Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	**)**	
	)	
Inquiry Concerning Deployment of Advanced	**)**	GN Docket No. 24-214
Telecommunications Capability to All	**)**	
Americans in a Reasonable and Timely	**)**	
Fashion	**)**	
	)	

COMMENTS OF NEXT CENTURY CITIES AND PUBLIC KNOWLEDGE

Ryan Johnston
Senior Policy Counsel, Federal Programs
Next Century Cities

Corian Zacher
Senior Policy Counsel, State and Local Affairs
Next Century Cities

Alisa Valentin
Broadband Policy Director
Public Knowledge

Nat Purser
Government Affairs Policy Advocate
Public Knowledge

Peter Gregory
Broadband Policy Fellow
Public Knowledge

October 7, 2024

TABLE OF CONTENTS

<div align="center">

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

</div>

In the Matter of	**)**	
	)	
Inquiry Concerning Deployment of Advanced	**)**	GN Docket No. 24-214
Telecommunications Capability to All	**)**	
Americans in a Reasonable and Timely	**)**	
Fashion	**)**	
	)	

<div align="center">

COMMENTS OF NEXT CENTURY CITIES AND PUBLIC KNOWLEDGE

</div>

I.   Introduction

Next Century Cities[1] and Public Knowledge ("Joint Commenters") submit these comments in response to the Federal Communications Commission's ("FCC" or "Commission") request for comment on its Eighteenth Section 706 Notice of Inquiry ("NOI").[2] In the last two years, the Commission has taken great strides to improve broadband availability and affordability. Still, numerous households remain disconnected. Geography and income continue to have a strong correlation with broadband subscription rates.[3]

As the Commission continues its work to bring broadband to every household, it must also closely monitor broadband affordability and other adoption barriers, including device availability and digital skilling. 53% of previous Affordable Connectivity Program ("ACP")

---

[1] Next Century Cities is a nonprofit nonpartisan 501(c)(3) coalition of over 250 member municipalities that works collaboratively with local leaders to ensure reliable and affordable broadband access for every community, while helping others realize the economic, social and public health importance of high-speed connectivity.
[2] *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Notice of Inquiry, FCC No. 24-92 (2024) *(hereinafter* NOI).
[3] *See generally* Corian Zacher and Stacey Baxter, Broadband Affordability: The Metrics that Drive and Divide Us (2024), https://nextcenturycities.org/wp-content/uploads/2021/05/TPRC-2024-Paper-Submission.pdf.

<div align="center">

1

</div>

participants now state that it is too difficult for them to pay their current monthly Internet bill.[4]

With 45% of households without broadband citing broadband costs as the reason they remain

unconnected, affordability should be the Commission's highest priority.[5] However, the

Commission cannot focus solely on affordability. Even among households that can afford a

broadband subscription, the Commission should also consider whether households are able to

fully utilize their connections to meet their needs. Policymakers must ensure that every

household nationwide can make full use of their broadband connection – including through

digital skills, interoperable devices, and privacy tools. Only then can the Commission fully

assess the progress on its universal connectivity goals.

II.   Affordability Must Remain One of the Commission's Top Priorities.

Affordability is a key factor in broadband adoption disparities. As the Notice of Inquiry

acknowledges, this is highly evident from the socioeconomic distribution of fixed home

broadband subscribers. As the Commission observes, data from the Pew Research Center show

that 87% of U.S. adults with annual household incomes of $30,000 or less state they are internet

users; but only 57% of those within that income threshold actually subscribe to fixed home

broadband.[6] Meanwhile, 98% of adults in the U.S. with annual household incomes of more than

$70,000 report that they use the internet and 88% of that population say they have broadband at

home.[7] With 1 in 6 Americans enrolled in the Affordable Connectivity Program at the time of its

lapse, it is abundantly clear that cost is the key barrier between millions of Americans and

---

[4] Jake Varn, *States Reckon With Lapse of the Broadband Affordable Connectivity Program* (Sep. 20, 2024), https://www.pewtrusts.org/en/research-and-analysis/articles/2024/09/20/states-reckon-with-lapse-of-the-broadband-affordable-connectivity-program.

