Amendment protected picketing outside a private shopping center).

¹⁴¹ *Packingham v. North Carolina*, 137 S. Ct. 1730, 1735 (2017) (quoting *Reno v. ACLU*, 521 U.S. 844, 868 (1997)).

¹⁴² Petitioner Brief for Writ of Certiorari at i, *Berninger v. FCC*, 825 F.3d 674 (D.C. Cir. 2016) (No. 17-498) (cert. denied) (listing question #1 for the court as “Does the Commission’s assumption of gatekeeper power over new methods of communication, in the most important place . . . for the exchange of views . . . the vast democratic forums of the Internet . . . violate the First Amendment?”) (internal citations omitted).

strong First Amendment protections against censorship,¹⁴³ given that online news outlets are the primary form of news communications today.¹⁴⁴ Third, as a policy matter, Censorship curtails speech and debate, fundamental to the democratic process.¹⁴⁵ For these policy reasons, the FCC should prohibit ISPs from blocking legal content.

3. “Reasonable Discrimination” Does Not Mean No Discrimination

“[D]iscrimination can be lawful or unlawful, depending on whether it is ‘due’ or ‘undue.’”¹⁴⁶ Due discrimination means “treat[ing] similar customers similarly; dissimilar customers dissimilarly.”¹⁴⁷ This same rule should be applied to data: treat similar data similarly, dissimilar data dissimilarly. In the context of broadband, this line is a helpful distinction in determining what is “unreasonable discrimination” under 47 C.F.R. § 8.7 of the *2010 Open Internet Order*, prior to its repeal.¹⁴⁸ Even with this definition, conduct-specific rules that define undue discrimination should be included for common concepts of potentially discriminatory behavior, including, at a minimum, throttling and paid prioritization practices.

¹⁴³ Willingham, *supra* note 140; *see also* *Red Lion Broad. v. FCC*, 395 U.S. 367 (1969) (holding that the FCC could require radio stations to provide equal airtime to opposing points of view by the press under the Fairness Doctrine, allowing the government to mandate access to the press even though radio stations were privately owned). *But see* *Miami Herald v. Tornillo*, 418 U.S. 241 (1974) (holding that a government’s mandate to access to the press was unconstitutional when the publication only has finite resources).

¹⁴⁴ Christine Schmidt, *Americans Expect to Get Their News from Social Media, But They Don’t Expect It to Be Accurate*, NIEMANLAB (Sept. 10, 2018, 11:35 AM), <http://www.niemanlab.org/2018/09/americans-expect-to-get-their-news-from-social-media-but-they-dont-expect-it-to-be-accurate/> (citing a PEW Institute report) [<https://perma.cc/3YP4-WANJ>].

¹⁴⁵ Eric Fish, *Is Internet Censorship Compatible with Democracy? Legal Restrictions of Online Speech in South Korea*, 10.2 ASIA-PACIFIC J. HUM. RTS. & L. 43 (2009) (“The possibility of government control over the Internet cuts out the very heart of its democratic ambitions.”).

¹⁴⁶ HEMPLING, *supra* note 9, at 288.

¹⁴⁷ *Id.*

¹⁴⁸ “In evaluating unreasonable discrimination, the types of practices we would be concerned about include, but are not limited to, discrimination that harms an actual or potential competitor to the broadband provider (such as by degrading VoIP applications or services when the broadband provider offers telephone service), that harms end users (such as by inhibiting end users from accessing the content, applications, services, or devices of their choice), or that impairs free expression (such as by slowing traffic from a particular blog because the broadband provider disagrees with the blogger’s message). *Open Internet Order*, 25 FCC Rcd. 17905, 17946 ¶ 75 (2010) (internal citations omitted), <https://www.fcc.gov/document/preserving-open-internet-final-rule>.

a. Not All Throttling Is Unduly Discriminatory

As mentioned previously, throttling means degrading or impairing access to lawful Internet traffic based on the content, application, service, users, or use of a non-harmful device. To supporters of the *Open Internet Orders*, throttling means that all traffic should be treated equally. But, changes in technology require changes in regulation.

