Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
)	
Inquiry Concerning Deployment of)	GN
Advanced Telecommunications Capability)	
to All American in a Reasonable and)	
Timely Fashion)	

3N Docket No. 20-269

COMMENTS OF COMMON CAUSE, NEXT CENTURY CITIES, AND PUBLIC KNOWLEDGE

Yosef Getachew Media & Democracy Program Director COMMON CAUSE 805 15th Street NW, Suite 800 Washington, D.C. 20005 (202) 833-1200

Francella Ochillo Executive Director Corian Zacher Policy Counsel Ryan Johnston Policy Counsel NEXT CENTURY CITIES 1201 Connecticut Ave NW, Suite #300 Washington, D.C. 20036 (202) 740-3259

Jenna Leventoff Senior Policy Counsel Kathleen Burke Policy Counsel PUBLIC KNOWLEDGE 1818 N St NW, Suite 410 Washington, D.C. 20036 (202) 861-0020

September 18, 2020

TABLE OF CONTENTS

I.	INT	INTRODUCTION AND SUMMARY 1		
II.	THE COMMISSION SHOULD INCREASE THE CURRENT BENCHMARK SPEED FOR BROADBAND TO 100/100 MBPS3			
	А.	Consumer Demand During and After the COVID-19 Pandemic Warrant the Commission to Update Its Benchmark for Broadband4		
	B.	Consumer Demands During and After the COVID-19 Pandemic Warrant Symmetrical Broadband Speeds of 100/100 Mbps6		
	C.	Our Nation's Networks are Already Offering Faster, Symmetrical Broadband Speeds9		
	D.	The Current Benchmark Speed Is Inadequate Compared to International Broadband Targets9		
	E.	The Commission is Required to Adopt a Forward-Looking Approach to Broadband as Directed by Congress and Its Own Policy Goals10		
III.	THE COMMISSION'S CURRENT METHODOLOGY IS FLAWED AND OVERSTATES DEPLOYMENT11			
	А.	Form 477 Provides Inaccurate and Incomplete Information to Broadband Deployment and Should Not Be Used as the Only Data Collection Source for the 2021 Broadband Deployment Report11		
	B.	The Broadband Deployment Report Should Include More Granular Information, Such As Quality of Service, Pricing Information, and Demographics		
	C.	The FCC Should Continue to Exclude Satellite Services from Its Deployment Determinations Because Satellite Services Overstate Deployment17		
	D.	The Commission Should Update Its Methodology of Comparing Broadband Speeds18		
	E.	The FCC Should Adopt a Process that Would Allow Consumers to Challenge the Accuracy of the 2021 Broadband Deployment Report		
IV.		BILE BROADBAND SERVICE IS NOT A SIMILAR FUNCTIONALITY OR STITUTE TO FIXED BROADBAND20		
	A.	Mobile Broadband is a Distinct Service from Fixed Broadband		

	В.	Millions of Consumers Rely Solely on Mobile Broadband Because it is More Affordable, Not Because it is as Reliable		
	C.	5G Mobile Wireless Service is a Distinct Service from Fixed Broadband23		
	D.	COVID-19 Demonstrates That Mobile Broadband Does Not Have the Same Functionality as Fixed Broadband25		
VI.		COMMISSION SHOULD CONTINUE TO INCLUDE TRIBAL LOYMENT MEASURES		
	А.	More Granular Data on Quality of Service and Price Will Benefit Tribal Residents		
	B.	Incorporating Tribal Input Would Improve Broadband Mapping on Tribal Lands27		
	C.	Increasing Spectrum Availability for Tribal Applicants Can Improve Deployment in Hard to Reach Areas		
VII.	THE COVID-19 PANDEMIC HAS EXPOSED THE DIGITAL DIVIDE AND THE COMMISSION'S POLICIES MUST MEET THE ENORMITY OF THE MOMENT			
	А.	COVID-19 Highlights the Importance of Broadband and Shows Why Data Must be Accurate		
	B.	The Pandemic Has Exposed the Urgent Need to Increase Broadband Adoption Rates		
	C.	Homes are the New Classrooms, But Commission Policy is Keeping Millions of students and Educators Disconnected		
	D.	The FCC Should Reinstate and Expand the Keep Americans Connected Pledge		
	Е.	The Commission Should Increase the Lifeline Subsidy		
VIII.		COMMISSION'S RECENT ACTIONS HAVE WIDENED THE DIGITAL DE INSTEAD OF NARROWING IT		
	А.	The Commission's Recent Actions and Pending Proposals to the Lifeline Program Will Widen the Digital Divide39		
	B.	In the "Race to 5G," The Commission Cannot Leave Unconnected Americans Further Behind41		
IX.	CON	CLUSION		

I. INTRODUCTION AND SUMMARY

Common Cause, Next Century Cities ("NCC"), and Public Knowledge submit these comments in response to the Federal Communications Commission's ("FCC" or "Commission") request for public input on whether broadband is being deployed to all Americans in a reasonable and timely fashion.¹ The answer to this question still depends heavily on a household's geography and income. Even though Americans nationwide need affordable and reliable broadband connections to comply with remote learning, work from home orders, telemedicine programs, and more, reliable and affordable high-speed connections are still a distant reality for millions.

According to Renae Cly, Monument Valley, Arizona resident, "[t]here's a signal here and there. But where we live on the reservation, there's no Wi-Fi access."² Kerrie Wagaman, a nurse in rural Baltimore County, Maryland, explained that slow internet means that her children are not always able to upload homework assignments and get disconnected during online classes.³ When Dan Makevich, a retiree from the Bay area in California, received calls to reschedule his doctor's appointments online while stay-at-home orders remained in place, he declined because he could not afford a broadband subscription and did not have the tools to get online.⁴

¹ Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, *Sixteenth Broadband Deployment Report Notice of Inquiry*, GN Docket No. 20-2969 (2020), https://docs.fcc.gov/public/attachments/FCC-20-112A1.pdf [hereinafter "NOI"].

² Zak Podmore, *San Juan School District working to expand internet access to students on the Navajo Nation* (Aug. 15, 2020), https://www.sltrib.com/news/2020/08/15/san-juan-school-district/.

³ See Alison Knezevich, Lillian Reed, and Wilborn P. Nobles III, *In 2020, many Marylanders still lack high-speed internet. And that's a problem for work and school.* (Aug. 7, 2020), https://www.baltimoresun.com/coronavirus/bs-md-pandemic-broadband-access-20200807-6ugb7j7dkneyvntm7dyvjgydmm-story.html.

⁴ See Laurence Du Sault, *Coronavirus: The Bay Area seniors who are left behind by a telehealth tech divide* (July 20, 2020), https://calmatters.org/california-divide/2020/07/coronavirus-bay-area-seniors-health-tech-divide.

These are not ordinary times. As the Coronavirus ("COVID-19") pandemic revealed, the digital divide continues to have a stranglehold on Tribal lands, people of color, seniors, people with disabilities, low-income populations, and rural parts of the country. The Commission must meet the enormity of this moment and scrutinize whether every American has an equal opportunity to participate in a digital society. Otherwise, stories like that of Karie Fugget in Drain, Oregon, will continue to be commonplace:

I am writing this from my car, which is parked in a Taco Bell parking lot. I have been here for hours now, and I have lost count of the times employees have looked out the glass front doors to see if I've left yet. Every time I notice them, I sink a little lower in my seat. I don't want to be here. I'm embarrassed. But I don't have internet in my home, and without public wifi, I can't work.⁵

In light of increased network demands, we urge the Commission to update the current benchmark from 25/3 Mbps to a symmetrical speed of 100/100 Mbps. A low standard undermines larger policy goals for widespread, high-speed connectivity and stifles our competitiveness in the global broadband marketplace.

It is highly problematic for the Commission to rely on Form 477, which provides inaccurate and incomplete information, as the primary datapoint to measure broadband deployment. A robust analysis requires the Commission to evaluate additional factors such as pricing data, user demographics, quality of service metrics, actual service speed data, data caps, network vulnerability and resilience data. Overstating whether Americans have access to minimum broadband speeds guarantees that unserved and underserved areas will continue to struggle with connectivity and miss out limited federal resources marked for communities in need. Thus, the FCC should implement a process through which consumers, governmental

⁵ Karie Fugett, *I live in rural America cut off from the internet. The pandemic has made me more isolated than ever.* (Apr. 9, 2020), https://www.vox.com/first-person/2020/4/9/21214105/coronavirus-internet-rural-america.

organizations, and other entities can challenge the accuracy of the 2021 Broadband Deployment Report ("2021 Report").

It is also important to note that low-income Americans disproportionately rely on mobile broadband because it is more affordable than fixed broadband, not because it is a substitute for a fixed connection. Although emerging technologies may change that calculation in years to come, fixed broadband currently remains superior with faster speeds and lower latency.

Fixed connections are scarce in Indigenous communities. Broadband deployment on Tribal lands not only lags behind deployment in non-Tribal lands, Americans living on Tribal lands are among the most disconnected in the U.S. The Commission must solicit input from Tribal leaders to improve broadband mapping and deployment opportunities.

Finally, the Commission should abandon proposals that could inadvertently widen the digital divide. The Commission has introduced a series of proposals that create uncertainty and reduce participation in the Lifeline program instead of using it as a tool. Likewise, the Commission has been reluctant to extend E-Rate benefits to accommodate the millions of students and teachers who were forced out of their traditional classrooms into online portals regardless of whether they were prepared. Still, Americans remain hopeful that this FCC will use every resource available to accelerate broadband deployment during a time of extraordinary need.

II. THE COMMISSION SHOULD INCREASE THE CURRENT BENCHMARK SPEED FOR BROADBAND TO 100/100 MBPS

The Commission's NOI proposes to maintain the current benchmark speed of 25/3 Mbps for assessing whether advanced telecommunications capability is being deployed to all

Americans in a reasonable and timely fashion.⁶ However, this speed does not fit consumer needs, is slower than many providers are already offering, does not meet the FCC's goals, and fails to keep pace with international broadband targets. In order to ensure that providers meet household connectivity requirements both during and after the COVID-19 pandemic, the Commission must increase its benchmark speed to 100/100 Mbps. Otherwise, Americans currently struggling with access to minimum broadband speeds will also be locked out of opportunities and services that have almost exclusively migrated online.

A. Consumer Demand During and After the COVID-19 Pandemic Warrant the Commission to Update Its Benchmark for Broadband

The landscape has changed. What households needed before COVID-19 stay-at-home orders were put in place is different thereafter. Even a trip to the bank or Department of Motor Vehicles now requires being able to get online. Speeds of 25/3 Mbps are no longer adequate to meet the needs of households, and have increasingly become insufficient.

