

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Restoring Internet Freedom

WC Docket No. 17-108

REPLY COMMENTS OF THE CITY AND COUNTY OF SAN FRANCISCO

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I. INTRODUCTION AND EXECUTIVE SUMMARY

The City and County of San Francisco (“San Francisco” or “City”) submits these reply comments in this proceeding in which the Federal Communications Commission (“Commission” or “FCC”) seeks to undo the rules ensuring open access to the internet that the Commission instituted just two years ago when it found that internet service is a “telecommunications service” as that term is defined in the Communications Act.¹

Those filing comments supporting the Commission’s existing net neutrality rules include the Mayors of more than 60 cities from all parts of the country, both large and small; the Internet Association, comprised of America’s largest internet companies including Amazon, Google, and Netflix; the Electronic Freedom Association, a non-profit organization that works to protect civil liberties in the digital world; 19 small internet service providers (“ISPs”) operating throughout the United States; the Voices for Internet Freedom Coalition, a collection of public interest groups from across the country; and millions of private citizens.

In contrast, comments supporting elimination of Title II rules to ensure internet access came largely from those entities that control access to the internet, including large cable television providers like Comcast, Charter Communications, and Cox Communications; large telecommunications providers including AT&T and Verizon; and a handful of municipal broadband providers. Three important things stand out about those comments.

First, almost all support the net neutrality principles favoring transparency, and prohibiting blocking, throttling, or unreasonable discrimination based on content. They largely express concerns over the open-ended nature of the Commission’s General Conduct Rule.

Second, while the companies filing these comments own billions of dollars of broadband facilities and continue to invest in them, they principally rely on academic studies to assert that investment in broadband infrastructure has declined as a result of this Commission’s decision

¹ See *In the Matter of Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601 (2015) (“*Open Internet Order*”).

to regulate the internet as a telecommunications services. None of these companies stated on the record that they have limited their own investments in broadband infrastructure based on the Commission's ruling. They also ignore the billions of dollars invested by providers of edge-based apps and services that rely on an open internet.

Finally, they assert that net neutrality rules are unnecessary because robust competition in the market for broadband internet service will require providers to offer services that meet the needs of their consumers. That assertion, however, relies on the claim that wireline and wireless broadband services are fully competitive, because in many markets there is little competition among wireline providers. However, the evidence suggests the two services are not fully competitive.

II. THERE IS BROAD INDUSTRY SUPPORT FOR THE UNDERLYING NET NEUTRALITY PRINCIPLES

Comments filed in this proceeding by the companies that provide broadband service to millions of customers throughout the United States asked the Commission to overturn the *Open Internet Order's* determination that broadband internet service is a telecommunications service. At the same time, they uniformly support the underlying net neutrality principles this Commission promulgated into regulations. They all agree that their customers require and should be offered broadband services that are transparent and without blocking, throttling, or paid prioritization.²

² For example, AT&T supports "a set of bright-line rules that require transparent disclosures of network-management practices and prohibit blocking and throttling of Internet content without justification under appropriately flexible principles of reasonable network management." (Comments of AT&T Services Inc., WC Docket No. 17-108, at 101 ("AT&T Comments").) According to AT&T, "[s]uch rules are acceptable because they reflect long-standing industry norms and are thus essentially cost-free." (*Id.*) Cox suggests that the "Commission should recognize that a wide array of BIAS providers (including Cox) and their industry associations have made prominent and unequivocal commitments to remain transparent and to refrain from blocking, throttling, or other anticompetitive conduct." (Comments of Cox Communications, Inc., WC Docket No. 17-108, at 20-21 ("Cox Comments")); see also Comments of Verizon, WC Docket No. 17-108, at 19-21 ("Verizon Comments"); Comments of Comcast Corporation, WC Docket No. 17-108, at 53-57.) According to Cox,

Most of the industry's attack on the net neutrality regulations³ concern the so-called "General Conduct Rule," which provides:

No unreasonable interference or unreasonable disadvantage standard for Internet conduct.

