Public Knowledge

January 21, 2020

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

Re: Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. GN Docket No. 19-285

Dear Ms. Dortch,

On January 16, 2020, Lindsay Stern and Jenna Leventoff of Public Knowledge, Yosef Getachew of Common Cause, Amir Nasr of New America's Open Technology Institute, Cat Blake of Next Century Cities, and Willmary Escoto of National Hispanic Media Coalition (collectively, "the Advocates") met with Adam Copeland, Alex Johns, Pamela Arluk, Edward Krachmer, and Janice Gorin in the Wireline Competition Bureau, and Pamela Megna with the Office of Economics and Analytics, regarding the above-captioned proceeding.

The Advocates expressed concern regarding the methodology, analysis, and conclusions in the Federal Communication Commission's ("FCC" or "Commission") *Fifteenth Broadband Deployment Report Notice of Inquiry*.[1] Overall, the Advocates expressed concern that the Commission has not taken a modern perspective on broadband deployment and adoption. The Advocates disagreed with the Commission's conclusions in its two prior Broadband Deployment reports that broadband is being deployed to all Americans in a timely fashion. We spoke with the Wireline Competition Bureau to reiterate our recommendations for ways that the Commission can ensure more robust and affordable broadband deployment as well as a more accurate Broadband Deployment Report. In the meeting, we specifically discussed increasing the current benchmark speeds; that mobile broadband is not a substitute for fixed broadband; collecting pricing data from broadband providers is crucial for consumers; and the issues and possible solutions for the Commission's data collection process and use of Form 477.

**The Current Benchmark Speed Is No Longer Adequate To Meet The Broadband Needs Of Households Today.**

The *Notice of Inquiry* purports to maintain the benchmark speed for fixed broadband at 25 Mbps/3 Mbps; however, the Advocates explained that this benchmark speed is no longer adequate to meet the broadband needs of households today. Technological innovation and

[1] Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 19-285, *Fifteenth Broadband Deployment Report Notice of Inquiry*, FCC 19-102 (rel. Oct. 23, 2019) ("*NOI*").

consumer demand for faster broadband warrant the Commission to update its benchmark speed from 25 Mbps to 100 Mbps downstream. Online innovation has dramatically grown with the increasing use of over-the-top services, internet of things devices, and other high bandwidth applications.

As more households depend on broadband for an increasing number of high-bandwidth uses, faster broadband speeds are required. Especially in households with more than one family member, it is no longer reasonable to suggest that the current benchmark speed can accommodate these households' desires (e.g., streaming television) and needs (e.g., video conferencing one's doctor). The benchmark speed should reflect the current realities of the marketplace and consumer demand. The Advocates explained that the modern "test case" for broadband should not be one family member using a broadband service, but rather that the benchmark should incorporate the situation where someone is streaming 4K while another person is video conferencing with a doctor and many other household devices are connected to the internet. Multiple, simultaneous uses of broadband in a single household more so reflect the modern use of broadband in homes across the country.

The Commission runs the risk of maintaining a broadband speed that is outdated for today and the near future. The Advocates explained that the Commission's current benchmark speed does not reflect today's marketplace realities for broadband. Providers are advertising and offering speeds well-beyond 25/3 Mbps. For example, in USTelecom's comments to the Commission, it explained that broadband at higher speeds is currently widely available, citing that as of mid-2018, wired broadband service at 100/10 Mbps was available to 89 percent of Americans.[2] Similarly, in Internet Innovation Alliance's comments, it stated that "broadband providers are constantly increasing speeds in response to competitive pressures," and that it expects this trend to continue and accelerate as the nation moves towards 5G wireless broadband.[3] The Commission has not updated its benchmark speed in five years, yet in CTIA's comments it explained that consumers enjoy 90 percent faster download speeds than they did five years ago.[4]

The Commission itself is moving away from the current benchmark speed and offering higher speed broadband in its various proposals. For example, in the *Rural Digital Opportunity Fund Draft Report and Order*, the Commission states that the Order would "encourage the deployment

