July 24, 2019

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: In the Matter of Modernizing the FCC Form 477 Data Program, WC Docket No. 11-10

Dear Ms. Dortch:

We, the undersigned public interest organizations, submit this letter in response to the Federal Communications Commission's ("FCC" or "Commission") draft Report and Order and Second Further Notice of Proposed Rulemaking in the above-captioned proceeding.[1]

The Commission's Form 477 data collection and reporting program is a unique tool to assess broadband availability throughout the country. Currently, the Commission's Form 477 provides reports from internet service providers (ISPs) twice a year showing where they have deployed, or are able to provide broadband service without an extraordinary commitment of resources. However, as a wide range of commenters have demonstrated, Form 477 data alone does not provide all the datasets necessary for the Commission, or the public, to examine each facet necessary for closing the digital divide. Deficiencies in data can paint an inaccurate and incomplete picture of broadband access.

While we support ongoing efforts to modernize Form 477, we urge the Commission to expand its broadband data collection program to ensure broadband availability and affordability is accurately measured in underrepresented and marginalized communities that have historically lagged behind in connectivity. Specifically, the Commission should collect and analyze additional data to shed light on how equitably broadband is deployed in the United States, the affordability of broadband service, and how these variables impact underserved and unserved neighborhoods, low-income Americans, communities of color, and other marginalized communities. These improvements would produce better analysis and better policies to close the digital divide.

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[1] See Establishing the Digital Opportunity Data Collection, Public Draft, Report and Order and Second Further Notice of Proposed Rulemaking, WC Docket Nos. 19-195, 11-10, FCCCIRC 1908-02 (July 11, 2019), https://docs.fcc.gov/public/attachments/DOC-358433A1.pdf.

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Any meaningful effort to improve the Commission's data collection program must recognize that deployment is only one aspect of the digital divide. In order to have a complete picture of the digital divide that exists in the United States, many other factors exist that should be analyzed alongside deployment, including:

- Broadband affordability and pricing data
- Information on demographics such as race, age, and disability
- Usage, subscription, and churn data
- Quality of service and actual service speed data
- Network vulnerability and resilience

These variables are an important part of the digital divide, yet the Commission currently collects little to no data about them. The Commission should expand its analysis to incorporate these metrics.

Analyzing this information is a long overdue step that would improve the Commission's broadband maps and address equity and civil rights concerns that are intrinsically linked to America's persistent digital divide. Access to high-speed broadband has become a necessity for K-12 education; for people to find employment and then have the ability to telework; for online healthcare, government services, and financial services; for entertainment; for civic engagement such as organizing; for storytelling without gatekeepers; and for following the news. To ensure that all Americans have affordable access to quality broadband, the Commission must first have a full understanding of who is able to use broadband and who is not, and what barriers prevent adoption.

First, the Commission must collect broadband affordability and pricing data, including all below the line fees and charges. Cost serves as the most prominent barrier to broadband adoption for millions of Americans, and yet the Commission does not collect or analyze how ISPs price their services and how that varies across different cities, states, and other key demographics. Pricing information is an essential piece to the digital divide, as millions of Americans do not purchase broadband because they cannot afford it, regardless of whether high-speed services are deployed where they live. If a person or household lives in an area where broadband is deployed, but it is so expensive that they cannot afford it, that service is not truly *available* to them. Understanding how price and affordability impact broadband adoption rates is critical for future policy solutions.

Study after study has shown that cost serves as a massive barrier to broadband adoption. The latest numbers from the Pew Research Center show that 18 percent of U.S. adults who make less than $30,000 a year do not *use* the internet, compared to just 2 percent of those who make more

than $75,000 annually.[2] The disparity over home broadband adoption is even more stark—just 45 percent of U.S. adults who make less than $30,000 a year have broadband at home, compared to 87 percent of adults who make more than $75,000 annually.[3] The digital divide has a disproportionate effect on historically marginalized communities as well, as Free Press' report *Digital Denied* found that 30 percent of Hispanics, 32 percent of African Americans, and 32 percent of Native Americans lack a wired broadband connection.[4]

Surveys have also reflected that consumers without broadband *themselves* cite cost as one of the most important reasons why. 50 percent of those who do not have broadband connections reported cost as a reason, according to the Pew Research Center—and 21 percent said that cost is the most important reason.[5] Recently, the North Carolina Broadband Infrastructure office found that 67 percent of households that did not have broadband access at home cited cost as the number one reason they lack that access.[6] A recent survey from the National Telecommunications and Information Administration found that of households making less than $25,000 annually and did not have home broadband, 51 percent labeled cost as the main reason why.[7]

Second, the Commission must analyze expanded broadband deployment and affordability data alongside data on demographics such as race. The digital divide disproportionately harms historically marginalized communities, both in terms of adoption rates and regarding the actual technologies that are deployed to these communities. The Commission is required under Section 706 of the 1996 Telecommunications Act to ensure that "advanced telecommunications capability" (defined in the modern day to include high-speed broadband services) is being deployed to "all Americans" in a "reasonable and timely basis."[8] In the interest of serving *all* Americans, including those from communities of color—the Commission must take concrete steps to address the racial digital divide.