Even before the COVID-19 pandemic, 25/3 Mbps speeds did not support how most households were using the internet. During a typical evening, a family of four could have one parent skyping with family members, another finishing a video conference, children playing video games and streaming content, while a Nest doorbell camera and Amazon Alexa run in the background. The FCC itself admits that household internet speeds must exceed 25 Mbps to run more than one "high demand application," such as video conferencing, online gaming, or streaming HD video.⁷ That, coupled with the changing landscape, is adequate cause to reassess the 25/3 Mbps benchmark.

⁶ NOI, *supra* note 2 at \P 4-5.

⁷ *Household Broadband Guide*, Federal Communications Commission (last updated Feb. 5, 2020), https://www.fcc.gov/research-reports/guides/household-broadband-guide.

Based on past trends and future projections, the needs of internet users are only likely to grow, irrespective of COVID-19 trends. According to the NTIA, from 2013 to 2017, the proportion of internet users watching online videos grew from 45 to 70 percent.⁸ Since then, many popular new streaming services have launched, including Disney+, AppleTV+, and HBO Max, which are likely to increase the proportion of internet users watching online videos.⁹ Moreover, in 2019, there were about 8 billion internet connected devices in use worldwide that consumers used for everything from keeping their homes secure, to turning on lights without their hands.¹⁰ By 2027, there are likely to be more than 41 billion.¹¹ Even the size of web pages are growing. As NCC stated in 2019 *706* comments, "since the start of 2015, the average size of web pages has increased by nearly 33 percent for desktop browsers and 50 percent for mobile browsers (which... tend to be connected to Wi-Fi networks using fixed connections)."¹² Speeds of 25/3 Mbps are simply insufficient.

⁸ Edward Carlson, *Cutting the Cord: NTIA Data Show Shift to Streaming Video as Consumers Drop Pay-TV*, National Telecommunications and Information Administration (May 21, 2019), https://www.ntia.doc.gov/blog/2019/cutting-cord-ntia-data-show-shift-streaming-video-consumers-drop-pay-tv; Stephen Silver, *Majority of U.S. Households Have at Least Two Streaming Services*, The National Interest (Sep. 17, 2020),

https://nationalinterest.org/blog/techland/majority-us-households-have-least-two-streamingservices-169095. ("The adoption and use of these established SVOD services along with newer direct-to-consumer streaming video options have increased over the past year, spurred more recently by the impact of the coronavirus pandemic.").

⁹ Dan Reilly, *All the New Streaming Services That Want Your Money*, Vulture (Nov. 5, 2019), https://www.vulture.com/2019/11/new-streaming-services-2019-2020.html.

¹⁰ Peter Newman, *THE INTERNET OF THINGS 2020: Here's What Over 400 IoT Decision-Makers Say About the Future of Enterprise Connectivity and How IoT Companies Can Use it to Grow Revenue*, Business Insider (Mar. 6, 2020), https://www.businessinsider.com/internet-ofthings-report?IR=T.

¹¹ Id.

¹² Next Century Cities, Comments on Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion (filed on Nov. 22, 2019),

https://ecfsapi.fcc.gov/file/1123072715538/Next%20Century%20Cities'%20Broadband%20Depl oyment%20NOI%20Comments%20(Filed%20on%2011.22.2019).pdf.

B. Consumer Demands During and After the COVID-19 Pandemic Warrant Symmetrical Broadband Speeds of 100/100 Mbps

Consumer needs regarding broadband speeds are vastly outpacing FCC policy. The Commission's current benchmark speed was last updated five years ago.¹³ Data usage has since doubled.¹⁴ In order to align with consumer needs both during the COVID-19 pandemic, and after, the Commission *must* increase its benchmark speed.

We agree with Commissioner Rosenworcel—a symmetrical speed of 100/100 Mbps will ensure that consumers can comfortably engage in multiple online activities at once, without having to pick and choose which is the most important.¹⁵ As Commissioner Rosenworcel stated "With many of our nation's providers offering gigabit service, it's time for the FCC to adjust its baseline...to at least 100 megabits per second. While we're at it we need to revisit our thinking about upload speeds. At present, our... asymmetrical approach is dated."¹⁶ Without increasing the minimum benchmark speed, our nation will invest limited public resources into deploying

¹³ Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, GN Docent No. 14-126, ¶ 3 (2015), https://docs.fcc.gov/public/attachments/FCC-15-10A1.pdf; BBC Wires, FCC Updates Broadband Speed Benchmark to 25 Mbps/3 Mbps, Broadband Communities Magazine (Jan. 30, 2015), https://www.bbcmag.com/breaking-news/fcc-updates-broadband-speed-benchmark-to-25mbps3-mbps.

¹⁴ In 2016 Americans used an average of 190 GB per month, but by the second quarter of 2020, the average American data usage doubled to 380 GB per month. *Compare* Joan Engebretson, *iGR: Average Monthly Broadband Usage is 190 Gigabytes Monthly Per Household*, Telecompetitor (Sept. 26, 2016), https://www.telecompetitor.com/igr-average-monthly-broadband-usage-is-190-gigabytes-monthly-per-

household/#:~:text=Average%20monthly%20broadband%20usage%20in,new%20report%20fro m%20iGR%20Research *with* OpenVault, Broadband Insights Report, 4 (2020),

https://openvault.com/wp-content/uploads/2020/08/Openvault_Q220_DataUsage_OVBI.pdf. 15 See NOI at \P 15.

¹⁶ *Id*.

broadband networks that are outdated by the time they are built—leaving families to face the consequences.

Although internet use and projected internet use before COVID-19 demanded speeds above 25/3 Mbps, the COVID-19 pandemic has introduced new requirements as living rooms are converted into classrooms and kitchen tables into offices. For the foreseeable future, multiple family members will be required to work from home, take online classes, and use telehealth programs for primary care. Without faster speeds, consumers are forced to make the impossible choice between a virtual class for a student, a videoconference for a parent, or a telehealth appointment for a grandparent. To engage in all of these activities at once requires symmetrical broadband speeds. The FCC can and should accommodate the change in demands by increasing its broadband benchmark speed to 100/100 Mbps.

The COVID-19 pandemic has dramatically increased the average amount of bandwidth used by households, particularly the increase in upstream bandwidth consumption. According to OpenVault, broadband usage during COVID-19 has increased by 47 percent from last year, and upstream consumption is up 56 percent year-over-year.¹⁷ Even as broadband usage declined in the second quarter of 2020, upstream consumption continued to increase.¹⁸ This likely has to do with increased use of video-conferencing and telehealth—things that are likely to continue even after the pandemic.¹⁹

¹⁷ OpenVault, Broadband Insights Report, 9 (2020), https://openvault.com/wpcontent/uploads/2020/08/Openvault_Q220_DataUsage_OVBI.pdf; BTR Staff, *OpenVault Says Bet on Prolonged Upstream Broadband Spike*, Broadband Technology Report (Aug. 13, 2020), https://www.broadbandtechreport.com/docsis/article/14181598/openvault-says-bet-onprolonged-upstream-broadband-spike.

¹⁸ Id.

¹⁹ Katherine Guyot and Isabel V. Sawhill, Telecommuting Will Likely Continue Long After the Pandemic, Brookings (April 6, 2020), https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/.

Before the pandemic, NTIA estimates that in 2019 nearly one-third of employed

Americans used the internet to work remotely.²⁰ In April 2020, the Brookings Institute estimated that about half of working adults were working from home.²¹ Experts believe that the amount of telework is likely to stay high once the pandemic ends as employers recognize that work can be accomplished remotely and office spaces cost money. A recent survey of HR leaders also shows that 77 percent expect more employees to work remotely, even a year after COVID-19 has largely subsided.²² An increased number of remote workers means that video conferencing services, like Zoom, which require faster upload speeds, will continue to be popular. Zoom has seen its number of monthly active users increase 4,700 percent year over year.²³

Telehealth, which also requires fast upload speeds, has also seen, and will likely continue to see, dramatic growth. From 2016 to 2017, claims for alternative care settings grew by 53 percent.²⁴ Growth Strategy consulting firm Frost & Sullivan predicts a sevenfold growth in telehealth by 2025.²⁵ Thus, it is clear that before, during, and after COVID-19, consumers need

²⁰ Rafi Goldberg, *Nearly a Third of American Employees Worked Remotely in 2019, NTIA Data Shows,* National Telecommunications and Information Administration (Sep. 3, 2020), https://www.ntia.gov/blog/2020/nearly-third-american-employees-worked-remotely-2019-ntia-data-show.

²¹ Katherine Guyot & Isabel V. Sawhill, *Telecommuting will likely continue long after the pandemic*, Brookings (Apr. 6, 2020), https://www.brookings.edu/blog/up-

front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic.

²² The Conference Board, From Immediate Responses to Planning for the Reimagined

Workplace, 8 (2020), https://conference-board.org/pdfdownload.cfm?masterProductID=20874.

²³ Jordan Novet, Zoom Shares Soar after Revenue more than Quadruples from Last Year, CNBC

⁽Aug. 31, 2020), https://www.cnbc.com/2020/08/31/zoom-zm-earnings-q2-2021.html.

²⁴ Staff News Writer, *Telehealth Up 53%, Growing Faster than any Other Place of Care*, American Medical Association (May 29, 2019), https://www.ama-assn.org/practice-management/digital/telehealth-53-growing-faster-any-other-place-care.

²⁵ Mike Miliard, *Telehealth Set For 'Tsunami of Growth,' says Frost and Sullivan*, Healthcare IT News (May 15, 2020), https://www.healthcareitnews.com/news/telehealth-set-tsunami-growth-says-frost-sullivan.

faster broadband speeds. A symmetrical speed of 100/100 Mbps will ensure that households can continue to use multiple high-bandwidth applications at the same time.

C. Our Nation's Networks are Already Offering Faster, Symmetrical Broadband Speeds

Luckily, our nation's networks are already poised to handle faster broadband speeds. According to OpenVault, in 2020, 61 percent of all broadband subscribers have connections of 100 Mbps or faster.²⁶ According to the Commission's own Measuring Broadband America Report, the median advertised download speed, averaged across all participating ISPs, was 123.3 Mbps—a 96 percent increase since 2017. The weighted average of all advertised upload speeds had also increased significantly. It was up 141 percent since last year.²⁷ According to the same report, most ISPs offering fiber advertise symmetric upload and download speeds. With so many ISPs offering high speeds, and offered speeds continually increasing, the Commission can comfortably increase its benchmark speed to 100/100 Mbps.