Any person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not unreasonably interfere with or unreasonably disadvantage end users' ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice, or edge providers' ability to make lawful content, applications, services, or devices available to end users. Reasonable network management shall not be considered a violation of this rule.⁴

Cox, for one, complains about the General Conduct Rule's "unbounded nature—under which virtually any practice could be deemed unreasonable based on post-hoc judgments, and could subject the provider to massive liability."⁵ Verizon is concerned that the Rule "creates significant ambiguity regarding what practices the Commission may consider 'unreasonable' (such as 'sponsored data' arrangements)."⁶ While commenters supporting net neutrality generally urge the Commission to retain the Rule, the Electronic Freedom Foundation expresses concerns over the "sheer complexity" of the Rule as expressed in the "guidance" that the Commission included in the *Open Internet Order*.⁷ The Electronic Freedom Foundation recommends that the Commission adopt a "simpler assessment of whether (1) the practice at

"[s]uch commitments flow naturally from BIAS providers' strong incentives to deliver the Internet experience their customers seek—including the ability to use whatever devices and to access whatever lawful online content and services they choose."² (Cox Comments at 21.)

³ AT&T and Verizon express concern that the Commission could use the Title II designation as a basis for rate regulation. (See AT&T Comments at 89; Verizon Comments at 34-35.) That argument, however, ignores the fact that the FCC for the most part does not regulate telephone rates, and the FCC chose to forebear from regulating broadband rates in the *Open Internet Order*. As the Commission held: "We expressly eschew the future use of prescriptive, industry-wide rate regulation." *Open Internet Order, supra*, 30 FCC Rcd at 5603, ¶ 5.

⁴ 47 C.F.R. § 8.11

⁵ Cox Comments at 31.

⁶ Andres V. Lerner and Janusz A. Ordovery, *An Economic Analysis of Title II Regulation of Broadband Internet Access Providers* (attached to Verizon Comments) ("Verizon Study"), WC Docket No. 17-108, at 9.

⁷ Comments of the Electronic Frontier Foundation on Notice of Proposed Rulemaking, WC Docket No. 17-108, at 28.

issue promotes or hinders free expression; and (2) whether the practice is ‘application agnostic.’”⁸

Concerns that the Commission will use the General Conduct Rule to take any action against any broadband service provider are vastly unsupported. In fact, the only time the Commission has addressed this Rule is in a January 11, 2017 staff report from the Wireless Telecommunications Bureau, which concerned certain zero-rated content, applications, and services offered by four wireless providers.⁹ Those services allow end-users to access certain content, applications, and services without counting the data consumed against their data allowances. As the staff report notes, the Commission found in the *Open Internet Order* that “zero-rating-based business models may, in some instances, provider consumer and competitive benefits.”¹⁰ The staff report expressed concerns that plans offered by two carriers could violate the General Conduct Rule “because of the network operators’ potentially unreasonable discrimination in favor of their own affiliates.”¹¹ The concern was that vertical integration could harm consumers. Yet, the report made no recommendation as to any further action on its policy analysis, and the Commission subsequently closed the proceeding and retracted the staff report.¹²

The comments here do not provide sufficient reasons for the Commission to abandon the net neutrality regulations that require transparency and prohibit blocking, throttling, and paid prioritization. At best, they suggest that the Commission might look to revise the General Conduct Rule to address concerns that it is vague and overbroad. San Francisco recommends

⁸ *Id.* at 29.

⁹ Wireless Telecommunications Bureau, *Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero-Rated Content and Services* (Jan. 11, 2017) (“WTB Staff Report”), available at: http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0111/DOC-342987A1.pdf.

¹⁰ WTB Staff Report at 1, citing *Open Internet Order*, 30 FCC Rcd at 5666-67, ¶ 151.

¹¹ WTB Staff Report at 1.

¹² See *Order*, Wireless Telecommunications Bureau Report: *Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero Rated Content and Services*, DA 17-127 (Feb. 3, 2017), available at: https://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0203/DA-17-127A1.pdf.

that in looking to revising the General Conduct Rule the Commission take heed of the recommendation put forth by the Electronic Freedom Foundation.

III. NO LARGE INTERNET SERVICE PROVIDER HAS CLAIMED THAT THE *OPEN INTERNET ORDER* NEGATIVELY IMPACTED ITS DEPLOYMENT OF THE BROADBAND FACILITIES NECESSARY TO SERVICE ITS CUSTOMERS

The Commission commenced this proceeding in large part over concerns that net neutrality rules had stifled investment in broadband infrastructure.¹³ To support that conclusion, the Commission relied on one study¹⁴ and ignored better evidence to the contrary in a separate study.¹⁵ The Commission opened the door for the industry to come forward and provide the Commission with substantial evidence supporting the concern about infrastructure investment. All the large broadband ISPs had to do was open their books and provide comments to the Commission showing that the *Open Internet Order* had put an immediate damper on already planned capital investments and/or their future capital investment planning. That would be the best evidence of what is happening across the Nation with regard to broadband investment: none of them did it.