[5] *Id*.

[6] NOI at para. 14; Risa Gelles-Watnick, *Americans' Use of Mobile Technology and Home Broadband* (Jan. 31, 2024), https://www.pewresearch.org/internet/2024/01/31/americans-use-of-mobile-technology-and-home-broadband/#:~:text=There%20are%20large%20gaps%20between,less%20than%20%2430%2C000%20per%20year.

[7] *Id*.

consistent, high-speed internet connection. In fact, a July 2024 study found that "13% of ACP recipients had already canceled their home internet service and another 12% planned to do so within the next three months."[8] And for low-income communities living in high-cost areas, like communities residing on tribal lands, the drop-off is even more acute. Given that ACP recipients on tribal lands may receive up to $75 a month (exceeding the standard allotment of $30), for the over 300,000 Indigenous Americans who were enrolled in the ACP, household broadband costs may come out to $900 more this year than in 2023.

Therefore, the Commission must continue to prioritize the reinstatement of some form of low-income and high-cost subsidy. Without a sustainable consumer subsidy, we cannot unlock the full measure of connectivity that BEAD was designed to provide. The success of federal programs that prioritize broadband infrastructure, such as the BEAD Program and Capital Projects Fund, depends on such a subsidy to ensure returns on broadband infrastructure investments.[9] Accordingly, Pew Research Center found that, in the wake of the ACP's end, state broadband offices are facing challenges implementing federal broadband programs.[10] ISPs have already seen subscriber rates drop due to the end of the ACP, with Charter Communications posting a loss of 145,000 customers in September 2024.[11] While BEAD's low-cost eligibility requirements anchor prices in select communities for a limited time, even the *negotiated low-income* prices are prohibitively expensive in some states, climbing up to $70 per month in the higher bounds.[12]

---

[8] *See States Reckon With Lapse of the Broadband Affordable Connectivity Program.*
[9] *Id.*
[10] *Id.*
[11] Joe Supan, *The Harsh Reality for the 23 Million Americans Hit by the End of ACP Support*, CNET (Sep. 5, 2024), https://www.cnet.com/home/internet/the-harsh-reality-for-the-23-million-americans-hit-by-the-end-of-acp- support/.
[12] Jake Varn, *Reviewing State (Draft) Low-Cost Options*, (Dec. 11, 2023), https://www.benton.org/blog/reviewing - state-draft-low-cost options#:~:text=NTIA%20will%20evaluate%20low%2Dcost,equipment%20charges%20or%20additional%20fees.

As the NOI observes, there are severe shortcomings to an affordability assessment that attempts to flatten diverse constituencies and geographical features into one, static number. Though some states have attempted to reckon with those nuances by instating tiered low-cost BEAD requirements depending on geography (such as Utah's $30 or $55 urban/rural pricing index), policies should not cling to the BEAD-determined thresholds indefinitely – research on state and local pricing, and on price elasticity within communities, must be done on an ongoing basis to ensure that support remains current and effective at facilitating affordability. As a study conducted by the Center for Rural Pennsylvania in 2020 indicated, such research can support the government, industry, and community organizations in assessing service performance and affordability, by supplying data such as the "willingness to pay" threshold for a community.[13] It is critical that there is not only a permanent subsidy available to consumers, but that this subsidy allotment is responsive to market dynamics, regional differences, and other factors that could untether prices from the original subsidy level.

III. Community Engagement Leads to Better Adoption Outcomes.

Broadband deployment efforts are often entirely focused on ensuring that digital infrastructure is deployed into communities. However, such infrastructure is meaningless if communities are unable to adopt it or have reservations about doing so. The Commission historically focuses on infrastructure availability, which directly impacts broadband adoption. Still, availability metrics alone do not fully explain ongoing barriers to internet adoption. The number of providers, type of service offering, and speed of offerings provide helpful insight, but cannot tell researchers and advocates whether consumers in each geographic area have a home

---

[13] Center for Rural Pennsylvania, *Broadband Demand: The Cost and Price Elasticity of Broadband Internet Service in Rural Pennsylvania* (Dec. 14, 2020), https://www.benton.org/headlines/broadband-demand-cost-and-price-elasticity-broadband-internet-service-rural-pennsylvania.

broadband connection. Detailed information about adoption rates by geographic area helps local leaders direct programming towards the neighborhoods in greatest need.