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[2] *See* Monica Anderson et al., "10% of Americans don't use the internet. Who are they?," Pew Research Center (Apr. 22, 2019), https://www.pewresearch.org/fact-tank/2019/04/22/some-americans-dont-use-the-internet-who-are-they/.

[3] *See* "Internet/Broadband Fact Sheet," Pew Research Center (Feb. 5, 2018), https://www.pewinternet.org/fact-sheet/internet-broadband/.

[4] *See* S. Derek Turner, "Digital Denied: The Impact of Systemic Racial Discrimination on Home-Internet Adoption" Free Press (Dec. 2016), https://www.freepress.net/sites/default/files/legacy-policy/digital_denied_free_press_report_december_2016.pdf.

[5] *See* "Mobile Technology and Home Broadband 2019," Pew Research Center (June 13, 2019), https://www.pewinternet.org/2019/06/13/mobile-technology-and-home-broadband-2019/.

[6] *See* Mandy Mitchell, "State is stepping in to help bridge the digital Homework Gap," WRAL (May 15, 2019), https://www.wral.com/state-is-stepping-in-to-help-bridge-the-digital-homework-gap/18389163/.

[7] *See* Rafi Goldberg, "Unplugged: NTIA Survey Finds Some Americans Still Avoid Home Internet Use," National Telecommunications and Information Administration Blog (April 15, 2019), https://www.ntia.gov/blog/2019/unplugged-ntia-survey-finds-some-americans-still-avoid-home-internet-use.

[8] 47 U.S.C. § 1302(b).

Free Press found that income differences between different demographics do not totally explain why some adopt broadband at higher or lower levels than others. "Among those with annual family incomes below $20,000, 58 percent of these low-income [w]hites have home-internet access, versus just 51 percent of Hispanics and 50 percent of Black people in the same income bracket," Free Press's report notes, highlighting that even among low-income households the racial digital divide persists.[9] "But even after accounting for such differences in income, age, education, and other factors, many racial and ethnic groups continue to lag behind [w]hites in home-internet adoption. This gap persists despite a host of other data demonstrating high demand for internet access in non-adopting households of color. This suggests that structural racial discrimination contributes to the digital divide."[10]

People of color are disproportionately harmed by the digital divide and systemically denied broadband access at higher rates than white Americans. This is reflected in the Homework Gap, which separates students who live in households that can afford home broadband and can use it to complete homework and do research, and those who do not. The Pew Research Center found that in total, 17 percent of U.S. teenagers said that they often or sometimes are unable to complete homework because of a lack of a reliable computer or internet connection. However, those figures are much higher for Black teenagers (25 percent), Hispanic teenagers (17 percent), and teenagers from households making less than $30,000 annually (24 percent) than they were for white teenagers (13 percent).[11] The same study found that 25 percent of Black school-age children and 23 percent of Hispanic school-age children did not have high-speed broadband access at home, compared to 15 percent of all school-age children.[12] This trend was reflected in the previously mentioned Department of Education study as well, which found that 46 percent of Black children and 44 percent of Hispanic children that did not have broadband at home reported that it was because internet service was too expensive, while only 28 percent of white children who did not have broadband said the same.[13]

Additionally, studies suggest that ISPs have participated in "digital redlining," where they upgrade their networks in more affluent (and predominantly white) neighborhoods at the expense of low-income and historically marginalized communities. The National Digital Inclusion Alliance found that AT&T has "systematically discriminated against lower-income Cleveland,

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[9] *Supra* note 4.

[10] *See id* (emphasis in original).

[11] *See* Monica Anderson & Andrew Perrin, "Nearly one-in-five teens can't always finish their homework because of the digital divide," Pew Research Center (Oct. 26, 2018), https://www.pewresearch.org/fact-tank/2018/10/26/nearly-one-in-five-teens-cant-always-finish-their-homework-because-of-the-digital-divide/.

[12] *See id.*

[13] *See* "Student Access to Digital Learning Resources Outside of the Classroom," U.S. Dep't of Education, Institute of Education Sciences, National Center for Education Statistics (Apr. 2018), https://nces.ed.gov/pubs2017/2017098.pdf.

Ohio, neighborhoods in its deployment of home Internet and video technologies over the past decade."[14] Specifically, the NDIA reported that AT&T has "withheld fiber-enhanced broadband improvements from most Cleveland neighborhoods with high poverty rates" and has specifically improved the broadband technology in higher-income areas of the city that has left the majority of census blocks with individual poverty rates above 35 percent with an "older, slower transmission technology called ADSL2, resulting in significantly slower Internet access speeds than AT&T provides to middle-income city neighborhoods as well as most suburbs."[15] Shortly after that report was released, a civil rights complaint was filed against AT&T for allegedly discriminating against low-income and marginalized communities in Detroit, Michigan, with the complaint alleging a "pattern of long-term, systematic failure to invest in the infrastructure required to provide equitable, mainstream Internet access to residents of the central city (compared to the suburbs) and to lower-income city neighborhoods."[16]

To better understand this racial digital divide, the Commission should analyze demographic information on race and ethnicity collected by the U.S. Census Bureau in conjunction with deployment and pricing data.