D. The Current Benchmark Speed Is Inadequate Compared to International Broadband Targets

The current benchmark speed of 25 Mbps downstream and 3 Mbps upstream falls woefully short of international broadband targets. The European Union ("EU"), in its Single Digital Market directive, has a goal of universal 100 Mbps downstream.²⁸ The EU also instituted an action plan in 2016 to transform EU countries into gigabit societies by 2025.²⁹ The Commission's proposal to maintain the current benchmark speed comes at a time when the

²⁶ OpenVault, *supra* note 14 at 3.

²⁷ *Measuring Fixed Broadband*, Federal Communications Commission (Aug. 3, 2020), https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-ninth-report.

 ²⁸ Connectivity for a European Gigabit Society, European Commission (Sep. 8, 2020), https://ec.europa.eu/digital-single-market/en/policies/improving-connectivity-and-access.
 ²⁹ Id.

United States occupies a low-ranking position in international rankings of broadband capabilities. According to the Commission's own data, in 2016 the United States ranked 10th out of 28 countries in terms of fixed broadband download speeds and 24th out of 28 countries with regard to mobile download speeds.³⁰ Maintaining the current benchmark speed for broadband places the U.S. in a disadvantageous position in the global broadband marketplace.

Maintaining the current benchmark speed also runs counter to the Administration's desire to have faster internet in order to serve Americans and demonstrate technological prowess. President Trump has stated that America "must win" the so-called race to 5G, in order to have faster internet that will enable Americans to "work, learn, communicate and travel," and to "make American farms more productive, American manufacturing more competitive, and American healthcare better and more accessible."³¹ Chairman Pai also has a program focused on winning the race to 5G.³² Our nation cannot insist that winning the Race to 5G is our top priority in order to improve internet speeds while maintaining non-competitive broadband standards.

E. The Commission is Required to Adopt a Forward-Looking Approach to Broadband as Directed by Congress and Its Own Policy Goals

In prior Broadband Deployment Reports, the Commission adopted a forward-looking approach and updated its benchmark speed when warranted. For example, in its 2010 Report, the Commission took "the overdue step of raising the minimum speed threshold for broadband" to 4 Mbps downstream.³³ The FCC stated that "technologies, retail offerings, and demand among

³⁰ International Comparison Requirements Pursuant to Broadband Data Improvement Act, Sixth Report, 33 FCC 978, ¶5-6 (2018)

³¹ Remarks on 5G Cellular Communications Technology and an Exchange with Reporters, Daily Comp. Pres. Doc., 2019 DCPD No. 00223 (Apr. 12, 2019)

³² *The FCC's 5G FAST Plan,* Federal Communications Commission, https://www.fcc.gov/5G (last visited Sep. 15, 2020).

³³ See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by

consumers have evolved in ways that demand increasing amounts of bandwidth."³⁴ In its 2015 Report, the Commission again raised the broadband benchmark speed to 25 Mbps.³⁵ The Commission once again acknowledged that it is required to reassess "the existing speed benchmark to reflect advancements over time."³⁶ The evidence again supports the Commission taking this forward-looking approach in this year's Report.

III. THE COMMISSION'S CURRENT METHODOLOGY IS FLAWED AND OVERSTATES DEPLOYMENT

A. Form 477 Provides Inaccurate and Incomplete Information to Broadband Deployment and Should Not Be Used as the Only Data Collection Source for the 2021 Broadband Deployment Report

The Commission's NOI proposes to continue using FCC Form 477 deployment data for fixed services even though the Commission has repeatedly acknowledged its "well-known limitations."³⁷ The Commission itself has recognized that the data provided by Form 477 "likely overstates the coverage experienced by some consumers."³⁸ Despite its limitations, the FCC still plans to use Form 477 data to evaluate the deployment of fixed broadband services for the upcoming 2021 Report. Not only does the FCC seek comment on this proposal, it also seeks comment on "the extent to which such an overstatement may occur, the potential data sources to

the Broadband Data Improvement Act, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report, 25 FCC Rcd 9556, 9558 (2010).

³⁴ Id.

³⁵ See Inquiry Concerning the Deployment of Advanced telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN Docket No. 14-126, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Broadband Deployment, 30 FCC Rcd 1375, 1377 (2015).

³⁶ *Id*.

³⁷ NOI, *supra* note 2 at \P 16.

³⁸ Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, *2020 Broadband Deployment Report*, GN Docket No. 19-285, ¶ 26 (2020).

quantify such an estimate, and how that estimate should affect the conclusions [the FCC] draw[s] regarding the state of deployment."³⁹

The limitations and inaccuracies of Form 477 data led, in part, to Congress' adoption of the Broadband DATA Act and the FCC's Digital Opportunity Data Collection Order.⁴⁰ While we support and applaud these measures to improve data collection and provide more accurate information about our nation's telecommunication services, continuing to use the inaccurate data from Form 477 as the basis for the 2021 Report is problematic for various reasons. Moreover, the Commission cannot bestow confidence in the 2021 Report's findings when the underlying analysis is based on data proven to be inaccurate.

We understand that the more granular data promised by the Broadband DATA Act and the Digital Opportunity Collection Order is not available for the upcoming report. However, the FCC can and should look for resources to augment Form 477 in the interim. While the FCC has supplemented its data by analyzing Ookla consumer speed test data, it has yet to partner with other organizations that can provide useful supplemental data. Measurement Lab (M-Lab) is one such organization.⁴¹ As a consortium of research, industry, and public-interest partners, M-Lab focuses on providing verifiable Internet speed measurements.⁴² Rural advocates have found M-Lab's data helps paint a more accurate picture of the connectivity in their area as it shows

³⁹ NOI, *supra* note 2 at ¶ 17.

 ⁴⁰ S. Rep. No. 116-24, 2-3 (2019); Establishing the Digital Opportunity Data Collection, *Report and Order and Second Further Notice of Proposed Rulemaking*, 34 FCC Rcd 7505, ¶ 10 (2019)
 ⁴¹ Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 2019 Broadband Deployment Report, 34 FCC Rcd 3857, ¶ 30 (2019); Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 2019 Broadband Deployment Report, 34 FCC Rcd 3857, ¶ 30 (2019); Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 2020 Broadband Deployment Report, GN Docket No. 19-285, ¶ 32 (2020).

⁴² What is Measurement Lab, Measurement Lab, https://www.measurementlab.net/about/ (last visited Sep. 15, 2020).

"typical speeds experienced" as opposed to the FCC's measurement of "maximum speed available."⁴³ The FCC should partner with organizations like M-Lab to supplement and evaluate the inaccuracies of Form 477 data.

Overstatements of broadband availability and inaccurate data prevent both Congress and the FCC from enacting policies that ensure unserved areas get the necessary resources to achieve broadband access. Supplementing the Broadband Deployment Report with additional data sources can help correct this problem and is the only way the Commission can ensure that its report is accurate.

B. The Broadband Deployment Report Should Include More Granular Information, Such As Quality of Service, Pricing Information, and Demographics

The purpose of the Report is to review whether broadband is being deployed to *all* Americans in a *reasonable* and timely manner.⁴⁴ The FCC's current metric for analyzing this focuses exclusively on whether broadband is available at a location. This methodology fails to consider the *reasonable* aspect of broadband deployment which must consider affordability and reliability. And, it also overlooks the effects that digital redlining and systemic discrimination have on preventing access for *all* Americans. Without these additional metrics, the Broadband Deployment Report is meaningless. If the Commission really wants to evaluate broadband deployment, it needs to consider it within a greater context—deployment is only one aspect of the digital divide.

The Form 477 data collection is devoid of key metrics. These include broadband affordability and pricing data; and quality of service metrics including actual service speed data

⁴³ Brian Whitacre, *Broadband Speed: FCC Map Vs. Experience on the Ground*, Daily Yonder (July 25, 2018), https://dailyyonder.com/broadband-speed-fcc-map-vs-experience-ground/2018/07/25/.

⁴⁴ See 47 U.S.C § 1302.

instead of the maximum available; data caps, denials of service, network vulnerability, and resilience data. Further, the Commission has a duty to analyze how the digital divide impacts communities, which it can do by utilizing Census data on race, age, and disability, in its analysis. It should include these metrics when conducting a comprehensive review of broadband connectivity in America as they are important aspects of the digital divide. While the Commission currently collects little to no data to that end, it should expand its analysis to incorporate these metrics in its next Broadband Deployment Report.

Pricing information, including all below-the-line fees (such as equipment rental fees), is also critical to evaluating broadband availability given that cost is often cited as the main barrier to broadband adoption.⁴⁵ In 2019, the Pew Research Center found that 44 percent of households with incomes less than \$30,000 do not have at home broadband. This compares to 19 percent for households making between \$30,000 and \$99,999 and only 6 percent for households with incomes above \$100,000.⁴⁶ This cost problem is compounded as broadband speeds increase. BroadbandNow found that while internet speeds increased in 2019, so too did broadband prices. Overall, 62 percent of plans that were below \$60 per month increased to above \$60 per month between Q2 and Q3 of 2019.⁴⁷ Understanding how increased speeds can impact prices is necessary when evaluating the reasonableness of broadband deployment in America. If the FCC's goal is to increase speeds, especially with its focus on 5G, the current trend of increasing

⁴⁶ Monica Anderson & Madhhumitha 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/.

⁴⁵ Rani Molla, *More than 60 Million Urban Americans don't have Access to or can't Afford Broadband Internet*, Vox (June 20, 2017), https://www.vox.com/2017/6/20/15839626/disparity-between-urban-rural-internet-access-major-economies.

⁴⁷ Julia Tanberk, *The State of Broadband in America, Q3 2019*, BroadbandNow (Oct. 23, 2019), https://broadbandnow.com/research/q3-broadband-report-2019.

prices with speeds will result in a growing digital divide as households are priced out of affording access to broadband.

Broadband quality is a metric that ensures consumers have access to reliable broadband. Such a metric should include actual speed data, latency, data caps, denials of service, and network vulnerability and resilience. A GAO report found that "quality of service is a key component of access to broadband[.]"⁴⁸ Charlene Warner from Mondovi, Wisconsin, has found that her internet speed fluctuates so much that her "internet is comparable to speed, reliability, and service that you would find in Venezuela" despite living less than 12 miles south of a collect town of 66,000 and in a county with more than 100,000 people. Joseph Mulgrave, a 22-year old in Staunton, Virginia explains how a limited data plan "mak[es] it more difficult to do just about anything to help [his] fiancé and children."⁴⁹ When he's out of data his phone "just becomes a box."⁵⁰ Disruptions in service, latency issues, and actual speeds all serve as barriers to utilizing broadband service. The FCC's Broadband Report is incomplete without this information—after all broadband only matters if consumers are able to effectively put it to use.

