



September 17, 2020

National Telecommunications Information Administration
1401 Constitution Ave, NW
Washington D.C. 20230

Re: Docket No. 200813–0218

Dear Ed Parkinson,

On behalf of the National Digital Inclusion Alliance, Public Knowledge and other signatory organizations, we submit these comments in response to the National Telecommunications and Information Administration’s Request for Public Comments Docket No. 200813–0218: NTIA Internet Use Survey Questionnaire Development. The National Digital Inclusion Alliance is a unified voice for home broadband access, public broadband access, personal devices and local technology training and support programs. NDIA works collaboratively to craft, identify and disseminate financial and operational resources for digital inclusion programs while serving as a bridge to policymakers and the general public. Public Knowledge is a public interest advocacy organization dedicated to promoting freedom of expression, an open internet, and access to affordable communications tools and creative works.

Long before the COVID-19 crisis, Americans turned to broadband for everything from finding a job to receiving medical care, connecting with loved ones, learning, engaging in democratic processes, and being entertained. Without broadband, it’s all but impossible to participate in modern society. However, not everyone in our country has reliable access to high-quality broadband. Our nation has a persistent digital divide where millions lack access to broadband, made more clear than ever by the COVID-19 crisis. In order to narrow the digital divide, policymakers in Congress and the administration, advocates, and citizens need accurate data about the reasons so many are unable to connect. However, our nation does not systematically collect much of the information needed to truly understand, and then close, the digital divide. This survey could help fill in some of the gaps.

Stakeholders understand, for example, how the cost of broadband impacts adoption or whether our nation’s networks provide adequate speeds for household online activities.

In addition, the pandemic has changed the way many use the internet. For example, functions such as video conferencing and streaming have dramatically increased as more individuals are

working from home, causing difficulties for many.¹ Additionally, school districts have recognized the potential increase in learning loss and difficulties with teaching lessons amid distance learning efforts.² In light of these facts, NTIA should add additional survey questions in order to surmise the heightened challenges families are facing.

I. Additional Questions are Needed to Determine How Households are Using the Internet, Particularly During the COVID-19 Pandemic

Since the coronavirus outbreak, families have become even more reliant upon the internet -- using it to work remotely, take online classes, receive medical care and connect with loved ones. Because of this, the pandemic has likely increased internet usage. On a typical day during the pandemic, one parent could be participating in a videoconference, while another parent video chats with their doctor, and their two children stream online classes.

NTIA should ask questions clarifying how households are using their connections during the pandemic. These questions should touch on the amount of time per day on the internet, the amount of devices used per day in each household, the number of household members using the internet concurrently, and any difficulties that have arisen since nationwide quarantine mandates have begun.

NTIA should ask a question about whether respondents have used the internet to access government services. Understanding the extent to which people use the internet for these services will help policymakers, digital inclusion practitioners and digital inclusion advocates ensure these important services are accessible to all who need them.

II. Additional Questions are Needed to Determine Connectivity Barriers, Particularly During the Pandemic

Since the pandemic began, a study from the Pew Research Center has shown that students engaged in online classes for the first time are facing particularly challenging connectivity barriers. Students without any home connectivity are forced to rely on public wi-fi to complete their schoolwork -- in some cases spending hours in parking lots.³ Students who have only wireless broadband struggle to do homework on cell phones.⁴ Others cannot connect because

¹ Adam Clark, *Why the Internet (Probably) Won't Break During the Coronavirus Pandemic*, Vox (March 25, 2020), <https://www.vox.com/recode/2020/3/25/21188391/internet-surge-traffic-coronavirus-pandemic>.

² Tanaz Meghanji, *D.C. Voices the Challenge of Distance Learning*, D.C. Policy Center (Apr. 21, 2020), <https://www.dcpolicycenter.org/publications/distance-learning/>

³ Cecilia Kang, *Parking Lots Have Become a Digital Lifeline*, N.Y. Times (May 5, 2020), <https://www.nytimes.com/2020/05/05/technology/parking-lots-wifi-coronavirus.html?login=email&auth=login-email>; Emily Vogels, *59% of U.S. Parents with Lower Incomes Say Their Child May Face Digital Obstacles in Schoolwork*, Pew Research Center (Sept. 10, 2020), <https://www.pewresearch.org/fact-tank/2020/09/10/59-of-u-s-parents-with-lower-incomes-say-their-child-may-face-digital-obstacles-in-schoolwork/>.