[2] Comments of *USTelecomm, In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capacity to All Americans in a Reasonable and Timely Fashion*, GN Docket 19-285 (Nov. 22, 2019), at 4.
[3] Comments of Internet Innovation Alliance, *In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capacity to All Americans in a Reasonable and Timely Fashion*, GN Docket 19-285 (Nov. 22, 2019), at 6.
[4] Comments of CTIA, *In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capacity to All Americans in a Reasonable and Timely Fashion*, GN Docket 19-285 (Nov. 22, 2019) ("CTIA Comments"), at 13.

of networks that will stand the test of time, including those providing gigabit connections." Moreover, in the Commission's recently published 5G FAST Plan, the Commission takes a forward-thinking, modern approach regarding wireless spectrum policy, and this is the same perspective the Commission should take regarding fixed broadband services.[5] Aiming for future-proof policies is a good use of taxpayer dollars and helps consumers, and the Commission should adhere to this goal by increasing the current benchmark speed.

**The Commission Should Continue To Find That Mobile Broadband Is Not A Substitute for Fixed Broadband.**

The Commission should conclude that mobile broadband is not a substitute for fixed broadband, as it has concluded for the past two years. As the Advocates explained, consumers do not view the two services as substitutes. In fact, low-income Americans are more likely to exclusively rely on mobile broadband than those with higher incomes.[6] Mobile is generally (1) more expensive for consumers, (2) less reliable (especially in rural areas), (3) slower, and (4) subject to data caps and expensive overage fees compared to fixed. Mobile is also increasingly reliant on fixed broadband for offloaded traffic and backhaul.[7] As such, it would not make sense for the Commission to deem mobile a substitute for fixed when it is dependent on fixed for its own functioning.

Devices that typically are associated with mobile broadband (e.g., smartphones, tablets) are limited in functionality compared to fixed. Studies have also shown that people who rely on mobile devices and mobile broadband for homework, teleworking, and searching for

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[5] *The FCC's 5G FAST Plan*, FCC Website, https://www.fcc.gov/5G (quoting Chairman Pai: "Forward-thinking spectrum policy, modern infrastructure policy, and market-based network regulation form the heart of our strategy for realizing the promise of the 5G future.").

[6] Monica Anderson, *Mobile Technology and Home Broadband 2019*, Pew Research Center (June 13, 2019), https://www.pewresearch.org/internet/2019/06/13/mobile-technology-and-home-broadband-2019/. The Pew survey found that 45 percent of non-broadband users said that the reason they do not have that access at home is because a smartphone does everything they need. As evidenced elsewhere, the lack of interest in fixed home broadband is inextricably linked to the cost—someone who cannot afford both services is likely to see having both services as unnecessary, particularly if they have to choose between having home broadband or a smartphone, which gives both mobile broadband and mobile phone service. *See* Benton Institute for Broadband & Society, *The Complexity of 'Relevance' as a Barrier to Broadband Adoption* (2016), https://www.benton.org/blog/complexity-relevance-barrier-broadband-adoption; Benton Institute for Broadband & Society, The Ability to Pay for Broadband (2019), https://www.benton.org/blog/ability-pay-broadband.

[7] Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2017–2022 White Paper* (Feb. 18, 2019), https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-738429.html.

employment have cited that reliance as a problem.[8] Mobile broadband cannot handle the volume of data that households consume on fixed broadband plans. Comcast and Charter—two of the largest fixed providers in the country—have reported that customers consume 200 gigabytes of data per month.[9] Broadband-only cord-cutting customers consume 400 GB per month, according to Charter.[10] Mobile cannot handle that amount of data for an entire household. Most plans throttle data or charge expensive overage fees after 25-50 GB of data that month, and even AT&T's "Unlimited Elite" plan only offers 100 GB of data before they throttle service.[11]