Coupled with the Commission's deregulation of copper retirement and network transition rules,⁵¹ consumers across the nation are likely to see a downgrade in service as carriers retire

⁴⁹ Nicol Turner Lee, *Closing the digital and Economic Divides in Rural America*, Brookings (last accessed Sept. 18, 2020), https://www.brookings.edu/longform/closing-the-digital-and-economic-divides-in-rural-america/.

⁴⁸ GAO, Broadband Internet FCC's Data Overstate Access on Tribal Lands, 22 (2018) https://www.gao.gov/assets/700/694386.pdf.

⁵⁰ Id.

⁵¹ See Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No.17-84, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 32 FCC 11128, 11177 & n.425 (2017).

their legacy services,⁵² arguably rendering them unserved.⁵³ Deregulation has also affected network resiliency, another critical facet of broadband deployment. To better understand the resiliency of our nation's broadband network the FCC should track the length and breadth of outages. The FCC and GAO have also both recognized that in order to accurately understand broadband access, the Commission can and should include information about denials of service in its analysis, but it is not collected in Form 477.⁵⁴ Without incorporating these metrics into its methodology, the Commission will continue to receive an incomplete picture of broadband availability.

The FCC's Broadband Deployment Report already considers general demographic information, but it fails to evaluate the impact of deployment on underserved communities including the elderly and people with disabilities. In 2018, 27 percent of people over the age of 65 still do not use the internet, compared with fewer than 10 percent of adults under the age of 65.⁵⁵ This divide is also evident amongst adults living with disability—only 54 percent of adults living with disability use the internet, compared with 81 percent of adults without a disability.⁵⁶

⁵² See Report of the Minnesota Department of Commerce, In the Matter of a Commission Inquiry into the Service Quality, Customer Service, and Billing Practices of Frontier Communications, Docket No. P-407, 405/CI-18-122 (Jan. 4, 2019) (finding Frontier failed to maintain its copper network, leading to frequent and lengthy internet outages); see also Karl Bode, Wildfire Victims Don't Have Call Service Thanks to Greedy Telecoms, Vice (Oct. 29, 2019) https://www.vice.com/en_us/article/ywa4p5/wildfire-victims-dont-have-cell-service-thanks-togreedy-telecoms. (explain how the California wildfires have led to massive cellular outages). ⁵³ See Harold Feld, Making the Digital Transition and "Upgrade for All" Again, Public Knowledge (Aug. 26, 2019) https://www.publicknowledge.org/blog/making-the-digitaltransition-an-upgrade-for-all-again/.

 ⁵⁴ See GAO, Broadband Internet: FCC Overstates Broadband Access on Tribal Lands, 23-24.
 ⁵⁵ Monica Anderson, et al., *10% of Americans don't use the internet. Who are they?*, Pew

Research Ctr. (April 22, 2019), https://www.pewresearch.org/fact-tank/2019/04/22/some-americans-dont-use-the-internet-who-are-they/.

⁵⁶ Susannah Fox, *Americans Living with Disability and Their Technology Profile*, Pew Research Ctr. (Jan. 21, 2011), pewresearch.org/internet/2011/01/21/americans-living-with-disability-and-their-technology-profile/.

Not only are adults with disability less likely to have internet access, they are also less likely to have high-speed internet once they are able to get connected.⁵⁷

One of the FCC's greatest data collection failings is its profound lack of information on how Black, Latinx, and other people of color are affected by an ever-increasing digital divide. Even when studies account for factors like income, education, and employment, they still find that Blacks and Hispanics are behind the curve on broadband adoption.⁵⁸ Angela Siefer, Executive Director of the National Digital Inclusion Alliance, recently explained to NPR this is particularly important as the FCC works to roll out 5G—a technology that will only further the digital inequity unless the digital redlining of the past is actively addressed in the present.⁵⁹

To help give necessary demographic context to broadband access, the FCC should use census data to complement its Broadband Report. Without understanding broadband deployment's inequality problem, Congress and the FCC cannot tailor its policies to truly provide access to *all* Americans.

C. The FCC Should Continue to Exclude Satellite Services from Its Deployment Determinations Because Satellite Services Overstate Deployment

The Commission proposes to treat satellite service the same way it was treated in the 2020 Broadband Report by "providing deployment estimates for fixed terrestrial services in the report's tables and providing deployment estimates for all fixed services, including satellite, separately in an appendix."⁶⁰ As part of this proposal, the FCC seeks comment "on the treatment

⁵⁸ Dana Floberg, *The Racial Digital Divide Persists*, Free Press (Dec. 13, 2018),

https://www.freepress.net/our-response/expert-analysis/insights-opinions/racial-digital-divide-persists.

⁵⁹ See Paul Flahive, Who Gets 5G — And Who Gets Left Behind — Has Some Worried About Digital Inequality, NPR (Feb. 25, 2020), https://www.npr.org/2020/02/25/809012775/who-gets-5g-and-who-gets-left-behind-has-some-worried-about-digital-inequality.

⁶⁰ NOI, *supra* note 2 at \P 21.

⁵⁷ Id.

of satellite service generally."⁶¹ We recommend that the FCC continue to exclude satellite service from its overall deployment analysis and analyze it separately.

While satellite service has improved, the technology is still relatively nascent, has higher latency, is more susceptible to weather disruptions, and faces other performance issues that make it an inadequate substitute to other fixed broadband services like cable and fiber. The FCC itself has pointed out that, while satellite service appears available to nearly all of the population, only a small percentage of the population subscribes to such service.⁶² The Commission explains this phenomenon by stating that "[w]hile satellite signal coverage may enable operators to offer services to wide swaths of the country, overall satellite capacity may limit the number of consumers that can actually subscribe to satellite service at any one time.³⁶³ As a result, including satellite services in measuring broadband availability would significantly overstate deployment and understate the actual scope of the digital divide. Thus, the FCC should continue excluding such data from its deployment determinations and analyze satellite coverage separately.

D. The Commission Should Update Its Methodology of Comparing Broadband Speeds

In the NOI, the Commission proposes to maintain the evaluative framework it used in the 2020 Broadband Deployment Report by continuing to rely on a five-year time period in its analysis.⁶⁴ Although we agree that continuing to track speeds that fall below today's broadband standard has some value for historic comparison, we urge the Commission to avoid using the

⁶¹ *Id*.

⁶² Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, *2020 Broadband Deployment Report*, GN Docket No. 19-285, ¶ 30 (2020) [hereinafter 2020 Broadband Report].

⁶³ *Id.* at n. 99. *See also* NOI, *supra* note 2 at \P 21.

⁶⁴ NOI, *supra* note 2 at \P 9.

10/1 Mbps metric to make any determinations about broadband deployment and evaluate coverage based on the number of people that do not have access.

Making determinations about the availability of broadband based on outdated metrics is misleading and overstates the availability of broadband deployments capable of handling current technological applications. The 2020 Broadband Deployment Report detailed the figures for five speed metrics for fixed services—specifically 10/1 Mbps, 25/3 Mbps, 50/5 Mbps, 100/10 Mbps, and 250/25 Mbps.⁶⁵ The FCC has already determined that 10/1 Mbps service no longer meets the definition of advanced telecommunications.⁶⁶ If 10/1 Mbps does not count as broadband today, the Commission should not count any increase of 10/1 Mbps service as an improvement in broadband coverage. The 706 provision requires the FCC to evaluate whether advanced telecommunications capability is currently deployed to all Americans, thus the Commission should not compare the current state of deployment with metrics that no longer meet the definition of advanced telecommunications.

Moreover, the FCC should evaluate broadband deployment based on the number of people that lack access as opposed to simply reviewing broadband deployment over a 5-year period. Deployment numbers will increase each year simply based on the growing population size. Thus, measuring an increase in the number of people with access will not provide a genuine picture of whether *all* Americans have access to broadband.

E. The FCC Should Adopt a Process that Would Allow Consumers to Challenge the Accuracy of the 2021 Broadband Deployment Report

The Commission seeks comment on "establish[ing] a challenge process for coverage data."⁶⁷ The Broadband DATA Act requires the FCC to establish rules by September 21, 2020

⁶⁵ 2020 Broadband Report, *supra* note 62 at ¶ 29.

⁶⁶ *Id.* at ¶ 13.

⁶⁷ NOI, *supra* note 2 at \P 19.

that will improve the FCC's data collection, including adopting processes for challenging and verifying the coverage maps and submitted data.⁶⁸ We believe that the FCC should create a user-friendly process through which consumers, governmental organizations, and other entities can challenge the accuracy of the Broadband Deployment Report.

The FCC has already admitted it plans to use Form 477 data to complete the 2021 Broadband Deployment Report.⁶⁹ Offering a challenge process is necessary to ensure that policy makers and other decision-making entities can have access to the most accurate data available. This is not possible unless there are opportunities to verify and challenge the data presented within the Report. Moreover, the FCC should ensure that the process of verifying the Broadband Deployment Report is user-friendly. As Commissioner Rosenworcel pointed out, "there are people across the country who want to help and are willing to participate. As we go forward, we need to make it simple for them as well as our state, local, and Tribal partners to do so."⁷⁰ Creating a challenge process to verify the FCC's deployment data is essential to ensuring that the 2021 Broadband Deployment Report accurately represents the state of broadband in America.

IV. MOBILE BROADBAND SERVICE IS NOT A SIMILAR FUNCTIONALITY OR SUBSTITUTE TO FIXED BROADBAND

The Commission seeks comment on whether it should modify its previous conclusion regarding the extent to which mobile and fixed broadband services are substitutes for each other.⁷¹ Since the publication of the 2020 Broadband Deployment Report, mobile broadband technology has not changed enough for the Commission to now find fixed and mobile broadband

⁶⁸ Id.

⁶⁹ NOI, *supra* note 2 at ¶16; *See also* Section III(A) of these comments.