Instead, these companies retained experts to describe to the Commission studies demonstrating a correlation between regulation and investment.¹⁶ AT&T's experts

¹³ See *In the Matter of Restoring Internet Freedom*, Notice of Proposed Rulemaking, 2017 WL 2292181, at *13, ¶ 44-46 (2017) (“*NPRM*”).

¹⁴ *Id.* at *13, ¶ 45, citing Hal Singer, *2016 Broadband Capex Survey: Tracking Investment in the Title II Era* (Mar. 1, 2016) (<https://halsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era>).

¹⁵ *NPRM*, *supra*, 2017 WL 2292181, at *13, ¶ 45, citing Free Press, *Internet Service Providers' Capital Expenditures* (Feb. 28, 2017) (<https://www.savetheinternet.com/sites/default/files/resources/internet-access-and-online-video-markets-are-thriving-in-title-ii-era.pdf>).

¹⁶ Charter does state that regulatory uncertainty has put some of their projects on hold, but it never explicitly states that it has reduced infrastructure investment. (Comments of Charter Communications, Inc., WC Docket No. 17-108, at 9-11.) Nonetheless, Charter admits it has “incurred capital expenditures (as a percentage of its total revenue) above the cable industry’s average over the past two years,” but claims that “those heightened capital expenditures have been driven, in large part, by one-time costs associated with Charter’s recently-closed transactions with Time Warner Cable and Bright House Networks.” (*Id.* at 10.) Apparently, concerns over Title II regulation did not dampen Charter’s enthusiasm for multi-billion dollar

“[d]ocument the well-established body of theoretical and empirical economic literature that establishes that regulatory uncertainty generally, and Title II regulation specifically, dampens investment incentives.”¹⁷ AT&T, however, admits that “correlation does not equal causation” because it “may be impossible to isolate all confounding variables.”¹⁸ Verizon’s experts assert that Title II classification will likely reduce investment, even though improved service is what consumers demand.¹⁹

In contrast to these theoretical assumptions, the Free Press showed that broadband deployment in “unserved areas continued at a healthy pace from the end of 2014 to the middle of 2016.”²⁰ The Free Press also showed that since 2015 the “number of Census Blocks with two or more ISPs offering service with downstream speeds at or above 25 Mbps increased by 42 percent following the *Open Internet Order*.”²¹ According to the Free Press, nearly 630,000 blocks that were previously unserved or underserved gain[ed] a modicum of competition at this critical speed threshold.”²² As the Free Press succinctly states: “The data indicates that the overwhelming majority of this competitive deployment at higher speeds is due to telephone company ISPs upgrading their networks in areas where cable ISPs already offered 25 Mbps and faster services.”²³

San Francisco has seen this growth in investment by ISPs. Since 2015, Bay Area ISPs have continued to expand their broadband infrastructure and workforce due to increasing demand

acquisitions of other cable providers to become the second largest cable television provider (second only to Comcast). See Ray Sheffer, *Charter Completes Merger with Bright House and Time Warner Cable* (May 20, 2016), available at <http://marketrealist.com/2016/05/charter-completes-merger-bright-house-time-warner-cable/>.

¹⁷ Declaration of Mark A. Israel, Allan L. Shampine & Thomas A. Stemwedel (submitted by AT&T Services, Inc.), WC Docket No. 17-108, at 44.

¹⁸ AT&T Comments, *supra*, at 54.

¹⁹ Verizon Study, *supra*, at 9 (“The threat that broadband Internet access providers will be subjected to such regulation creates significant business risks. These risks are likely to have the effect of reducing investments and hampering innovation in the long term, in an industry where continual investments and innovation are key to providing services that benefit consumers.”)

²⁰ Comments of Free Press, WC Docket No. 17-108, at 94 (“Free Press Comments”).