Third, the Commission must make public the data it collects on actual subscription rates. Subscription data is necessary for assessing the true scope of the digital divide and for analyzing broadband affordability and competition. Deployment data tells researchers where households could adopt broadband, but not which households actually do so. Luckily the Commission already collects significant data on subscribership from ISPs in Form 477, though this data is kept largely confidential. To encourage thorough public analysis of the digital divide, the Commission should release its 477 subscription data to the public.

Fourth, the Commission must collect additional performance data to measure actual speeds and latency. For many communities, and for families in particular, just having broadband access at home is not sufficient. They need reliable and fast broadband to actually be able to engage in most of the activities mentioned above that can catalyze opportunity such as teleworking or educational services. A recent Government Accountability Office report found that "quality of service is a key component of access to broadband and that routine outages, slow speeds, and high latency keep people on tribal lands from consistently accessing the Internet."[17] To that end,

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[14] Jon Brodkin, "AT&T allegedly 'discriminated' against poor people in broadband upgrades," Ars Technica (Mar. 10, 2017), https://arstechnica.com/information-technology/2017/03/att-allegedly-discriminated-against-poor-people-in-broadband-upgrades/.

[15] Bill Callahan, "AT&T's Digital Redlining Of Cleveland," National Digital Inclusion Alliance (Mar. 10, 2017), https://www.digitalinclusion.org/blog/2017/03/10/atts-digital-redlining-of-cleveland/.

[16] Harper Neidig, "AT&T hit with second complaint of discrimination against low-income neighborhoods," The Hill (Sept. 25, 2017), https://thehill.com/policy/technology/352267-att-hit-with-second-complaint-of-discrimination-against-low-income.

[17] GAO, Broadband Internet: FCC's Data Overstate Access on Tribal Lands (Sept. 2018), at 22, https://www.gao.gov/assets/700/694386.pdf.

the Commission should also collect data on usage limitations, including how providers deprioritize traffic once a data cap threshold is reached. However the Commission opts to empower consumers to submit crowdsourced speed measurements, it must make sure that process is robust and is taken into consideration by the Commission when it reviews whether high-speed broadband is truly being made available to all Americans.

Microsoft has conducted extensive research highlighting the discrepancies between the FCC's information and how many people across the country actually are not accessing the internet at broadband speeds. According to the FCC's 2018 Broadband Deployment Report, 24.7 million Americans lacked access to high-speed broadband services,[18] but Microsoft's report shows the reality is that 162.8 million Americans do not use high-speed internet, whether or not they have access to it, and broadband access (or rather, a lack thereof) in rural areas in particular is wildly misrepresented by the FCC's data.[19] In one case study, Microsoft showed that only 2 percent of residents in Ferry County, Washington, experience broadband speeds, even though the FCC claims that 100 percent of the county has access.[20] Microsoft's data shows that this is the case across the country: even when Form 477 shows that ISPs offer high-speed service, many still do not adopt at those speeds or do not experience the maximum advertised speed of the service they subscribe to.

Finally, the Commission must continue to preserve maximal transparency in its data collection and analysis. While improving the accuracy of the Commission's deployment data and expanding its analysis to include affordability and adoption factors are important goals, the Commission must not sacrifice transparency in doing so. The public interest benefits hugely from researchers having access not just to the Commission's compiled broadband maps, but also to the base data it collects from Form 477. Replacing publicly available data with ostensibly more granular but proprietary and hence confidential data would be a net loss to the public.

Fifth, the Commission should collect and consider the vulnerabilities and resiliency data of broadband networks. Natural disasters and the eroding of old infrastructure pose a significant threat to broadband access in the United States, particularly for communities that are already affected by one layer of the digital divide. As clearly demonstrated in the aftermath of Hurricane Maria in Puerto Rico, a vulnerable network can leave communities disconnected and disenfranchised. Even for communities that have managed to be one the connected side of the digital divide, if networks are so frail that access is threatened by any passing storm, access is not

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[18] *See* Federal Communications Commission, "2018 Broadband Deployment Report" (Feb. 2, 2018), https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report.
[19] *See* Steve Lohr, "Digital Divide Is Wider Than We Think, Study Says," The New York Times (Dec. 4, 2018), https://www.nytimes.com/2018/12/04/technology/digital-divide-us-fcc-microsoft.html.
[20] *See id*.

truly available. An accurate depiction of the digital divide in the United States must analyze network vulnerabilities alongside deployment and affordability data.

We urge the Commission to adopt the above-mentioned reforms to ensure that the government has the information necessary to tackle the digital divide, protect civil rights, and promote economic justice.

Sincerely,

The Benton Foundation
Common Cause
MediaJustice
National Hispanic Media Coalition
New America's Open Technology Institute
Open MIC (Open Media and Information Companies Initiative)
Public Knowledge