



The Honorable Ajit Pai
Federal Communications Commission
445 12th St. S.W.
Washington DC 20544

Re: Comment for WC Docket 17-108

COMMUNITY TECHNOLOGY ADVISORY BOARD STATEMENT TO THE FCC REGARDING ITS RESTORING INTERNET FREEDOM PROPOSAL

The Community Technology Advisory Board (hereafter referred to as CTAB) of Seattle, Washington strongly supports maintaining the classification of broadband internet access as a telecommunications service under Title II of the Communications Act of 1934 as amended by the Telecommunications Act of 1996.

Seattle, Washington has a vibrant economy that includes a significant telecommunications presence as well as an impressive array of content creators, a formidable gaming industry,¹ and a robust network of ecommerce, technology, and healthcare startups and established businesses. Nevertheless, the city is facing well-documented growing pains related to its explosive population growth in recent years.² Seattle needs policies that support its economy while ensuring all residents can participate equally in that economy. Retaining classification of broadband internet access as a telecommunications service is a boon to consumers locally (as well as nationally) by aligning broadband providers' incentives with consumer interests and by mitigating the digital divide.

We therefore offer the following comments on Section III.A.3, paragraphs 68 and 100, and paragraphs 27–32 of the Restoring Internet Freedom Notice of Proposed Rulemaking (17-108) (hereafter referred to as NPRM).

We urge the Commission to retain the classification of broadband internet access as a telecommunications service and to strongly support expanded broadband access to low-income, elderly and disabled individuals under the Lifeline Program and other Universal Service Fund programs.

¹ Taylor Soper, *Here's why Seattle—not Silicon Valley—is the gaming industry's epicenter*, GEEKWIRE (Sep. 17, 2013 10:43 am), <https://www.geekwire.com/2013/big-fish-coo-seattle-epicenter-gaming/>.

² See, e.g., Tyrone Beason, *Will Seattle figure out how to deal with its new wealth?*, THE SEATTLE TIMES (Jul. 6, 2017 6:17 am), <http://www.seattletimes.com/pacific-nw-magazine/money-changes-everything-will-seattle-figure-out-how-to-deal-with-its-new-wealth/>; Gene Balk, *As Seattle incomes soar, gap grows between rich and poor*, THE SEATTLE TIMES (Oct. 6, 2014 6:33 pm), <http://blogs.seattletimes.com/fyi-guy/2014/10/06/as-seattle-incomes-soar-gap-grows-between-rich-and-poor/>.



Classification of broadband internet access service as a telecommunications service is in the public interest and supports the Commission's and Chairman Ajit Pai's regulatory priorities

Title IV Section 402 of the Communications Act of 1934 as amended by the Telecommunications Act of 1996 requires the Commission to consider whether regulatory changes would be in the public interest.³ Chairman Pai and the Commission as a whole consider innovation, a thriving economy, and the expansion of broadband services to low-income individuals to be public goods.⁴ Classifying broadband internet access service as a telecommunications service under Title II would serve those interests.

Title II enforcement aligns incentives of broadband providers with the interests of consumers

In Section III.A.3 of the NPRM, the Commission questions the purported benefits of Title II enforcement of net neutrality principles. Specifically, the Commission worries that classification of broadband access as a telecommunications service has had negative effects on the economy and on low-income individuals' and rural dwellers' access to high speed internet. The linchpin of this argument seems to focus on ISPs' reduced investment into broadband networks.

In support of this claim, the NPRM cites a USTelecom report tracking broadband investment expenditures over the last 20 years. In it, USTelecom mentions it "has argued that the regulatory reclassification of broadband providers as common carriers under Title II of the Communications Act in early 2015 would exert downward pressure on investment, holding other factors constant."⁵ Upon examination of its own data, however, it is difficult to discern the reason for this argument. Although investment in broadband between 2014 and 2015 dropped by approximately \$1 billion (a difference of less than 1.3%, which is consistent with other years in the report), investment in 2015 was at its second highest level since 2001.⁶ In fact, 2014 and 2015 accounted for the fourth and fifth highest investment levels in the 20-year series, with the top three

“[I]t begins to look like the overall economy has more of an impact on broadband investment than the Title II Order has had so far.”