²¹ *Id.*

²² *Id.*

²³ *Id.*

for high-speed internet.²⁴ Sonic, a Santa Rosa-based ISP, brings fiber optic internet to thousands of customers in Northern California. Sonic recently told the San Francisco Chronicle that it has “bolster[ed] its ranks by 188 employees in 2016 alone” and expects to expand into “seven more San Francisco neighborhoods.”²⁵ MonkeyBrains, a San Francisco based ISP, has “expanded both its customer base and its workforce by 25 percent in each of the last four years.”²⁶ This rapid increase is partially due to the low barriers to entry that net neutrality offers. According to Andreas Glocker, the CEO of Fastmetrics, a business ISP in San Francisco, “demand has been phenomenal” since 2015. Mr. Glocker told the San Francisco Chronicle that: “If big (Internet providers) can choose who they do business with in that way, it will be very damaging for smaller (providers) like us.”²⁷

Moreover, the Commission should not focus on investment solely from ISPs, because other companies are using the open internet to reshape the economy. Title II regulation of the internet has led to increased spending on infrastructure used to “enable the cloud economy” by members of the Internet Association.²⁸ These leading internet companies have “invested billions of dollars in thousands of data centers, submarine cables, and other cloud infrastructure.”²⁹ They also spend “hundreds of millions of dollars to send traffic over the Internet to users of their services.”³⁰ For these reasons, the members of the Internet Association soundly support net neutrality:

The success of the cloud economy and the transformation of the Internet into an indispensable part of daily life is largely based on a free and open Internet, one that enables consumers to access any website or app, buy any product, and use any service they

²⁴ Dominic Fracassa, *Bay Area Internet providers thriving in the era of net neutrality*, *San Francisco Chronicle* (June 26, 2017), available at: <http://www.sfchronicle.com/business/article/Bay-Area-Internet-providers-thriving-in-the-era-11200806.php>.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ Internet Association Comments, WC Docket No. 17-108, at 6.

²⁹ *Id.*

³⁰ *Id.* at 7.

choose. Net neutrality rules enable an ecosystem of “innovation without permission” in which anyone with a good idea can launch an app without having to strike a deal with an ISP or worry about whether an ISP will block, throttle, or otherwise discriminate against a service.³¹

This data from the Free Press and the Internet Association, and the evidence of ISP growth in the Bay Area, make the large ISPs’ omissions even more glaring. Studies and economic theory cannot overcome the compelling evidence that broadband investment has continued to boom since 2015.

IV. COMPETITION ALONE WILL NOT ADDRESS CONCERNS OVER NET NEUTRALITY, BECAUSE ROBUST WIRELINE BROADBAND COMPETITION SIMPLY DOES NOT EXIST IN MOST MARKETS, AND WIRELESS SERVICE IS NOT AN ADEQUATE ALTERNATIVE

As the Free Press notes, one year ago more than half of the population of the United States was able to purchase broadband from two or more wireline broadband service providers.³² While that would seem to suggest the market is fully competitive, that is simply not the case. A choice between two providers does not offer consumers the ability to choose the best services at the lowest prices. As the Commission noted in the National Broadband Report:

Given that approximately 96% of the population has at most two wireline providers, there are reasons to be concerned about wireline broadband competition in the United States. Whether sufficient competition exists is unclear and, even if such competition presently exists, it is surely fragile.³³

Furthermore, as this Commission has found, even in communities with two providers, business owners and residents of multiple tenant environments may not be able to choose their provider. In many cases, property owners will have some sort of exclusive agreement with one provider. For that reason, the Commission has opened a proceeding to explore

³¹ *Id.* at 8.

³² Free Press Comments, *supra*, at 98.

³³ National Broadband Report, § 4.1, available at <http://www.broadband.gov/plan/4-broadband-competition-and-innovation-policy/#s4-1>.

whether such things as exclusive marketing agreements, bulk-billing agreements, and prohibitions on sharing inside wiring are hindering competition.³⁴

Verizon contends that the market is fully competitive because “wireless broadband services are increasingly becoming a competitive alternative for wireline networks for some consumers.”³⁵ Not surprisingly, Verizon cites no evidence for this conclusion.

The evidence suggests that consumers choosing wireless broadband do so largely because they *lack* choice. As Commissioner Clyburn recently noted, consumers who “are mobile-only often find themselves in such a position, not by choice but because they cannot afford a fixed connection.”³⁶ Even the numbers do not support the argument that the markets are competitive at least in California. While 87% of California households have a broadband internet connection, 18% of those access the internet only through a smartphone.³⁷ For the time being, therefore, fixed wireless service seems to be an “option only in areas where wireline broadband is either too expensive, non-existent, or of very poor quality.”³⁸

In the absence of robust competition, the Commission cannot rely on the marketplace to ensure that ISPs will continue to stand by the net neutrality principles they claim to support.