“The idea that all traffic must be treated equally sounds democratic, but can be costly and inefficient in practice, and ignores the reality that different Internet traffic can have different needs for speed and reliability.”¹⁴⁹ Throttling, in certain circumstances, may actually allow ISPs to optimize performance of the network.¹⁵⁰ This optimization is especially important for essential services, such as “autonomous vehicles, remote surgeries, and public safety communications.”¹⁵¹ For example, distinguishing between different types of traffic across the Internet allows ISPs to keep certain “packets” of data together, thereby reducing lag time and buffering.¹⁵² In addition, treating data differently could allow for ISPs to create service packages based not on download and upload speeds generally but on the types of services a user requires. While this rule could be implied by the *2015 Order*’s requirement for “reasonable network management” exceptions,¹⁵³ crafting an explicit rule may force both sides of the net neutrality debate to grapple with the issue directly, setting aside political rhetoric and grounding the conduct-driven rules in the foundation of how the Internet operates.

Relying on the analogy that due discrimination (as opposed to undue discrimination), as related to customers, means treating all similar customers similarly, these types of throttling should treat similar classes of data similarly. For example, in the power industry it was not unduly discriminatory to treat municipalities and rural cooperatives differently

¹⁴⁹ EHRlich, *supra* note 26, at 12.

¹⁵⁰ *See id.*

¹⁵¹ Katherine Trendacosta, *Busting Two Myths About Paid Prioritization*, EFF (Apr. 16, 2018), <https://www.eff.org/deeplinks/2018/04/busting-two-myths-about-paid-prioritization> [<https://perma.cc/M2VR-3KDE>].

¹⁵² EHRlich, *supra* note 26, at 12.

¹⁵³ Reasonable network management. A network management practice is a practice that has a primarily technical network management justification, but does not include other business practices. A network management practice is reasonable if it is primarily used for and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service. 47 C.F.R. § 8.2.

where “the different load profiles meant different costs to serve.”¹⁵⁴ Analogously, this general rule could also be used in distinguishing between different types of data. For example, “a packet containing the next frame of your streaming movie or online game needs to be delivered in very timely fashion, while email or a Facebook post can take its time (relatively speaking).”¹⁵⁵

In fact, discrimination in this manner may increase quality by increasing speed for the services delivered and increase cost effectiveness because end users are paying only for the services they need, giving buyers the opportunity to choose a service that meets their needs.¹⁵⁶ These types of throttling should be permissible and are not unduly discriminatory.

b. Some Edge Provider Paid Prioritization Is Unduly Discriminatory

Paid prioritization embodies the idea that ISPs can promote some data over others based on an edge provider’s payments to increase speed, and thus traffic, on their websites.¹⁵⁷ Throttling by paid prioritization may be unduly discriminatory, although the reasonable network management exception under the *Open Internet Orders* and the *Restoring Internet Freedom Order* provide an escape hatch with which ISPs may justify charging large sums of money to edge providers for prioritization.¹⁵⁸ For example, “Netflix already pays huge amounts of money to get their data to consumers quickly,” but this is permissible as a reasonable network management practice because it helps “the Internet run properly.”¹⁵⁹

¹⁵⁴ HEMPLING, *supra* note 9, at 291.

¹⁵⁵ Devin Coldewey, *These Are the Arguments Against Net Neutrality and Why They’re Wrong*, TECH CRUNCH (May 19, 2017), <https://techcrunch.com/2017/05/19/these-are-the-arguments-against-net-neutrality-and-why-theyre-wrong/> [<https://perma.cc/2TJX-FGBK>].

¹⁵⁶ See *Open Internet Order*, 25 FCC Rcd 17905, 17945 ¶ 72 (2010) (“However, prohibiting tiered or usage-based pricing and requiring all subscribers to pay the same amount for broadband service, regardless of the performance or usage of the service, would force lighter end users of the network to subsidize heavier end users. . . . The framework we adopt today does not prevent broadband providers from asking subscribers who use the network less to pay less, and subscribers who use the network more to pay more.”).

¹⁵⁷ Note that paid prioritization is a type of throttling that allows “ISPs [to] double-dip by letting them charge consumers for access to Internet services and then turn[ing] around and charg[ing] Internet services for better access to consumers.” Trendacosta, *supra* note 151.

¹⁵⁸ See *id.*

¹⁵⁹ Coldewey, *supra* note 155.