³ Codified at 47 U.S.C. § 161.

⁴ See *Ajit Pai*, FCC.GOV (accessed on Jul. 8, 2017 12:17 pm), <https://www.fcc.gov/about/leadership/ajit-pai>.

⁵ Patrick Brogan, *Broadband Investment Ticked Down in 2015* (2016), available at <https://www.ustelecom.org/sites/default/files/Broadband%20Investment%20Down%20in%202015.pdf>.

⁶ *Id.* at 2. Admittedly, it is unclear whether these figures have been adjusted for inflation.



highest investment years being 1999–2001, which account for the peak of the dotcom boom.⁷ Paired with the fact that investment dipped when the dotcom bubble burst and again when the housing bubble burst in 2008,⁸ it begins to look like the overall economy has more of an impact on broadband investment than the *Title II Order*⁹ has had so far.¹⁰

A more likely explanation for ISPs' reluctance to invest in broadband infrastructure, particularly infrastructure that benefits low income individuals and people living in rural areas may be the lack of competition among last-mile ISPs,¹¹ or, as Columbia University Professor Vishal Misra calls them, "eyeball ISPs."¹² Misra distinguishes eyeball ISPs from transit ISPs.¹³ Transit ISPs build infrastructure and sell transit services to other ISPs.¹⁴ Eyeball ISPs, on the other hand, are the ISPs with which individual consumers are more familiar.¹⁵ These ISPs are highly monopolistic, whereas transit ISPs face considerably more competition.¹⁶ The Commission's own data illustrates that nearly three-fourths of all Americans either have one ISP offering high speed internet with speeds of at least 25MBPS or none at all.¹⁷ Misra points out that without competition, eyeball ISPs have disincentives to innovate or invest in infrastructure.¹⁸

According to Misra, information transmitted over the internet before about 2007 or 2008 was largely symmetrical.¹⁹ That is, packets of information were similarly sized in either direction and required similar bandwidths.²⁰ As 2010 approached, behemoth content creators such as Facebook and Netflix arose, causing asymmetrical flows of information from the content creators to the individual user and requiring more and more bandwidth.²¹ Misra claims eyeball ISPs could easily manage this

⁷ *Id.*

⁸ *Id.*

⁹ *In the Matter of Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd. 5601 (2015) (*Title II Order*).

¹⁰ Furthermore, the FCC previously found (by substantial evidence) that no-blocking and anti-discrimination principles encourage investment in content creation, which, in turn, promotes infrastructure investment. See *Verizon v. FCC*, 740 F.3d 623, 644–46 (2014).

¹¹ Jon Brodtkin, *US broadband: Still no ISP choice for many, especially at higher speeds*, ARSTECHNICA (Aug. 10, 2016 8:43 am), <https://arstechnica.com/information-technology/2016/08/us-broadband-still-no-isp-choice-for-many-especially-at-higher-speeds/>.

¹² Linda Crane, *Net neutrality is all good and fine but the real problem is elsewhere*, Computer Science Columbia University (Nov. 2014), <http://www.cs.columbia.edu/2014/net-neutrality/>; Richard T.B. Ma et al., *On Cooperative Settlement Between Content, Transit, and Eyeball Internet Service Providers*, 19 IEEE/ACM TRANSACTIONS ON NETWORKING 802 (June 2011), http://dna-pubs.cs.columbia.edu/citation/paperfile/194/ToN_InternetEco2.pdf.

¹³ Crane, *supra* n.11.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ Jon Brodtkin, *Tom Wheeler defends Title II rules, accuses Pai of helping monopolists*, ARSTECHNICA (June 29, 2017 7:22 am), <https://arstechnica.com/tech-policy/2017/06/tom-wheeler-defends-title-ii-rules-accuses-pai-of-helping-monopolists/>.