The Commission should formulate a two-pronged approach to quantify broadband adoption. First, it must work qualitatively to identify and address barriers to adoption. Then, by working with data sets from civil society research institutions, the Commission's own data collections, and industry subscribership information, the Commission can make a determination about whether services are adopted.

The Commission is correct in pointing out that adoption barriers extend beyond access and affordability.[14] Even in a world where every household has broadband available, some households may not be interested in subscribing, affirmatively choosing not to adopt. Furthermore, households without technology education may not know that online services are available or feel uncomfortable using newer devices. As such, claiming adoption is a success by measuring infrastructure availability does not show whether service has been adopted or simply *could* be adopted. Instead, the Commission should focus on gathering data from organizations such as Pew Research Center, broadband consumer label information, and industry-submitted subscribership information, and overlay that with already collected BDC locations to produce a visualization that can begin to address the locational adoption question. This includes continuing to partner with the United States Census Bureau to utilize the American Community Survey (ACS) and Local Estimates of Internet Adoption (LEIA).

The *Lewis Latimer Plan for Digital Equity and Inclusion* framework published by the National Urban League states that it is critical to "expand the collection of data on broadband use

---

[14] NOI at para. 32.

by target populations, particularly underserved communities."[15] In response to the Commission's proceeding on the prevention and elimination of digital discrimination, the National Urban League specifically stated that a few areas of data collection could be useful in understanding broadband adoption and consumers' digital experience including:

Table 1. *The Lewis Latimer Plan:* Supplemental Data Collection for Coverage Maps

Goal	Key Question	Indicator (s)
Availability: Do households have access to broadband?	Does the area have broadband service?	-Number of broadband providers in the area
	Do the services meet minimum federal requirements?	-Upload speed -Download Speed -Latency
	Is the broadband service of good quality?	-Number of interruptions to service per day -Number of consumer complaints.
Affordability: Are households using broadband?	Is broadband affordable for the households in an area?	-Median net income of household -Size of household -Household members by gender, race, national origin, and immigration status -Median price of broadband plan
	How is broadband being made more affordable?	-Local or federal programs in the community that provide discounted or free broadband plans -Programs operated by providers to provide discounted/subsidized service -Programs operated by NGOs to make broadband more affordable
Adoption: How are households using broadband?	What is broadband used for?	-How often do members of households use broadband for education, health care, and jobs? -Are you able to access telework/remote learning/social media/streaming with your household's broadband plan? -How many interruptions to any of the above services –especially telework and remote learning– do you generally experience in a day? -How many interruptions to any of the above services –especially telework/remote learning/social media/streaming with your

---

[15] Chapter 14, *The Lewis Latimer Plan for Digital Equity and Inclusion*, National Urban League (2021), available at https://nul.org/sites/default/files/2021-04/NUL%20LL%20DEIA%20041421%20Latimer%20Plan_vFINAL_1136AM.pdf

		household's broadband plan? -How many interruptions to any of the above services –especially telework and remote learning– do you generally experience in a day?
	Do broadband plans meet the needs of different customers?	-Number of available broadband plans that vary in speed and cost -Key locations where broadband is free -Are you aware of any low-cost/no-cost broadband services in your area? -If you are aware, do you subscribe to one of these services? -If you are aware and do not subscribe what is the primary reason for not subscribing?