“Critics of net neutrality believe bandwidth-hogging media giants like Netflix should have to pay extra for the heavy burden they place on broadband networks” while proponents typically argue that “a fast lane for one site would necessarily slow down other, potentially competing sites.”¹⁶⁰ But, these two viewpoints can be reconciled by treating similar edge providers similarly and different edge providers differently. Rather, the prohibition should be against ISPs “rig[ging] sweetheart deals giving fat pipe access to services of their choosing, while charging the competition higher rates.”¹⁶¹ For example, critics of the recent AT&T-Time Warner merger explain how AT&T may “weaponize” the media content it acquired in the acquisition.¹⁶² With the elimination of the prohibition against paid prioritization, AT&T could zero-rate all data they owned, while leaving unaffiliated media companies under customer data caps. AT&T can also legally charge other media companies for the same zero-rated prioritization.¹⁶³

The rule to treat all similar edge providers similarly and different edge providers differently should take into consideration the following factors: (1) whether the edge providers are competitors with each other, (2) the type(s) of data the edge providers primarily transmit, (3) the number of customers, readers, or viewers of the edge providers’ content, (4) the bandwidth required for an ISP to provide users with adequate service, and (5) potentially additional metrics. Congress should grant the FCC authority to classify edge providers based on these factors and/or other factors deemed appropriate. For example, ISPs should not give preferential treatment to Netflix at a lower paid prioritization rate and discourage Hulu access by charging them a higher rate because they are competitors, transmit similar types of data, and likely have a similar number of customers. Thus, for example, assuming the FCC finds the five factors above are equivalent for Netflix and Hulu, the rate an ISP charges to Netflix for prioritization should be approximately equal to the amount that Hulu is charged. It is inequitable to simply treat all video services equally, for example, because this may prove detrimental to small

¹⁶⁰ Margaret Rouse, *Paid Prioritization*, WHATIS.COM, <https://whatis.techtarget.com/definition/paid-prioritization> [<https://perma.cc/6R44-TN85>].

¹⁶¹ Coldewey, *supra* note 155.

¹⁶² E.g., Mark Sullivan, *AT&T’s Time Warner Deal and Net Neutrality’s End Gave Us Watch TV*, FAST COMPANY (June 22, 2018), <https://www.fastcompany.com/40588895/atts-time-warner-deal-and-net-neutralitys-end-gave-us-watchtv> [<https://perma.cc/9HXP-RLMK>].

¹⁶³ *See id.*

businesses that likely cannot afford to pay for the faster pipeline at the same rate as Netflix and Hulu. In other words, ISPs should create reasonable rate tiers, allowing smaller costs for new entrants to the market. One possible means for structuring these rate tiers would be to charge edge providers based on the bandwidth required to transmit their services.

While other industries also charge different rates for prioritization without undue discrimination, paid prioritization in the broadband market is different because of the public interest discussed in Section II and because of the failures in the market structure discussed in Section III. For example, an individual may pay for a toll lane or toll road for faster access to a destination. The rule articulated for paid prioritization here is similar. In other words, if Netflix wants a “fast lane,” they can pay for it; so can a start-up video service. The argument rather is that the “first class seat” price should be different for Netflix versus a start-up because of the number of cars they will be sending across the toll road. Thus, a lower rate for smaller edge providers minimizes the economic burden required to compete with a larger, more established edge provider. Additionally, a higher toll for a larger edge provider does not discourage growth or innovation, even if they have to pay a higher rate because this is only one of many factors a multi-million dollar company would consider in determining growth strategies. Thus, this rule balances the economic interests in allowing ISPs to charge for more bandwidth with the economic interest of promoting new edge providers in the market and may remove barriers to entry where newcomers cannot pay to play. Accordingly, paid prioritization may be permissible if crafted in such a way that treats similar data similarly but impermissible where it does not.

Specific rules that give clarity to ISPs on what practices are unduly discriminatory protect these providers from litigation based on application of broad, ambiguous rules—or no rules at all under the *Restoring Internet Freedom Order*—and protect end users from practices that may detract from a free and open Internet. The previous rules failed to address the ISP market structure, but removing the textual ambiguities surrounding the classification of broadband and providing clearer, more explicit regulations (and attached consequences for violations) leads to a more consumer-friendly market and seeks to limit anticompetitive behavior. These conduct-driven rules will result in ISP performance consistent with the public interest, helping to ensure reliable Internet access is available to all Americans in a non-unduly discriminatory manner at a reasonable cost. The sheer importance of these services to the American economy and

individual development mean they demand a closer watch. This paper provides one way to do this—put the public interest first.