¹⁸ Crane, *supra* n.11.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*



asymmetry by upgrading their infrastructure, but they have an incentive not to do so: they can charge higher prices for a scarce resource.²²

If eyeball ISPs were not so monopolistic, consumers could rely on general free market principles to ensure eyeball ISPs would provide quality services to consumers and pass along savings to them. After all, this is what transit ISPs do. Because Transit ISPs face much more competition than eyeball ISPs, they have reduced prices to their customers (who tend to be eyeball ISPs).²³ Without competition among eyeball ISPs, however, consumers must rely on the FCC's Title II enforcement to align ISPs' incentives with the interests of customers. It does this by requiring eyeball ISPs provide quality service without blocking,²⁴ without throttling, and without unreasonably discriminating against content,²⁵ and by requiring ISPs charge only just and reasonable rates to consumers.²⁶

Given the differences stated here between eyeball ISPs and transit ISPs, CTAB would be open to the Commission forbearing from applying some statutory obligations against classes of ISPs should the Commission deem those obligations to be too burdensome.²⁷

Title II enforcement empowers the expansion of broadband access subsidies imperative to ensuring equal participation in the economy and civic life

Additionally, Chairman Pai has made expanding broadband access a cornerstone of his regulatory ambitions.²⁸ Similarly, the NPRM mentioned in paragraph 68 the Commission's desire to retain the Lifeline broadband program. The Lifeline program, disability accommodations, and subsidies for the development of broadband in rural areas²⁹ are all made possible under Title II.³⁰ CTAB emphatically supports these programs and implores the Commission to retain the telecommunications services classification of broadband access that enables the creation of these programs under Title II.

²² *Id.*

²³ *Id.* (referring to Timothy B. Lee, *Comcast is destroying the principle that makes a competitive internet possible*, VOX (May 6, 2014 8:00 am), <https://www.vox.com/2014/5/6/5678080/voxsplaining-telecom>).

²⁴ Communications Act of 1934, 47 U.S.C. § 201.

²⁵ *Id.* at § 202(a).

²⁶ *Id.* at §§ 201, 205.

²⁷ *See Id.* at § 160.

²⁸ Jon Brodtkin, *FCC Chairman Pai vows to close broadband "digital divide,"* ARSTECHNICA (Jan. 25, 2017 8:40 am), <https://arstechnica.com/tech-policy/2017/01/fcc-chairman-pai-vows-to-close-broadband-digital-divide/>. *See also*, Broadband Deployment Action Committee, FCC.gov, <https://www.fcc.gov/broadband-deployment-advisory-committee>.

²⁹ Given Seattle is heavily urbanized, this comment focuses on the Lifeline program rather than rural subsidies, as rural communities likely can speak with greater authority on the impacts of rural subsidy programs.

³⁰ Order approving *In re Lifeline and Link Up Reform and Modernization* Proposed Rule Changes (adopted Mar. 31, 2016) (WC 11-42, 09-197, 10-90), https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-38A1.pdf.



Although the Commission argues reverting to light-touch regulation would improve access to broadband for all residents, it is unclear how reclassifying broadband internet access to an information service would impact these programs. This creates significant uncertainty for people who rely on these programs to participate more equally in society.

Early attempts at regulating network management illuminate CTAB's concerns regarding the impact of reclassification on Lifeline and related programs.

Prior to the *Title II Order*, in 2010, following complaints from Comcast customers about Comcast throttling some peer-to-peer file-sharing applications,³¹ the Commission attempted to subject cable internet to a no-blocking rule,³² which is one of the rules now possible under Title II. When these rules were litigated, the D.C. Circuit Court of Appeals found that the Commission had not relied on statutory authority in creating the new rules.³³ Because the Commission had not classified broadband internet access as a telecommunications service, the Commission could not rely on authority in Title II to make its no-blocking rule.³⁴ Conceivably, the Commission could have used Section 706 of the Telecommunications Act of 1996 as an independent grant of authority by which the Commission could make new rules, but the Commission had previously interpreted Section 706 as a policy statement rather than as independent authority.³⁵ As a result, the early no-blocking rule failed.