⁴ Emily Vogels, *59% of U.S. Parents with Lower Incomes Say Their Child May Face Digital Obstacles in Schoolwork*, Pew Research Center (Sept. 10, 2020),

they don't have computers, or don't have enough computers for all children in the household.⁵ In order to accurately survey what connectivity challenges households are facing, NTIA should ask questions that highlight how families' needs have changed since the pandemic began and what digital barriers exist.

Past NTIA surveys reveal that one of the main reasons people do not subscribe to home internet is because they cannot afford it.⁶ As a consequence of this, lower broadband adoption is correlated with lower household incomes.⁷ However, NTIA does not collect specific data as it pertains to price. It is unclear what price point would result in significant broadband adoption by lower income segments of the population, but we believe that this is a topic NTIA should approach because of the apparent relationship between the cost of internet service and broadband adoption.⁸ In order to better capture this data, questions should ask at what price a household can afford broadband. This will enable stakeholders like policymakers and digital inclusion activists to create policies that ensure families can subscribe to broadband at an affordable price point.

III. Additional Questions are Needed to Determine if Connections are Suiting Household Needs, Particularly During the Pandemic

Even if families do have access to broadband, their connection may be too slow or too unreliable to meaningfully participate in online activities. The COVID-19 pandemic has likely exacerbated these connectivity problems. During the COVID-19 pandemic, many households are spending more time than ever online, and multiple family members are engaging in higher bandwidth activities, like videoconferencing and video streaming, simultaneously. NTIA should ask questions that highlight whether internet connections are suiting household needs, in order to help the NTIA, policymakers, and digital inclusion activists better understand the national broadband landscape. Questions should ask how data caps, broadband speeds, and outages impact connectivity.

We suspect that many respondents are limited in how often and for what purposes they can use the internet because their connections are subject to data caps, which can vary significantly. Data caps for wireline services vary by region and can range from over a terabyte to a mere 150

<https://www.pewresearch.org/fact-tank/2020/09/10/59-of-u-s-parents-with-lower-incomes-say-their-child-may-face-digital-obstacles-in-schoolwork/>.

⁵ Debbie Truong, *As Classes Move Online, What Happens to Students Without Internet or Computers?*, NPR (Mar. 18, 2020),

<https://www.npr.org/local/305/2020/03/18/817691597/as-classes-move-online-what-happens-to-students-without-internet-or-computers>; Emily Vogels, *59% of U.S. Parents with Lower Incomes Say Their Child May Face Digital Obstacles in Schoolwork*, Pew Research Center (Sept. 10, 2020),

<https://www.pewresearch.org/fact-tank/2020/09/10/59-of-u-s-parents-with-lower-incomes-say-their-child-may-face-digital-obstacles-in-schoolwork/>.

⁶ John Horrigan, *Measuring the Gap: What's the Right Approach to Exploring Why Some Americans do Not Subscribe to Broadband*, National Digital Inclusion Alliance (Feb. 2020),

https://www.digitalinclusion.org/wp-content/uploads/2020/02/Horrigan_Measuring-the-Gap-v1.1.pdf.

⁷ Angela Siefer, *FCC Broadband Report Ignores Affordability Issue*, National Digital Inclusion Alliance (May 30, 2019) <https://www.digitalinclusion.org/blog/2019/05/30/fcc-broadband-report-ignores-affordability-issue/>.

⁸ *Id.*

gigabytes.⁹ If data caps are preventing consumers from using the internet to access the services they need or are making access cost prohibitive, questions must address this reality. There are a number of different ways that NTIA could approach this issue. Survey questions should address both awareness of data caps in a household's plan, as well as the impact a data cap has on a household's ability to complete their online activities.

Current broadband speeds may also fail to meet modern consumer needs. Millions of consumers have seen a degradation in download speeds over the past year as a result of increased strain on network infrastructure.¹⁰ In addition, advertised or offered speeds are often higher than the speeds that consumers actually experience.¹¹ This has created a significant disconnect between the information currently available and the reality on the ground. Finally, download speeds are often lower for those in the lowest income groups, perhaps because internet service providers do not invest in maintaining networks in areas that are not profitable.¹² Despite this, experts believe that the amount of telework and use of telemedicine are likely to stay high once the pandemic ends.¹³ Thus, it is critical that policymakers, advocates, and practitioners understand whether households have access to broadband speeds that meet their needs. Survey questions should address both *perception* of broadband speed and the impact insufficient speed has on a household's ability to complete their online activities.