 ⁷⁰ Statement of Commissioner Jessica Rosenworcel, *Re: Establishing the Digital Opportunity Data Collection, WC Docket No. 19-195; Modernizing the FCC Form 477 Data Program, WC Docket No. 11-10* (July 17, 2020), https://docs.fcc.gov/public/attachments/FCC-20-94A5.pdf.
 ⁷¹ See NOI, supra note 2 at 4
 ⁷¹ 10.

services are equivalent substitutes. Instead, the pandemic highlights that mobile broadband does not have the same functionality as fixed broadband. The Commission should continue measuring fixed and mobile broadband connections separately, as complementary products.

A. Mobile Broadband is a Distinct Service from Fixed Broadband

Technological characteristics, combined with consumer expectations, make fixed and mobile services distinct, complementary products. For example, mobile broadband services typically come with data caps where the mobile network operator places a limit on the amount of data a customer can use over their internet connection.⁷² Once a customer reaches that limit, the mobile carrier engages in certain actions such as slowing down data speeds or charging fees for data overages. Data caps make it difficult for consumers to continuously engage in data-intensive activities like video streaming necessary for virtual learning or work, or downloading files using a mobile connection. On fixed connections, large amounts of data usage are generally permitted, and speeds are typically not throttled for heavy usage. Other key differences between fixed and mobile broadband include pricing models, speed variability, and service reliability.⁷³ These characteristics demonstrate that fixed and mobile broadband serve different needs, and surveys of consumer attitudes generally show the same result. Users typically see fixed and mobile as complementary ways to get online and have clear views about which service is suited to which particular task. For example, 63 percent of respondents to one survey reported themselves as "not likely at all" to cancel home broadband and go mobile-only.⁷⁴

⁷² See Data Caps, Public Knowledge, https://www.publicknowledge.org/issues/data-caps (last visited Sep. 15, 2020).

⁷³ See Karl Bode, Unlimited Wireless No Threat to Fixed ISPs (Yet), Analyst Says, DSLReports (Apr. 17, 2017), http://www.dslreports.com/shownews/Unlimited-Wireless-No-Threat-to-Fixed-ISPs-Yet-Analyst-%20Says-139362 (stating mobile broadband "typically offers lower speeds and weaker reliability than its wireline counterparts").

⁷⁴ See John B. Horrigan, Smartphones and Broadband: Tech users see them as complements and very few would give up their home broadband subscription in favor of their smartphone, at 8

Moreover, most mobile traffic is offloaded onto Wi-Fi, which then connects to the fixed network. According to Cisco, in 2017, 54 percent of total mobile data traffic was offloaded onto the fixed network through Wi-Fi or femtocell.⁷⁵ Therefore, when consumers are using their mobile devices, they may not realize that they are still relying on a fixed broadband network rather than a mobile network. In other words, they are using two distinct services.

Lumping fixed and mobile broadband technologies together for the purposes of measuring broadband deployment would distort the marketplace and likely paint too rosy a picture of the state of broadband availability and deployment. For example, if the Commission determines a consumer has access to two broadband providers (one mobile and one fixed), it may assume the consumer has multiple options for broadband access. In reality, the consumer only has access to one fixed provider and one mobile provider. This type of analysis could prevent the FCC or Congress from enacting policies that ensure robust broadband access for both fixed and mobile services.

B. Millions of Consumers Rely Solely on Mobile Broadband Because it is More Affordable, Not Because it is as Reliable

Continuing to classify mobile and fixed broadband as separate services is increasingly important as studies indicate a majority of Americans rely on both fixed and mobile broadband for service. Those who use only mobile services are disproportionately low-income Americans.⁷⁶ In other words, people with low-income are not choosing to be mobile only because they see it as an equivalent to fixed, but instead, because they do not have a choice given their cost constraints.

(2014),

https://www.publicknowledge.org/assets/uploads/blog/Smartphones_and_Broadband.pdf. ⁷⁵ Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2017–2022* (2019), https://s3.amazonaws.com/media.mediapost.com/uploads/CiscoForecast.pdf ⁷⁶ *Internet/Broadband Fact Sheet*, Pew Research Center (June 12, 2019) https://www.pewresearch.org/internet/fact-sheet/internet-broadband/.

Classifying these services as substitutes would overlook the reason why so many Americans are using mobile instead of fixed: because mobile is often the only affordable choice.

According to the Pew Research Center's June 2019 Report, there is a major hole in America's ability to provide affordable high speed broadband, evidenced by the fact that 26 percent of adults in lower income households rely on their smartphones instead of home broadband.⁷⁷ This reliance does not mean that mobile is a substitute for fixed. Instead, the strong correlation between income and dependence on mobile broadband demonstrates that it is the only option for consumers forced to make a choice. Moreover, according to a report by New York City's Comptroller Scott Stringer, "Internet disparities track closely to socioeconomic factors like poverty and are most apparent in traditionally marginalized communities. 44 percent of New Yorkers in poverty lack broadband internet access, as opposed to 22 percent above the poverty line."⁷⁸

C. 5G Mobile Wireless Service is a Distinct Service from Fixed Broadband

As the Commission examines new and emerging technologies when measuring broadband deployment, it should not consider the next generation of mobile wireless service – 5G – as a substitute for fixed broadband. First, it is important to note that 5G networks are still years away from being deployed as fully-realized commercial services.⁷⁹ Classifying 5G service

⁷⁸ Office of the New York City Comptroller Scott M. Stringer, Census and the City: Overcoming NYC's Digital Divide in the 2020 Census (2019) https://comptroller.nyc.gov/wp-content/uploads/documents/Census_and_The_City_Overcoming_NYC_Digital_Divide_Census.pdf.

⁷⁷ See 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//; see also Bruce Kushnick, I Can't Do My Homework On This Smartphone, Medium (Oct. 10, 2019), https://medium.com/@kushnickbruce/i-cant-do-my-homework-on-this-smartphone-185891bac24d.

⁷⁹ Dexter Johnson, *5G Poised for Commercial Rollout by 2020*, IEEE Spectrum (May 2, 2018). https://spectrum.ieee.org/tech-talk/telecom/wireless/5g-is-meeting-its-targets-for-2020-commercial-rollout.

as a substitute to fixed broadband in anticipation of 5G would assume that 5G service is an established technology in the market. In reality, 5G service is not yet a competitor to fixed broadband.

Second, while 5G networks promise to offer faster speeds, lower latency, and greater capacity, in some cases they will only be a minor improvement to 4G LTE services.⁸⁰ According to statistics from Opensignal, current average 5G download speeds in the U.S. are only a modest uptick from average 4G LTE speeds.⁸¹ Small improvements to download speeds do not address problems with the reliability of connection, the persistence of available speed, or other features that distinguish mobile from fixed broadband. These critical differences are likely to persist, and until they disappear, the Commission should measure 5G as another mobile wireless service, distinct from fixed broadband.

Finally, the term "5G" has evolved into a blanket term for different products over time and potentially even different deployment plans. For example, Verizon's 5G deployments have primarily relied on its millimeter wave high-band spectrum, while Sprint mainly depends on its mid-band spectrum, and AT&T and T-Mobile on their low-band spectrum.⁸² It is also unclear what percentage of the new capacity carriers will allocate to network segments dedicated to nonconsumer uses such as connected cars or other IoT dedicated networks. The various deployment plans mean 5G will have a broad range of functionalities across multiple spectrum bands, giving

⁸⁰ See Dave Burstein, 5G NR Only 25% to 50% Faster, Not Truly a New Generation, Wireless One (Apr. 29, 2018), http://wirelessone.news/10-r/1036-5g-nr-only-25-to-50-faster-not-truly-a-new-generation.

 ⁸¹ Ian Fogg, *Benchmarking the Global 5G User Experience*, OpenSignal (Aug. 26, 2020), https://www.opensignal.com/2020/08/26/benchmarking-the-global-5g-user-experience.
 ⁸² See Francesco Rizzato & Ian Fogg, *How AT&T Sprint, T-Mobile and Verizon differ in their early 5G approach*, Opensignal (Feb. 20, 2020), https://www.opensignal.com/2020/02/20/how-att-sprint-t-mobile-and-verizon-differ-in-their-early-5g-approach.

consumers varying degrees of service. These uncertainties add more credence that the Commission should not give blanket treatment to anything labelled "5G," as being a substitute for fixed broadband, whether fixed or mobile, or whether millimeter wave or other frequency.⁸³

D. COVID-19 Demonstrates That Mobile Broadband Does Not Have the Same Functionality as Fixed Broadband

The pandemic has shone a light on the glaring differences between a fixed and mobile broadband connection. With a significant amount of the nation working, learning, and meeting daily needs while staying at home, a mobile connection alone simply is not sufficient. Workers with a mobile-only connection face significant limitations working from home, particularly when it comes to high bandwidth applications such as video conferencing. Students without fixed broadband have been forced to rely on parking lot Wi-Fi to keep up with their school work while teachers have had to attach selfie-sticks to their smartphones to virtually teach their students.⁸⁴ Many states have only recently begun to create mobile-friendly applications for applying to government assistance programs.⁸⁵ These limitations highlight the many barriers individuals with a mobile-only connection are facing during the pandemic.

⁸⁴ Cecilia King, *Parking Lots Have Become a Digital Lifeline*, N.Y. Times (May 20, 2020), https://www.nytimes.com/2020/05/05/technology/parking-lots-wifi-coronavirus.html.

https://www.abcactionnews.com/news/local-news/i-team-investigates/new-mobile-friendlyunemployment-website-wont-help-the-thousands-who-already-applied; *There's an app for that: Marylanders can file for unemployment in app*, WBALTV (July 22, 2020), https://www.wbaltv.com/article/maryland-department-of-labor-new-app-unemployment-

⁸³ The one exception, obviously, is where "5G" spectrum is used to deploy fixed mobile services. *See, e.g.,* Dan Jones, *Verizon Fixed 5G, A Cable Competitor is Coming!*, Light Reading (May 25, 2018), https://www.lightreading.com/mobile/5g/verizons-fixed-5g-a-cable-alternative-is-coming!/d/d-id/743405. In such cases, the Commission should follow it's usual practice of considering fixed wireless broadband service as a competitor to wireline.

⁸⁵ See, e.g., Kylie McGivern, New mobile-friendly unemployment website won't help the thousands who already applied, ABC Action News (April 13, 2020),

https://www.wbaltv.com/article/maryland-department-of-labor-new-app-unemploymentclaims/33395086.