Shortly thereafter, the Commission again attempted to regulate broadband internet access by creating no-blocking, no-unreasonable discrimination, and disclosure rules.³⁶ The Commission still chose to classify broadband internet access as an information service.³⁷ This time, however, the Commission interpreted Section 706 of the Telecommunications Act of 1996 as providing it with the “affirmative authority to enact measures encouraging the deployment of broadband infrastructure.”³⁸ Here, the D.C. Circuit Court of Appeals overturned the anti-blocking and anti-discrimination rules.³⁹ Although the Commission relied on statutory authority in making these rules, the no-blocking and anti-discrimination rules would have regulated broadband providers in the same manner as common carriers.⁴⁰ Because broadband internet access was still classified as an information service, broadband providers could not be treated as common carriers.⁴¹

³¹ See *In re Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications*, 23 F.C.C.R. 13028 (2008) (“Comcast Order”).

³² See *Comcast Corp. v. FCC*, 600 F.3d 642, 644–45 (D.C. Cir. 2010).

³³ *Id.* at 644.

³⁴ *Id.* 649.

³⁵ *Id.* at 658–59.

³⁶ *Verizon v. FCC*, 730 F.3d 623, 628 (D.C. Cir. 2014).

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.* at 639–59.

⁴¹ *Id.*



The *Title II Order* changed that. Because the Commission classified broadband internet access as a telecommunications service, broadband providers could be regulated as common carriers under Title II. This allowed the Commission to put in place no-blocking rules to address consumer complaints, as well as anti-discrimination and no-paid prioritization rules, which allow consumers to access the services they choose rather than the services broadband providers prioritize. The statutory authority of Title II also enabled the expansion of Lifeline and Universal Service fund programs.

CTAB's reading of case law suggests it is possible that the Commission could reinterpret other sections of the Communications Act as grants of authority that may allow it to continue to subsidize Universal Service or similar programs even if the Commission otherwise chooses to classify broadband internet access as an information service.⁴² Nevertheless, it is unclear whether doing so would most likely result in much weaker Lifeline and subsidy programs. The uncertainty to consumers relying on the expanded Lifeline broadband program made possible by reclassifying broadband internet access as an information service could be devastating. As mentioned above, Seattle is facing an affordability crisis. Every increased cost passed onto consumers by this policy will be felt. For Seattleites relying on Lifeline's broadband program, reclassification may mean the loss of the ability to participate in Seattle's increasingly digital economy, society, and government. This would be a step backward when we should be seeking policies to continue to expand access to all.⁴³

“[Reclassification as an information service] would be a step backward when we should be seeking policies to continue to expand access to all”

FCC *can* classify broadband internet access services as an information service, but it *should* instead retain classification as a telecommunications service

Finally, we wish to address the threshold question of whether the FCC can legally classify broadband internet access as either an information service or as a telecommunications service. We conclude that it has the legal authority to do either. However, given the substantial public interest in retaining classification as a telecommunications service, we encourage the Commission to address the

⁴² One of these sections is Section 706, but according to paragraph 100 of the Restoring Internet Freedom NPRM, the Commission is seeking to reinterpret 706 as a policy statement rather than a grant of authority, thereby further weakening its ability to subsidize broadband access and broadband infrastructure development.

⁴³ In addition, CTAB strongly urges the FCC to fully implement the *Lifeline Modernization Order*. The *Order on Reconsideration* (DA 17-128) halted approval of broadband providers eligible to receive Universal Service Fund subsidies, which impedes the ability to provide broadband to low-income individuals around the country. See, Issie Lapowsky, *Millions need the program the FCC just put on hold*, WIRED (Feb. 14, 2017 9:30 am), <https://www.wired.com/2017/02/millions-need-broadband-program-fcc-just-put-hold/>. For more information on specific impacts to the Seattle community, impact statements will be submitted as part of a reply to this comment in August.



reasonability of its interpretation of “information services” and “telecommunications services” from the lenses of individual consumers and technologists. The practical elements of the relationship between broadband providers and consumers renders classification of broadband internet access as an information service unreasonable.