The Advocates discussed how 5G does not change any of these realities, and the Commission should not use 5G as a reason to deem mobile as a substitute for fixed broadband. 5G should not heavily influence the Commission's conclusion here as it is too early to conclude how these networks work and change consumer behavior. 5G has not been deployed in any consistent or widespread manner, but instead has mostly been showcased or demonstrated at shows or in limited urban areas. We have not seen enough from these limited deployments to reasonably conclude that this new technology renders mobile as substitutable to fixed broadband. Further, mobile carriers themselves have acknowledged that the most "revolutionary" speeds that they tout as possible through 5G networks—those using millimeter wave spectrum—will never scale beyond urban and high-population density areas.[12] This will deepen the digital divide and leave rural, Tribal, and other historically underserved and unserved areas behind. For example, Verizon recently admitted that the 5G deployed on low-band spectrum (the 5G service that will

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[8] Andrew Burger, *Pew: Smartphone-Only Internet Users Find Them an Incomplete Home Broadband Substitute*, Telecompetitor (Oct. 6, 2016), https://www.telecompetitor.com/pew-smartphone-only-internet-users-find-them-an-incomplete-home-broadband-substitute/; Monica Anderson and 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/.

[9] Jon Brodkin, *Comcast usage soars 34% to 200GB a month, pushing users closer to data cap*, Ars Technica (Apr. 26, 2019), https://arstechnica.com/information-technology/2019/04/comcast-usage-soars-34-to-200gb-a-month-pushing-users-closer-to-data-cap/; Daniel Frankel, *Charter: Broadband-Only Users Average 400GB of Monthly Data Usage*, Multichannel News (May 2, 2019), https://www.multichannel.com/news/charter-says-average-cord-cutter-uses-400gb-of-data-per-month.

[10] *Id.*

[11] Jon Brodkin, *AT&T's priciest "unlimited" plan now allows 100GB+ of un-throttled data*, Ars Technica (Oct. 31, 2019), https://arstechnica.com/information-technology/2019/10/atts-priciest-unlimited-plan-now-allows-100gb-of-un-throttled-data/.

[12] Jon Brodkin, *Millimeter-wave 5G will never scale beyond dense urban areas, T-Mobile says*, Ars Technica (April 22, 2019), https://arstechnica.com/information-technology/2019/04/millimeter-wave-5g-will-never-scale-beyond-dense-urban-areas-t-mobile-says/; Sean Hollister, *Verizon and T-Mobile agree much of the US won't see the fast version of 5G*, The Verge (April 24, 2019), https://www.theverge.com/2019/4/24/18514905/verizon-t-mobile-agree-rural-united-states-dont-getmillimeter-wave-5g.

be deployed to rural areas) would be equivalent to "good 4G."[13] The FCC cannot deem mobile as a substitute for fixed broadband based on the capabilities of 5G that are only available in certain parts of the country. If 5G only brings "fixed-like" capabilities to *some* and not *all* Americans, then it cannot and should not be determined to be substitutable for fixed broadband in the context of the Commission's Section 706 obligations.

**The Commission Should Start Collecting Pricing Data To More Accurately Reflect Broadband Adoption And Competition.**

The Commission has stated many times that its top priority is to close the digital divide and to bring the educational, healthcare, social, and civic benefits of broadband to all Americans. The Advocates strongly support this goal, but for that to happen the Commission must ensure that broadband is not just physically available but also that it is affordable for all Americans. The Commission should not primarily focus on broadband deployment because even if broadband is deployed to every community in America, millions of people would still not be able to afford to subscribe, and what is the point of deployment if people cannot use the service? As the Advocates expressed, the digital divide continues to punish low-income Americans. According to Pew, only 56% of households making $33k or less per year subscribe to home broadband, while 94% of households earning $100k or more per year subscribe to broadband.[14]