Further, the Commission can increase its effectiveness in determining broadband adoption by working closely with municipalities, schools, libraries, digital navigators, and other community-based organizations that work tirelessly to promote connectivity and provide digital resources on the ground. Community digital equity leaders are often the first to hear from consumers in their area about opportunities and challenges with purchasing new desktops or smartphones, as well as with residential and business broadband plans, which grants them key insights into how technological advancement impacts adoption for their community overall. Working closely with communities can also help address the concerns of households that are resistant to adopting advanced internet technologies and demonstrate the immediate and long-term benefits of broadband connectivity. Collecting data that only measures subscribership, without examining subscription barriers, overlooks a critical opportunity to address challenges to universal service that the Commission has not yet explored. The agency should work closely with communities and their leaders focused on digital equity to gain access to this critical data.

In addition to collaborating directly with communities, the Commission should consider how language barriers affect adoption rates. In 2019, there were 25.5 million limited English

proficiency (LEP) individuals in the United States.[16] Nearly 81% of these individuals were immigrants, of which usually one-third are classified as low-income at or below 200% of the poverty level.[17] This is a critical barrier affecting adoption, as primarily English-speaking households are nearly three times more likely to have broadband than LEP households.[18] In early 2023, the GAO released a report analyzing the Commission's efforts in conducting consumer outreach and meeting its goals for broadband affordability. While making findings that the Commission has worked to translate ACP materials into five languages, the GAO recommended that the Commission revise its translation process to make communications to non-English speaking communities better aligned with industry practices, including ensuring that translations are more clear and precise, practical, and complete.[19] Therefore, in an attempt to collect enhanced information about adoption rates, the Commission should research and include metrics on the effect of language barriers on adoption as an important indicator for the overall effectiveness of broadband programs.

The Commission's proposal to identify adoption rates utilizing Form 477 data and the Broadband Data Collection ("BDC") availability maps may provide a clear path forward on paper.[20] However, this approach only offers the Commission information on existing subscribership and does not account for households that have not fully adopted or cannot continuously maintain a broadband connection for whatever reason. Utilizing this combination

---

[16] Kevin Taglang, *Language Barriers and Digital Equity*, Benton Institute for Broadband and Society (Sep. 5, 2023), https://www.benton.org/blog/language-barriers-and-digital-equity.
[17] *Id*.
[18] *Overcoming The Barriers to Broadband Adoption*, Education Superhighway, available at https://www.educationsuperhighway.org/wp-content/uploads/Broadband-Adoption-Center-Whitepaper.pdf.
[19] U.S. Gov't Accountability Off., GAO-23-105399, FCC Could Improve Performance Goals and Measures, Consumer Outreach, and Fraud Risk Management (Jan. 2023).
[20] NOI at para. 33.

of data sets to determine adoption rates positions the Commission to conclude that service has been more widely adopted than in reality.

For mobile subscribers, utilizing Form 477 data as the Commission proposes *also* neglects to provide the needed granularity to accurately measure mobile subscribership.[21] However, utilizing Form 502 data can provide insights into the number of active numbers used in a geographic area, which would allow the Commission to more accurately estimate mobile adoption. However, without the use of other provider subscribership data, it will be difficult for the Commission to determine where some subscribers are using more than one cellular device, and where others have none. This may lead to the artificial inflation of mobile adoption rates.

This presents an opportunity for the Commission to work in tandem with the National Telecommunications and Information Administration ("NTIA"), state broadband offices, and localities to determine whether provider subscriber data is accurate. This level of data aggregation synchronizes the two largest collectors of broadband information on affordability data collection, analysis, and use. Failure to collaborate in this way perpetuates the current atmosphere of confusion and undermines the Commission's universal service priorities.

IV. Broadband Infrastructure Investment is Undercut by Failing to Ensure Equitable Access to All.

Affordable and accessible broadband for all is a noble goal that can only be achieved if the physical infrastructure is accessible, affordable, and usable. Importantly, the Commission is correct in maintaining that fixed and mobile service are not replacements for each other, but complementary.[22] As broadband demand increases, so will the need for higher speeds and capacity.

---

[21] NOI at para. 36.
[22] NOI at para. 8-10.