Under *Chevron U.S.A. v. Natural Resources Defense Council, Inc.*,⁴⁴ courts will not overturn an executive agency’s reasonable interpretation of an ambiguous statute it administers.⁴⁵ In 2005, the Supreme Court concluded in the *National Cable & Telecommunications Association v. Brand X Internet Services*⁴⁶ that the Communications Act of 1934 as amended by the Telecommunications Act of 1996 is ambiguous with respect to the classification of broadband services offered by ISPs.⁴⁷ Although the D.C. Circuit had previously determined that classifying broadband internet access services as telecommunications services would be better than classifying them as information services,⁴⁸ and although at least some justices agreed that this was the best interpretation, the Supreme Court held that the Act was ambiguous and the classification of broadband internet access as an information service was reasonable.⁴⁹ As a result, the Court would not overturn the classification.⁵⁰

The Commission asserts in paragraphs 27 and 29 that broadband internet access should be classified as an information service because broadband providers allow users the capabilities to retrieve information across the internet. Even if users “click-through” to other applications, those actions do not foreclose classification as an information service. Paragraph 29 argues that internet access services are information services because individual users do not choose how their activities online are routed. Finally, paragraph 30 claims ISPs routinely change the form or content of information sent over their networks by blocking harmful content or interweaving different versions of internet protocols. We address these analyses from two perspectives. First, as individual users who subscribe to internet services. Then, we consider the expertise of financially disinterested computer scientists.

CTAB’s community members report that broadband providers market to them the speed and reliability of their internet connections. Although members can identify others who use email services offered by broadband providers, and may use broadband providers’ portals to pay subscriber fees, those services are largely peripheral to the telecommunications functions of transmitting packets of information between two points. This would suggest the primary business model of broadband providers is as telecommunications companies.⁵¹

⁴⁴ 467 U.S. 837 (1984).

⁴⁵ *Id.* at 843.

⁴⁶ 545 U.S. 967 (2005).

⁴⁷ *Id.* at 986–89 (2005).

⁴⁸ *Id.* at 984.

⁴⁹ *Id.* at 1000–02.

⁵⁰ *Id.*

⁵¹ In fact, even the broadband association USTelecom, by its very name, seems to acknowledge broadband as a telecommunications service despite their preference to be legally classified as an information service.



The computer scientists with whom CTAB consulted suggest that content providers such as Google, Facebook, and Amazon are more like information services than broadband access providers: Google curates and retrieves information for a user, Amazon Web Services (AWS) stores and processes information, and Facebook allows one to electronically publish media. There are many applications online, but the internet itself is the medium through which the data underlying these applications is transmitted. The internet is the pipeline. Broadband providers offer the medium through which all these functions can occur. Only peripherally do they offer their own information services. In this way, to harken back to a metaphor used by the late Justice Scalia, broadband providers more closely resemble Postmates than they do Domino's Pizza—they deliver information for a variety of other vendors, not just themselves.

Furthermore, users type in website or email addresses to specify points between which they intend information to be transmitted, just as mobile phone callers dial phone numbers to determine the points of their communication. They need not select the information's route at each network branch for the communication to be classified as a telecommunications service. Further still, under the statute, telecommunications services do not change the form or content of data delivered through their channels. The proliferation of encryption methods such as HTTPS make it increasingly difficult for broadband providers to modify network data even if they desired to, reinforcing the notion that broadband internet access closely resembles a telecommunications service.

Conclusion

CTAB shares the Commission's concern for increasing access to broadband internet access and ending the digital divide. Maintaining the classification of broadband internet access under Title II is an important step in this direction. Treating broadband providers as common carriers incentivizes competition and the delivery of better products and services to consumers. It also enables the provision of subsidized broadband access to low-income individuals and people with disabilities, among others. Finally, it makes good technical sense. The Communications Act provides the Commission with regulatory flexibility to balance the equities between content creators, broadband providers (transit and eyeball ISPs alike), and individual consumers, and CTAB welcomes the Commission's thoughts in doing so. However, any attempt to balance the equities should not come at the expense of the full benefits available to consumers under Title II.

About the City of Seattle Community Technology Advisory Board:

The **Community Technology Advisory Board** (CTAB) of Seattle, Washington is a board of community members and technologists appointed by the City of Seattle Mayor and City Council to advise on technology-related matters of public interest.