The stories below submitted by Americans across the country show the challenges many are facing with just a mobile connection:

- "For 12 years companies have said they will bring broadband to this area. Electric coops in the surrounding areas are bringing broadband to their customers. My landline company keeps sending advertisements for their Internet service, but they don't serve this area... My cell phone data and hotspot service goes in and out when I participate in online training, meetings, and webinars." - Trudy Berry (Green Bay, Virginia)
- "I am [a] 40 year old single mother of two boys in grade school. We [purchase an additional mobile line]... to be able to use a hot spot for email... [After 'binge watching tv'] we received a letter from AT&T saying we had used all of the data we purchased and then some, and we were just starting the billing cycle, furthermore we were about to be suspended for our excess. Surprise!" Elizabeth Janson (Harborside, Maine)
- "My internet is comparable to speed, reliability and service that you would find in Venezuela! One day I have slow internet and the next day I don't. Using a cell phone 'hot spot' is not an option as the cell service where I live does not function well either. I live just 12 miles South of a college town of 66,000 in a county with well over 100,000 people." Charlene Warner (Mondovi, Wisconsin)

VI. THE COMMISSION SHOULD CONTINUE TO INCLUDE TRIBAL DEPLOYMENT MEASURES

The Commission seeks comment on "whether deployment in Tribal areas still lags compared to deployment in non-Tribal areas," and any "barriers to deployment on Tribal lands."⁸⁶ Broadband access in Tribal lands still lags behind deployment in non-Tribal lands. Yet, without more granular data about service coverage, affordability, and quality, the extent of this disparity is difficult to measure. In addition, improving the quantity of spectrum available and collaborating with Tribal governments would reduce barriers to Tribal deployment.

⁸⁶ NOI, *supra* note 2 at **P** 14-15.

A. More Granular Data on Quality of Service and Price Will Benefit Tribal Residents

A GAO 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."⁸⁷ In addition, the GAO has also found that broadband prices are often prohibitively expensive on tribal lands, and more costly than elsewhere.⁸⁸ The median household income for American Indians is just \$40,315—over \$17,000 less than the national median.⁸⁹ Still, according to the report, broadband service can cost one and a half times as much as comparable service in urban areas.⁹⁰ Combined, this makes it difficult for tribal households to afford service, even if it is available. Thus, we echo our recommendations in Section III(B). Collecting data about the quality of service and price will also improve tribal connectivity. The Commission should specifically analyze this data both for the nation as a whole, and for tribal lands to understand the extent of the problem on tribal lands.

B. Incorporating Tribal Input Would Improve Broadband Mapping on Tribal Lands

The Commission seeks comment on alternative sources of information about deployment on Tribal lands.⁹¹ As with non-Tribal areas, Form 477 data overstates availability on Tribal lands.⁹² The lack of accurate, granular data about existing infrastructure hinders deployment on Tribal lands by making areas deemed "served" ineligible for federal funding. The Commission is still developing a process for soliciting input from Tribal leaders, which is crucial to supporting

⁸⁷ Government Accountability Office, *Broadband Internet FCC's Data Overstate Access on Tribal Lands*, 22 (2018) https://www.gao.gov/assets/700/694386.pdf

⁸⁸ *Id.* at 20-21.

⁸⁹ Id.

⁹⁰ Id.

⁹¹ NOI, *supra* note 2 at \P 28.

⁹² See generally Government Accountability Office, *Broadband Internet: FCC's Data Overstate* Access on Tribal Lands, 22 (2018) https://www.gao.gov/assets/700/694386.pdf.

broadband deployment on Tribal lands.⁹³ We urge the Commission to complete this process and incorporate the findings into the 2021 Broadband Deployment Report so that the Commission and other policymakers can better support Tribal Nations as they connect their communities. Tribes know their lands best.

C. Increasing Spectrum Availability for Tribal Applicants Can Improve Deployment in Hard to Reach Areas

The Commission rightfully notes that broadband is not being deployed on Tribal lands to the same extent as in non-Tribal lands.⁹⁴ Further, the Commission identifies that "the remote, isolated nature of these lands combined with challenging terrain and lower incomes increase the cost of network deployment and entry, thereby reducing the profitability of providing service."⁹⁵ Several practical solutions exist that could reduce barriers to tribal deployment and ensure that all corners of the United States are connected. The first is to increase Tribal access to spectrum by helping tribes secure spectrum. The second is targeting outreach to Tribal governments to address future challenges as they arise.

Tribal Nations often struggle to obtain spectrum because they do not have the capital available to submit bid applications to participate in the auction process.⁹⁶ Moreover, Tribal lands may not be used as collateral to secure commercial loans, creating a significant barrier considering the cost of winning a spectrum license at auction can be millions of dollars.⁹⁷

⁹⁶ See GAO Report on Tribal Access to Spectrum: Promoting Communications Services in Indian Country: Hearing Before the S. Comm. on Indian Affairs, 116th Cong., (2019) (statement of Andrew Von Ah, Director, Government Accountability Office),

⁹³ NOI, *supra* note 2 at \P 19.

⁹⁴ *Id.* at \P 14-15.

⁹⁵ *Id.* at \P 14.

https://www.gao.gov/assets/710/701483.pdf, (identifying high costs at auctions as a barrier to Tribal spectrum access).

To solve this problem, the Commission should consider granting tribes autonomy of spectrum licenses over their lands, as has been proposed in the DIGITAL Reservations Act.⁹⁸ To do this, the Commission should cease selling spectrum over tribal lands to for-profit corporations without tribal consultation, and instead grant that spectrum to native nations. We believe this action is warranted given that tribal connectivity lags behind even other rural areas.⁹⁹

Should the Commission opt for a more piecemeal approach, opening Tribal priority windows when spectrum becomes available may also improve Tribal Nations' ability to obtain spectrum. Although the FCC's Rural Tribal Priority Window allowed some tribes to access free spectrum, many Tribal Nations were unable to apply because they did not know about the opportunity, or did not have the resources to apply.¹⁰⁰ The COVID-19 pandemic made it particularly challenging for tribes to apply on time. Many application workshops and other forms of in-person outreach intended to help tribes that are unfamiliar with the FCC and its process were canceled.¹⁰¹ In addition, stay-at-home orders delayed tribal decision making, because many tribal leaders and employees were working from home, and did not have internet access.¹⁰² Finally, Tribes simply had other matters to deal with—matters of life and death. According to the

⁹⁸ Deploying the Internet by Guaranteeing Indian Tribes Autonomy over Licensing on Reservations Act of 2020, H.R. 7774, 116th Cong.

 $https://haaland.house.gov/files/wysiwyg_uploaded/Bill_DIGITALReservations_07272020.pdf.$

⁹⁹ See generally Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018, 15-16 (2019), https://docs.fcc.gov/public/attachments/DOC-357269A1.pdf.

¹⁰⁰ See generally Letter from AMERIND Critical Infrastructure, National Congress of American Indians, Southern California Tribal Chairmen's Association, Native Public Media, Public Knowledge, WTB 18-120 (filed Aug. 3, 2020),

https://www.fcc.gov/ecfs/filing/10803252651981.

¹⁰¹ Public Knowledge, et al., Re: Extending the 2.5 GHz Priority Window for Indian Tribes (July 7, 2020). https://www.publicknowledge.org/documents/group-letter-to-congress-on-extending-2-5-ghz-priority-window-for-indian-tribes/.

 $^{^{102}}$ *Id*.

CDC, "American Indian and Alaska Native people have suffered a disproportionate burden of COVID-19 illness during the pandemic."¹⁰³ Thus, many tribes still need spectrum, but are unable to afford to buy it.

In addition to opening new Tribal Priority Windows, substantive reforms to the bidding process and other means of securing spectrum like those considered in the FCC's Spectrum over Tribal Lands Notice of Proposed Rulemaking in 2011 should be undertaken to quickly address this need.¹⁰⁴ In that proceeding, the Commission explored policy options that could be used to promote greater mobile deployment on Tribal lands. In response to that inquiry, a number of commenters offered support for proposals that would promote access to spectrum for Tribal entities. For example, the National Congress of American Indians (NCAI) adopted a resolution urging the Commission to improve access to spectrum by establishing a structure for secondary market negotiations between spectrum licensees and Tribal nations.¹⁰⁵ Those proposals included better access to spectrum over Tribal lands through reforms to rules governing the secondary market proposal and a "build or divest" proposal, which would require mobile providers that have satisfied the applicable construction requirements for the license but left the Tribal land areas unserved or underserved to indicate whether it would agree (a) to extend coverage to the

¹⁰³ Press Release, Centers for Disease Control, CDC Data Shows Disproportionate Covid-19 Impact in American Indian/Alaskan Native Population (Aug. 19, 2020),

https://www.cdc.gov/media/releases/2020/p0819-covid-19-impact-american-indian-alaskanative.html#:~:text=%E2%80%9CAmerican%20Indian%20and%20Alaska%20Native,19%20res ources%20across%20tribal%20communities.%E2%80%9D.

¹⁰⁴ Improving Communications Services for Native Nations by Promoting Greater Utilization of Spectrum over Tribal Lands, Notice of Proposed Rulemaking, WT Docket No. 11-40, 26 FCC Rcd 2623 (2011).

¹⁰⁵ Urging the Federal Communications Commission to Improve Access to Spectrum Licenses for Tribal Nations, National Congress of American Indians (2015),

http://www.ncai.org/resources/resolutions/urging-the-federal-communications-commission-to-improve-access-to-spectrum-licenses-for-tribal-nations.

Tribal land(s), or (b) relinquish its authorization for the unserved or underserved Tribal land within the geographic area of its license. Unfortunately, the proposals put forward in the Spectrum over Tribal Lands NPRM did not result in changes in Commission policy. We urge the Commission to revisit this proceeding and consider the proposals as viable ways to promote mobile broadband availability on Tribal lands.

For any proceedings involving Commission efforts to close the digital divide on Tribal lands, empowering the FCC's Office of Native Affairs and Policy ("ONAP") to conduct additional outreach and to take the lead on proceedings may help further these efforts.¹⁰⁶ Through targeted outreach by ONAP, the Commission can identify and implement other innovative solutions tailored to Tribal governments' needs. As an outgrowth of the ONAP outreach, the Commission should have ONAP lead on proceedings that are seeking to address tribal communications needs and have the bureaus play a consultative role to ONAP, instead of having tribal communities left to rely on the various bureaus to lead rulemaking initiatives on tribal issues, for whom tribes unfortunately are often an afterthought.