The increase in broadband benchmark speeds to 100/20 Mbps is laudable, but this increase continues to overlook the shift in demand from consumers largely consuming content to frequently generating content. As Joint Commenters have held in the past, consumer needs are vastly outpacing consumer policy.[23] Increasing the download benchmark to 100 Mbps is crucial and long overdue; however, the Commission has continued to shy away from implementing a symmetrical upload speed. The COVID-19 pandemic introduced new requirements as living and dining rooms transformed into offices, classrooms, and doctor's offices.[24]

These requirements are still largely part of many consumers' everyday lives. As household technological capabilities increase and as new technologies like augmented and virtual reality begin to take hold the need for higher upload speeds will become more critical. The Commission is well aware that the average household has multiple connected devices.[25] It is time to update our benchmark speeds once again to reflect consumer needs.

A. Utilizing Broadband Data Collection Data is a Step in the Right Direction, but the Commission Must Not Continue to Use Form 477 Data.

The Commission proposes to continue to use BDC data as its primary data source for analyzing physical deployment. In doing so, the Commission has stepped away from the self-reported data that providers have submitted under Form 477 and embraced a challenge process driven data source that is more accurate and provides a clearer picture of where service has and has not been deployed.

However, the use of Form 477, even for the purposes of historical trend analysis, continues to provide a skewed view of broadband availability for deployments that have happened before 2024. It is imperative that the Commission continues its practice of presenting

---

[23] Comments of Public Knowledge, Common Cause, and Next Century Cities, GN Docket No. 20-269 at 6.
[24] *Id*. at 7.
[25] FCC, Home Network Tips, https://www.fcc.gov/home-network-tips (last accessed Oct. 2, 2024).

year-end snapshots of deployment for the five most recent years, but it should endeavor to use BDC data when available and only rely on Form 477 when absolutely necessary. This will ensure that historic trends are more accurate and that anyone who wishes to use this reporting data will not draw incorrect conclusions from overstated deployment data.

Further, the Commission can refine its data collections by continuing to improve the BDC challenge process. This can be done on two fronts. First, by including information such as pricing, lifeline and other subsidy eligible plans, and which providers offer devices can help not only address the availability of broadband services but also adoption concerns as well. Second, the Commission can increase the transparency of the challenge process writ large.[26] The Commission should release guidance on:

- How the Commission will evaluate whether a challenger's evidence, methodology, and basis for assertions meets the required evidentiary standards.[27]

- How the Commission will evaluate whether a provider meets the required evidentiary standard to rebut a challenge.[28]

- How the Commission's evaluations will differ between the preponderance of evidence standard, as required in consumer challenges, and the clear and convincing evidence standard, as required in challenges from government and other entities.[29]

- How the Commission will handle these evaluations when the challenger's evidence and provider's evidence rely on different methodologies.[30]

---

[26] Letter from Next Century Cities, National Broadband Mapping Coalition, Buckeye Hills Regional Council, Access Humboldt, SA Digital Connects, National Association of Counties, California Community Foundation, South Bay Cities Council of Governments to Marlene H. Dortch, Secretary, FCC at 2 (July 6, 2022), https://www.fcc.gov/ecfs/document/10707613112993/1.

[27] *Id.*

[28] *Id.*

[29] *Id.*

[30] *Id.*

In doing so, the Commission will answer some of the most pressing questions that communities have continued to have. This will provide essential insights into how communities, non-profits, and others can help format their challenges to be best used by the Commission.

B. To Ensure that Access is Equitable to All, it is Important for The Commission to Collect Robust Information, Including Qualitative and Quantitative Metrics, for all Communities.

The Commission notes that "[t]he *2024 Report* limited the discussion of equitable access to presenting, for informational purposes, the demographic analysis required by Section 706(c)."[31] In Section 706(c), the Commission, in analyzing unserved areas for the Report, is required to evaluate the population, population density, and average per capita income for each unserved area.[32] While the Commission has proposed to present only the demographic analysis required under this section, the Joint Commenters argue that this data collection alone is not sufficient to assess equitable access to advanced telecommunications. In order to make the Section 706 Report useful to providers, consumers, and regulators, the Commission must go beyond what is minimally required and present more robust quantitative and qualitative data that captures the real state of access across the country.