Outages can also severely impair a household's ability to use the internet, and are an important indicator of a network's reliability. An outage during school or work can have serious repercussions for the user and be indicative of a larger issue with the connection. During the COVID-19 pandemic, outages have become more prevalent as broadband networks experience heavy usage. Like broadband speeds, service outages are also more prevalent among those in the lowest income groups.¹⁴ Survey questions should ask respondents about the length and frequency of outages, as well as the impact of outages on a household's ability to complete their online

⁹ Karl Bode, *Americans' Increasing Data Use Is on a Collision With Data Caps*, Vice (Apr. 30, 2019), https://www.vice.com/en_us/article/bj9n3z/americans-increasing-data-use-is-on-a-collision-course-with-data-caps.

¹⁰ Tyler Cooper, *Home Internet Connections Holding Steady In Most Major US Cities Amid Shift to Remote Work*, Broadband Now (Mar. 17, 2020), <https://broadbandnow.com/report/home-internet-connections-holding-steady-major-us-cities/>

¹¹ Shalini Ramachandran, Lillian Rizzo & Drew Fitzgerald, *Your Internet Provider Likely Juiced Its Official Speed Scores*, Wall Street Journal (Dec. 12, 2019), <https://www.wsj.com/articles/its-hard-to-trust-the-numbers-internet-providers-inflate-official-speed-results-11576171855>

¹² Kevin Taglang, *The Internet is Not Working for Everyone*, Benton Institute: Weekly Digest (May 26, 2020), <https://www.benton.org/blog/internet-not-working-everyone>; Bill Callahan, *AT&T's Digital Redlining of Cleveland*, National Digital Inclusion Alliance (Mar. 10, 2017), <https://www.digitalinclusion.org/blog/2017/03/10/atts-digital-redlining-of-cleveland/>.

¹³ Katherine Guyot & Isabel V. Sawhill, *Telecommuting Will Likely Continue Long After the Pandemic*, Brookings Institute (Apr. 6, 2020), <https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/>; 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>.

¹⁴ Kevin Taglang, *The Internet is Not Working for Everyone*, Benton Institute: Weekly Digest (May 26, 2020), <https://www.benton.org/blog/internet-not-working-everyone>.

activities. This issue is directly tied to the question of whether or not connections are suiting household needs.

IV. NTIA Should Use Multiple Approaches to Ask Why Respondents Do not Subscribe to Broadband

Two schools of thought have emerged as to why households do not subscribe to broadband internet service. One school of thought argues that people lack broadband mainly because they are simply not interested in service; they do not understand its value. Another identifies cost as the main reason; people who do not subscribe to broadband cannot afford the monthly fee. The different findings are driven, to a significant degree, on how survey research frames the question to respondents.

The first approach is to ask open-ended questions. The open-ended approach records respondents' verbal answers. The answers are subsequently classified into "pre-coded" categories that include: Do not need, not interested, can use the internet elsewhere, the respondent cannot afford it, respondent does not have a computer, the internet is not available.

The second approach, asking close-ended questions, is used by the Pew Research Center, the California Emerging Technology Fund, and others, to ask respondents why they do not subscribe to broadband. Survey creators then present a list of reasons to respondents. From the list provided to them, respondents can choose which reasons apply to them. In both approaches, respondents receive a follow-up question asking about the main reason they do not subscribe.

The different approaches yield different findings. The open-ended approach generally finds that a high percentage of respondents cite "don't need/not interested" when their verbal responses are coded into categories. Close-ended approaches generally yield more respondents citing multiple reasons for not having service while also finding that the cost of the monthly access fee is most often cited.

We propose that the NTIA, in its 2021 Current Population Supplement on the Internet, run an experiment with the two approaches to asking about why people do not go online. One would be an "open-ended" question (that is, maintaining the approach from the previous survey) and the other would be "close-ended" (that is, the approach used by the Pew Research Center and others by which respondents are read a list of reasons and are permitted to choose all that apply). Open-ended pre-coded response categories would be identical to the list presented to respondents in the close-ended question. By using two different approaches to framing the question in the same survey, the results help resolve the following issue: Are findings about why people subscribe to broadband sensitive to open-ended versus closed-ended survey questions? The result would help clarify the reasons why people do not subscribe to broadband.

V. Conclusion

In conclusion, NTIA can significantly advance the information that stakeholders like policymakers and digital inclusion activists have about barriers to connectivity, how the internet

is used, and the quality of connections by adding just a few questions to its Internet Use Survey. Answers to these questions can help us to understand the digital divide, and create tailored solutions to close it.