VII. THE COVID-19 PANDEMIC HAS EXPOSED THE DIGITAL DIVIDE AND THE COMMISSION'S POLICIES MUST MEET THE ENORMITY OF THE MOMENT

The Commission seeks comment on the impact that COVID-19 will have on broadband deployment and adoption. Further, the Commission asks how COVID-19 affects deployment to schools and classrooms, as well as Tribal lands. Finally, the Commission seeks comment on how to account for COVID-related impacts in future reports.¹⁰⁷ The need for expansive deployment and improved adoption has only increased as COVID-19 forced students, employees, and

¹⁰⁶ See Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018, 15-16 (2019), https://docs.fcc.gov/public/attachments/DOC-357269A1.pdf.

¹⁰⁷ NOI, *supra* note 2 at **[** 29.

patients online. More than ever before, there is a persistent need for reliable, high-speed home internet, which requires the Commission to make funding more widely available and, importantly, address the affordability gap that continues to keep low-income, rural, and other marginalized populations offline.

A. COVID-19 Highlights the Importance of Broadband and Shows Why Data Must be Accurate

Ensuring that all corners of the United States have access to reliable, high-speed broadband is rightfully the Commission's top priority.¹⁰⁸ Still, millions of Americans still do not have access to either minimum broadband speeds or reliable service, which has become particularly detrimental over the last several months as work, school, and healthcare have migrated online.¹⁰⁹ Meanwhile, in-person services have indefinitely become limited, and internet outages and unreliable connections are causing serious disruptions in daily life.¹¹⁰

With these changes, accurate information about broadband service offerings is even more critical. Residents need reliable access in order to work from home, comply with remote learning mandates, connect with loved ones, and obtain health care. Likewise, community leaders need to be able to identify for whom those opportunities are denied before developing strategies to expand broadband access and increase adoption.

¹⁰⁸ See id. at **[** 1-2.

¹⁰⁹ See Emmanuel Martinez, *How Many Americans Lack High-Speed Internet?*, The Markup (Mar. 26, 2020), https://themarkup.org/ask-the-markup/2020/03/26/how-many-americans-lack-high-speed-internet.

¹¹⁰ See generally Monica Anderson & Emily A. Vogels, *Americans Turn to Technology During COVID-19 Outbreak, say an Outage Would be a Problem,* Pew Research Center (Mar. 31, 2020), https://www.pewresearch.org/fact-tank/2020/03/31/americans-turn-to-technology-during-covid-19-outbreak-say-an-outage-would-be-a-problem/.

For example, schools seek to ensure their students are connected, but finding and reaching students without internet access remains a major hurdle in getting them online.¹¹¹ Without accurate, granular information about broadband availability, the injustices that result from some people entirely lacking access to education, work, and government proceedings will persist long after the pandemic.

B. The Pandemic Has Exposed the Urgent Need to Increase Broadband Adoption Rates

The Commission's inquiry into whether adoption will increase as the needs COVID-19 creates for reliable home internet increases misses a key aspect of digital inequity—affordability. Even before the pandemic hit, broadband access was crucial to participate in society fully. For most people whose home is considered "served" because infrastructure serves their census block, the problem is not whether connectivity is technically feasible, but whether they can afford their internet bill at the end of the month.

Just as COVID-19 has increased the need for reliable broadband access, it has also cost millions of Americans their jobs, their homes, and their disposable incomes.¹¹² For these consumers, the potential result is the inability to pay for broadband service. As was the case before the digital divide, people of color are the most likely to be impacted. According to a recent survey from Morning Consult, 30 percent of Black, Hispanic and other non-white adults earning less than \$50,000 a year have missed at least one payment on their internet bill since the

 ¹¹¹ Kim Hart, Schools Confront Broadband Access Crisis, Axios (July 9, 2020),
 https://www.axios.com/school-broadband-crisis-500dd146-a1cf-4cde-b2af-2b9b2de2f81a.html.
 ¹¹² See A 'Homeless Pandemic' Looms as 30 Million Risk Eviction, NPR (Aug. 10, 2020),
 https://www.npr.org/2020/08/10/900766719/millions-of-americans-are-in-danger-of-being-evicted-during-pandemic.

pandemic began.¹¹³ Additionally, almost half of lower-income people of color are worried about paying for their home broadband connections moving forward.¹¹⁴

Although many internet service providers have offered discounts during the pandemic,¹¹⁵ paying for service once promotional pricing expires is an ongoing challenge for households living on the margins. While promotional prices may be vital to getting some people connected, price spikes at the expiration of promotions could force some people to cancel their service simply because they cannot afford the cost increase.

C. Homes are the New Classrooms, But Commission Policy is Keeping Millions of students and Educators Disconnected

Overnight in March 2020, classes shifted online, leaving the millions of students who lack home internet access without the opportunity to connect with peers, teachers, and access online educational tools. The "homework gap" has since become a "learning gap." During the pandemic, 15 percent of students don't have any access to the classroom.¹¹⁶

Before COVID-19, some students completed coursework using public Wi-Fi, such as at libraries and restaurants, but the pandemic drastically reduced those opportunities because of

stay at home and social distancing orders.¹¹⁷ Educators experienced similar disparities: some,

stay at nome and social distancing orders. Educators experienced similar dispartices, some,

¹¹³ Sam Sabin, Among Lower Earners, People of Color are More Likely Than Whites to Worry About Paying Internet, Phone Bills, Morning Consult (June 30, 2020),

https://morningconsult.com/2020/06/30/internet-service-providers-pandemic-low-income-billing-poll/.

¹¹⁴ *Id*.

¹¹⁵ Brianne Sandorff, *Companies Offering Aid During COVID-19*, Reviews.org (Apr. 20, 2020) https://www.reviews.org/internet-service/companies-offering-aid-during-covid-19/.

¹¹⁶ See Brooke Auxier & Monica Anderson, Schools Close due to the Coronavirus, Some U.S. Students Face a Digital 'Homework Gap', Pew Research Center, (Mar. 16, 2020),

https://www.pewresearch.org/fact-tank/2020/03/16/as-schools-close-due-to-the-coronavirus-some-u-s-students-face-a-digital-homework-gap/.

¹¹⁷ Amanda Litvinov, *Coronavirus Brings 'Homework Gap' to the Forefront*, National Education Association (May 4, 2020), https://www.nea.org/advocating-for-change/new-from-nea/coronavirus-brings-homework-gap-forefront ("*Coronavirus Brings 'Homework Gap' to the Forefront*").

unable to teach from their homes, parked alongside students in parking lots because they lack home broadband access.¹¹⁸ As school districts considered whether to return to in-person classes for the fall semester, the broadband access of their students was a concern for many. Districts with the least broadband access had the fewest opportunities to educate their students without risking their health.

Distance learning opens the door for the Commission to update its E-Rate policies to embrace this new reality. School districts with students who need resources the most are still scrambling to secure the requisite tools for their online curriculum. Many schools want to use E-Rate funds to provide wi-fi on school buses parked in the community, or provide students with wi-fi hotspots and devices but Commission policy does not allow these funds to support connectivity outside of the literal classroom.¹¹⁹ Schools who want to offer these solutions are forced to find alternative sources of funding, or else jeopardize their E-Rate funding. Even if the Commission did allow schools to use this funding to provide connectivity in the new classroom, these solutions are only temporary. Wi-fi hotspots may not provide the capacity needed to participate in video-based meetings, particularly in rural areas—making them far better than nothing, but insufficient for a household's long-term needs.¹²⁰ Additionally, school districts may lack the funding necessary to offer all students who need home internet access a wireless

¹¹⁸ Id.; see also Madeline Will, Teachers Without Internet Work in Parking Lots, Empty School Buildings During COVID-19, Education Week (Apr. 29, 2020),

https://www.edweek.org/ew/articles/2020/04/29/teachers-without-internet-work-in-parking-lots.html.

¹¹⁹ *Keeping K-12 Students Online and Learning -- There's a Plan for That,* Benton Institute for Broadband and Society (Apr 17, 2020), https://www.benton.org/blog/keeping-k12-students-online-and-learning-theres-plan.

¹²⁰ Litvinov, *supra* note 117.

hotspot.¹²¹ By analyzing the learning gap in its Broadband Deployment Report, the Commission can better understand emergent needs for distance learning and target E-Rate funds toward workable solutions.

D. The FCC Should Reinstate and Expand the Keep Americans Connected Pledge

The Commission seeks comment on the ongoing effects of its efforts to spur broadband deployment, any additional efforts it might undertake, and whether the Commission has effectively increased deployment by targeting universal service funding to unserved areas.¹²² The Commission can resume and expand its COVID-specific policies to decrease the risk of high costs and disconnected services.

At the outset of the pandemic, the FCC announced COVID-specific policy changes. Specifically, it encouraged providers to sign the Keep Americans Connected Pledge. The Pledge laid out a good set of principles including a promise not to shut off service to those who can't pay.¹²³ Still, it did not include a prohibition on data caps and overage fees, leaving people who primarily access broadband through their phones without essential tools for connecting with employers, educators, and healthcare providers.¹²⁴ Further, providers were not required to participate in the Pledge, and the Commission lacked mechanisms to enforce the voluntary commitment. Indeed, the FCC received over 500 consumer complaints about broadband

¹²¹ Tara Nicola, Alexis Gable & Jennifer Ash, The Response of Rural Districts to the COVID-19 Pandemic, National Center for Rural Education Research Networks (2020), https://cepr.harvard.edu/files/cepr/files/ncrern_report.pdf.

¹²² NOI at **]** 29.

 ¹²³ See Keep Americans Connected, Federal Communications Commission (July 8, 2020), https://www.fcc.gov/keep-americans-connected.
 ¹²⁴ Id.

providers failing to uphold the Pledge.¹²⁵ There has been little as to whether these complaints were resolved. Finally, the commitment period for the Pledge ended in May 2020, even though people across the country are still working and learning remotely to this day. 800 providers originally participated, with some committing to long-term solutions, but most limited their support to a month or two.¹²⁶

Just as the FCC identified in March, suspending service terminations, waiving late fees, and opening Wi-Fi hotspots to the public remain important steps that providers can take to offset COVID-related circumstances. By reinstating and expanding the Pledge, the Commission can encourage provider practices that keep people connected.

E. The Commission Should Increase the Lifeline Subsidy

Similarly, the Commission should increase the Lifeline subsidy for consumers in need during the pandemic pursuant to its role managing the Universal Service Fund. The Commission has used that authority to increase the Lifeline subsidy during previous disasters. For example, after Hurricane Katrina, the FCC provided households eligible for individual housing assistance under FEMA with "support for a free wireless handset and a package of at least 300 minutes of use, not to exceed \$130 per household."¹²⁷ The Commission wrote that this support was "necessary" to assist with recovery efforts and "consistent with Section 254 of the Act, and the provision of universal service generally, for they will help ensure that needed

¹²⁶ See id.; Companies Have Gone Above and Beyond the Call to Keep Americans Connected During Pandemic, https://www.fcc.gov/companies-have-gone-above-and-beyond-call-keep-americans-connected-during-pandemic (last visited Sept. 18, 2020).