In accomplishing this goal, the Commission must focus on partnering with communities to verify qualitative data and enhancing its quantitative metrics to better serve its goals of enhancing equity in access. If this approach is adopted, such information should focus on producing insightful data that reveals remaining barriers to ensuring that everyone's communications needs are met. In the Fourth Report and Order for the Affordable Connectivity Program, the Commission aimed to standardize its data collection and find new ways to "paint a

---

[31] NOI at para. 47.
[32] 47 U.S.C § 1302(c).

fuller picture of how many eligible households are participating in the ACP."[33] In doing so, the Commission sought to collect data on prices, plan coverage, and plan characteristics, and some further on information related to the digital divide, including data on low-income broadband plan and connected device offerings.[34] This information, and resultant ACP reports, should be analyzed in the Section 706 Report. While this was a step in the right direction, the Commission should go further, aiming to look at more demographic information and qualitative sources to ensure that digital equity is prioritized when evaluating overall broadband access.

First, the Commission could collect or utilize enhanced demographic data, such as more socioeconomic data from available census materials and compare this data to other census-block level data the commission already has on adoption/access rates. While the Commission collects this data as required from ACP participants, the Commission can compare ACS data or conduct separate research that allows consumers to consent to demographic data collection in order to better measure whether access is equitable. The Commission can also use data that is readily collected, such as the kinds of affordability programs, bundled service offerings, and information about device subsidies, in the Section 706 Report to make findings on which provider programs are effective and enhance equitable access to telecommunications.

Beyond quantitative measurements, the Commission should also utilize qualitative methods when completing its research for the Section 706 Report. For example, the Commission can utilize the model it used when conducting the listening sessions through the Task Force to Prevent Digital Discrimination to gather qualitative data points and gain insights from communities, especially communities that have not adopted broadband, for use in creating this

---

[33] *See* Affordable Connectivity Program, Fourth Report and Order and Further Notice of Proposed Rulemaking, WC Docket Nos. 21-450, FCC 22-87 (Nov. 23, 2022).
[34] *Id*.

year's report. The Commission can look to the NTIA's framework for its Internet for All needs assessment framework as a guide for developing robust qualitative metrics to measure digital equity by usings surveys, interviews, and focus groups.[35] It is critical to understand what adjustments need to be made to meet consumers' communications needs, and qualitative measurements will aid the Commission in forming this assessment.

V.   Conclusion

The importance of affordable, high-quality connectivity cannot be understated. Granular broadband data about those who are and are not connected is critical for understanding which residents face barriers to connecting with employers, healthcare, family, first responders, and the entire digital ecosystem. Such data is not only crucial for understanding the way in which broadband policy must improve, but how federal funding opportunities can be targeted to address the most disconnected areas. Through updating the BDC challenge process and collecting more robust information about devices and affordability, the Commission can develop a more comprehensive picture of the state of American connectivity. Without this information, we will continue to guess how well networks are performing and who is truly connected – and guesswork cannot guide the provision of an essential technology.

Respectfully submitted,

<table>
<tr><td>**/s/ Ryan Johnston**</td><td>**/s/ Alisa Valentin**</td></tr>
<tr><td>**/s/ Corian Zacher**</td><td>**/s/ Nat Purser**</td></tr>
<tr><td>Next Century Cities</td><td>**/s/ Peter Gregory**</td></tr>
<tr><td>1828 L Street NW, Suite 300</td><td>Public Knowledge</td></tr>
<tr><td>Washington, DC 20036</td><td>1818 N Street NW, Suite 410</td></tr>
<tr><td></td><td>Washington, DC 20036</td></tr>
</table>

October 7, 2024

---

[35] *See* NTIA Internet for All: Digital Equity Needs Assessment Guide, available at https://broadbandusa.ntia.doc.gov/sites/default/files/2023-01/IFA_Digital_Equity_Needs_Assessment_Guide.pdf.