V. AN OPEN INTERNET SUPPORTS CIVIC ENGAGEMENT AND ACCESS TO CRITICAL SERVICES, INCLUDING THOSE PROVIDED BY LOCAL GOVERNMENTS

In its comments, the Voices for Internet Freedom Coalition stresses the importance of strong, enforceable open internet regulations to ensure that vulnerable populations have

³⁴ See *In the Matter of Improving Competitive Broadband Access to Multiple Tenant Environments, Notice of Inquiry*, 2017 WL 2790732 (2017).

³⁵ Verizon Study, *supra*, at 28.

³⁶ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, Concurring Statement of Commissioner Mignon L. Clyburn (Aug. 8, 2017).

³⁷ California Emerging Technology Fund Annual Survey 2017, available at: <http://www.cetfund.org/progress/annualsurvey>.

³⁸ Bernie Arnason, *Will 5G Enable Wireless Replacement of Home Broadband and Disrupt FTTH?* (May 5, 2016), available at <http://www.telecompetitor.com/will-5g-enable-wireless-replacement-home-broadband-disrupt-ftth/>.

opportunities for civic engagement and entrepreneurial activities and access to critical services.³⁹ This access requires high-speed, affordable, and robust internet connections.⁴⁰

Local governments rely heavily on unfettered data networks to provide a host of critical services from voter registration to health care. As more state and local governments deliver their services online, an open internet will be even more essential. The strongest possible protections are necessary to ensure that paid prioritization, blocking, and throttling do not create discriminatory access to vital services. These services are simply too important to rely on legally tenuous and largely voluntary guidelines that the Commission would revert to by reclassifying internet service as an “information service.”

For instance, San Francisco has developed online platforms to improve government services. The City’s “311” platform serves as a single point of entry for resolution of community needs 24 hours a day, including sidewalk repairs, blight, and waste management, among other services.⁴¹ San Francisco’s 311 website received approximately 94,000 and 125,000 service requests in 2015 and 2016, respectively, representing an increase of 33%. Likewise, the City’s Department of Public Health’s “WebConnect” service provides community members with unprecedented access to healthcare services and vital medical records;⁴² while the “SF Business Portal” provides thousands of business owners with easy access to comprehensive resources for starting, running, and growing their business.⁴³ Tethering internet speeds with some form of paid prioritization (i.e. paying for faster data traffic) would hinder these types of innovative opportunities to engage residents with each other, their communities, and their local governments.

³⁹ See Voices for Internet Freedom Coalition Comments, WC Docket No. 17-108, at 10-33.

⁴⁰ See id.

⁴¹ See <https://www.sf311.org/web/guest/reports>.

⁴² See <http://sfgh.ucsf.edu/dph-webconnect-remote-access-token-faqs>.

⁴³ See <https://businessportal.sfgov.org/>

Moreover, the increasing demand for online local government services corresponds with rising political participation across the State of California. For example, California registered a record number of voters after registration was made available online in 2015—an increase of approximately 1.2 million voters.⁴⁴ Now, more than 78% of California’s eligible voters have registered to vote.⁴⁵

This is not a surprising statistic. Internet use and online political engagement are leading to increased civic participation in the political process. In fact, the internet now serves as the dominant source of political information for many American.⁴⁶ This is another reason for the Commission to uphold the net neutrality regulations adopted by the Commission in the *Open Internet Order*.

⁴⁴ Liam Dylan, *California has 19.4 million registered voters — a new record*, Los Angeles Times (Nov. 4, 2016), available at: <http://www.latimes.com/politics/essential/la-pol-ca-essential-politics-updates-california-has-19-4-million-registered-1478295112-htmstory.html>.

⁴⁵ *Id.* Online registration also contributed to a record number of voter registrations in the State of Alabama. See <http://sos.alabama.gov/newsroom/record-voter-registration-numbers-alabama>.

⁴⁶ Aaron Smith, *The Internet as a Source of Political News and Information*, Pew Research Center: Internet, Science & Tech (Apr. 14, 2009), available at: www.pewinternet.org/2009/04/15/the-internet-as-a-source-of-political-news-and-information/.

VI. CONCLUSION

For the reasons set forth in San Francisco's initial comments and herein, there is no evidence to support the Commission changing the existing net neutrality rules and adopting a "light-touch" regulatory scheme.

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