¹²⁵ Makena Kelly, *The FCC has received hundreds of complaints about carriers' coronavirus pledge*, The Verge (May 19, 2020), https://www.theverge.com/2020/5/19/21263843/fcc-ajit-pai-coronavirus-pandemic-keep-americans-connected-verizon-att-comcast.

¹²⁷ FCC, Order, CC Docket No. 96-45, CC Docket No. 02-6, WC Docket No. 02-60, WC Docket No. 03-109, 7 (adopted Oct. 14, 2005), https://docs.fcc.gov/public/attachments/FCC-05-178A1.pdf.

telecommunications and information services will continue to be available throughout our nation on an affordable basis despite the impact of this national tragedy.¹²⁸ Likewise, today, enhanced Lifeline support is needed to ensure that telecommunications and information services will continue to be available and affordable despite the impact of this national tragedy that has left millions unemployed. The Commission should also extend its pandemic-related Lifeline program waivers to at least the end of the year.¹²⁹ These waivers have been valuable in ensuring lowincome communities are not left behind because of an inability to connect.

Through managing the Universal Service Fund and the other policy tools at its disposal, the Commission has the legal authority to expand both funding resources for broadband expansion and enforce consumer protections. Robust and comprehensive resource support from the Commission can help providers, universities, and state and local governments connect more people and ensure that people who have broadband access remain online.

VIII. THE COMMISSION'S RECENT ACTIONS HAVE WIDENED THE DIGITAL DIVIDE INSTEAD OF NARROWING IT

The 2020 Broadband Report discusses the Commission's actions to close the digital divide.¹³⁰ However, many of the Commission's recent actions have served to widen the digital divide, particularly for rural and low-income Americans.

¹²⁸ *Id.* at 4.

¹²⁹ See Lifeline and Link UP Reform and Modernization, WC Docket No. 11-42, Order, DA 20-577 (June 1, 2020) (order providing the waiver easing the application and enrollment process on rural Tribal lands and extending the prior Lifeline COVID-19 waivers through August 31, 2020). ¹³⁰ 2020 Broadband Deployment Report, *supra* note 62 at **PP** 54-89.

A. The Commission's Recent Actions and Pending Proposals to the Lifeline Program Will Widen the Digital Divide

Since first introducing proposals in its 2017 proceeding¹³¹ to drastically cut the Lifeline program, the Commission has continuously placed the only subsidy program assisting lowincome Americans in securing communications services on the chopping block. First, the Commission's decision to eliminate the Lifeline Broadband Provider ("LBP") designation¹³² removes a mechanism that was intended to promote more carrier participation in the program. Commissioner Starks notes in his dissent, there were "approximately 40 companies with pending LBP designations, many of which have applied to provide service in several states with high rates of poverty."¹³³ Eliminating the LBP designation precludes market entry for competitive and innovative service providers for Lifeline subscribers, undermining the Commission's stated goal "to empower Lifeline subscribers to obtain the highest value for the Lifeline benefit through consumer choice in a competitive market."¹³⁴

In addition to eliminating the LBP designation, the Commission is now considering several toxic proposals such as surveying eligible Lifeline applicants on whether they could afford communications services without the discount, and requiring subscribers to pay a fee in

¹³¹ See Bridging the Digital Divide for Low-Income Consumers, Lifeline and Link Up Reform and Modernization, Telecommunications Carriers Eligible for Universal Service Support, WC Docket Nos. 17-287, 11-42, 09-197, Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FCC Rcd 10475 (2017) ("2017 Lifeline NPRM"). Many proposals in this proceeding are still pending including the Commission's proposal to alter eligibility requirements which would cause 70 percent of Lifeline subscribers to lose service.

¹³² See Bridging the Digital Divide for Low-Income Consumers *et al*, WC Docket No. 17-287 *et al*, *Fifth Report and Order, Memorandum Opinion and Order and Order on Reconsideration, and Further Notice of Proposed Rulemaking*, FCC 19-111 (rel. Nov. 14, 2019) ("*Fifth Report and Order*").

¹³³ *Fifth Report and Order*, Statement of Commissioner Geoffrey Starks Concurring in Part and Dissenting in Part, at 109.

¹³⁴ 2017 Lifeline NPRM ¶ 80.

exchange for receiving a handset.¹³⁵ These proposals are ultimately designed to reduce participation in the Lifeline program.

The Commission continues to create program uncertainty around Lifeline by raising the minimum service standards, which could endanger subscribers' access to essential voice and broadband services. Last year, the Commission raised the mobile minimum service standards to 3 GB while phasing out support for voice-only service¹³⁶ despite objections from service providers, civil rights, and public interest organizations.¹³⁷ The Commission once again proposes to increase the mobile broadband minimum service standard to 4.5 GB.¹³⁸ An increase in the service standard without an increase in the Lifeline subsidy risks disruption of the Lifeline service to low-income households as it is likely to force providers to charge a copay that low income consumers cannot afford.¹³⁹ For unbanked consumers, the very act of paying a copay, no matter its price, is impossible. Further, the Commission would be taking action without any analysis as to how an increase in the minimum service standard would impact the Lifeline marketplace - information it will have next year when it completes its State of the Lifeline

¹³⁵ *Fifth Report and Order*, ¶ 139.

¹³⁶ See Lifeline and Link Up Reform and Modernization *et al.*, WC Docket No. 11-42 *et al.*, *Order*, FCC 19-116, ¶ 1 (rel. Nov. 19, 2019).

¹³⁷ See National Consumer Law Center, on behalf of its low-income clients, National Hispanic Media Coalition, OCA – Asian Pacific American Advocates, United Church of Christ, OC, Inc.; and CTIA, Joint Petition to Pause Implementation of December 2019 Lifeline Minimum Service Standards Pending Forthcoming Marketplace Study, WC Docket Nos. 11-42, 09-197, and 10-90 (filed June 27, 2019).

¹³⁸ Press Release, FCC, FCC Chairman Pai Circulates Order to Ensure Predictable Increases in Minimum Standard for Lifeline Mobile Broadband Service (July 30, 2020),

https://docs.fcc.gov/public/attachments/DOC-365835A1.pdf.

¹³⁹ See National Consumer Law Center, on behalf of its low-income clients, National Hispanic Media Coalition, OCA – Asian Pacific American Advocates, United Church of Christ, OC, Inc.; and CTIA, Joint Petition to Pause Implementation of December 2019 Lifeline Minimum Service Standards Pending Forthcoming Marketplace Study, WC Docket Nos. 11-42, 09-197, and 10-90 (filed June 27, 2019).

Marketplace report. Therefore, the Commission should grant the National Lifeline Association's petition¹⁴⁰ to retain the current mobile broadband minimum service standard at 3 GB and to maintain the program's current level of voice support.¹⁴¹

B. In the "Race to 5G," The Commission Cannot Leave Unconnected Americans Further Behind

For the millions of people still lacking broadband access, and over a hundred million more who do not use the internet at the current 25/3 Mbps benchmark, the prospect of 5G may never become a reality.¹⁴² 5G requires both a high-quality, resilient physical infrastructure, and large quantities of high-, medium-, and low-band spectrum. This combination of resources scarcely exists outside of high-income urban areas, but unconnected Americans disproportionately live in low-income rural parts of the country.

At the same time, the Commission has reduced the tools available to local governments seeking to address this disparity through localized small cell policies.¹⁴³ This discrepancy does not support unconnected Americans; it supports providers' profit-maximizing efforts while relieving them of their civic duty to return the benefits of using public spectrum and facilities to the communities which they serve. As the Commission continues making policies to facilitate 5G

¹⁴⁰ See National Lifeline Association, Petition for Waiver of Lifeline Mobile Broadband Minimum Service Standard and Voice Support Phase Down, WC Docket Nos. 11-42, 09-197, and 10-90 (filed August 27, 2020).

¹⁴¹ See Joint Public Interest Comments in Support of NALA Petition of Waiver of Lifeline Mobile Broadband Minimum Standard and Voice Support Phase-Down, WC Docket Nos. 11-42, 09-197, 10-90 (filed Sept. 14, 2020).

¹⁴² See Ex Parte from Microsoft, Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion & In the Matter of Reform of the FCC Form 477 Data Program Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans Improvement of Wireless Broadband Subscribership Data, GN 18-238 & WC 11-10, 4 (March 29, 2019), https://www.fcc.gov/ecfs/filing/10329025758889.

¹⁴³ See generally Next Century Cities Comments, Accelerating Wireline Broadband Deployment by Removing Barriers to Deployment, WC 17-84 (Sept. 3, 2020), https://www.fcc.gov/ecfs/filing/10904064319916.

deployment, it can and should seek out opportunities to ensure that in bringing new, innovative technological capabilities, it also enables some parts of the country to access 3G and 4G services.

IX. CONCLUSION

COVID-19 revealed the importance of high-speed connectivity. Throughout the pandemic, people who do not have access to reliable, affordable broadband have found themselves more isolated than ever. Granular data about broadband who is and is not connected is crucial for ensuring that people living in all corners of the United States can fully connect with employers, healthcare providers, educators, and friends and family. It is not only critical for understanding the many ways that broadband deployment policy must improve, but the final analysis determines which areas can access much-needed funding opportunities. Through a robust analysis of the current connectivity challenges that COVID-19 highlights and exacerbates, and by expanding policies that facilitate greater broadband deployment, the Commission can pave the way for widespread and inclusive digital opportunities.

Respectfully submitted,

/s/ Yosef Getachew
Media & Democracy Program Director
COMMON CAUSE
805 15th Street NW, Suite 800
Washington, D.C. 20005 (202) 833-1200

/s/ Francella Ochillo
Executive Director
/s/ Corian Zacher
Policy Counsel
/s/ Ryan Johnston
Policy Counsel
NEXT CENTURY CITIES
1201 Connecticut Ave NW, Suite #300
Washington, D.C. 20036 (202)740-3259

/s/ Jenna Leventoff
Senior Policy Counsel
/s/ Kathleen Burke

Policy Counsel **PUBLIC KNOWLEDGE** 1818 N St NW, Suite 410 Washington, D.C. 20036 (202) 861-0020