The Commission staff expressed concern with the practical implementation of collecting price data from broadband providers. They cited the varying pricing patterns of the broadband industry as a reason it would be too complicated to collect that data and use it to analyze the affordability of broadband (such as bundles and promotional pricing). However, the Advocates explained that collecting that data is still crucial to better understand the state of affordability, adoption, and competition of broadband services. If experts at the Commission cannot parse the confusing nature of ISPs' pricing schemes, how are consumers expected to navigate hidden fees themselves? Therefore, the Commission must first accept the premise that collecting pricing data is vital to studying the true state of broadband availability. The Commission can then determine how it can collect and analyze this data. We are confident that the Commission can collect pricing data because broadband providers *have this data*. Broadband providers are usually for-profit companies that constantly track and collect their own pricing data. If the providers already

[13] Jon Brodkin, *Verizon: 5G speeds on low-spectrum bands will be more like "good 4G"*, Ars Technica (Aug. 8, 2019), https://arstechnica.com/information-technology/2019/08/verizon-5g-speeds-on-low-spectrum-bands-will-be-more-like-good-4g/.
[14] Monica Anderson and Madhumitha Kumar, *Digital divide persists even as lower-income Americans make gains in tech adoption*, Pew Research Center (May 7, 2019), https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/.

have this data, the Commission can ask them to report it. The Commission's priority should be consumers, not whether it is too complicated for companies to report their pricing information.

The Advocates encouraged the Commission to engage deeply with local governments and other stakeholders who have developed methods for overcoming economic barriers to broadband adoption. For example, Fort Collins, Colorado is implementing income-qualified credits in order to offer gigabit service to low-income residents for $19.95 per month.[15] Wilson, North Carolina allows customers of its municipal network to pay-as-you-go, a program designed to prevent poor credit or unreliable income from being a barrier to adopting service.[16] The Advocates hope that the Commission establishes procedures to ensure that pricing information is being collected in a helpful and effective manner. The public currently has no pricing data and that lack of transparency must end if we are going to fully understand the digital divide.

**Form 477 Is Seriously Flawed And The Commission Should Not Solely Rely On Form 477 In its Upcoming Broadband Deployment Report.**

The *Notice of Inquiry* acknowledges that Form 477 data is inaccurate but then states that the Commission will continue to use it in its upcoming Broadband Deployment Report because it is "currently the most reliable" data collection source.[17] But the Advocates explained that it is currently the most reliable because it is the Commission's only source of data collection. The Advocates expressed their concern with the Commission's acknowledgement that Form 477 is deeply flawed—also evidenced by the current proceeding *Modernizing the FCC Form 477 Data Program,* WC Docket No. 11-10— and yet that the Commission will likely still move forward with using Form 477 as the basis for its upcoming Report. The Advocates recommended that the Commission can supplement its Form 477 data with other sources, such as organizations like M-Lab that crowdsource data or by using state-collected data. In addition, the Commission can make Form 477 more reliable by adding additional metrics to what providers must report, such as actual broadband speeds (not only advertised speeds) and pricing data (including all below-the-line fees). The Commission can also enable a more robust challenge process for consumers as well as an independent verification process, enabling the Commission to verify the Form 477 data and enforce penalties if the submitted information is inaccurate. The Commission should not continue to only rely on broadband providers regarding whether Americans are being served and at what speeds.

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[15] Jacy Marmaduke, *Fort Collins Connexion plans big discounts on gig-speed internet for low-income residents, Colorodoan (Sept. 29, 2019),* https://www.coloradoan.com/story/news/2019/09/29/fort-collins-connexion-plans-discounts-low-income-residents/3787212002/.

[16] *Transcript: Community Broadband Bits Episode 291*, Community Networks (Feb. 1, 2018), https://muninetworks.org/content/transcript-community-broadband-bits-episode-291.

[17] *NOI* at ¶¶ 16-17.

In accordance with Section 1.1206(b) of the Commission's rules, an electronic copy of this letter is being filed in the above-referenced docket. Please contact me with any questions regarding this filing.

Respectfully submitted,
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