

**Before the  
National Telecommunications and Information Administration  
Washington, DC 20230**

In the Matter of )  
Infrastructure Investment and Jobs Act )  
Implementation ) Docket No. 220105-0002  
)  
)

**COMMENTS OF PUBLIC KNOWLEDGE AND TURN**

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**I. INTRODUCTION**

The Infrastructure Investment and Jobs Act of 2021 (IIJA) presents an incredible opportunity to narrow our nation’s stark digital divide. An estimated 42 million people across the country don’t have access to home internet.<sup>1</sup> This makes it impossible to attend virtual classes, earn a living from the safety of home, access virtual healthcare, or connect with loved ones. Low-income, marginalized, and Tribal communities are particularly unlikely to be connected. Only 66% of African Americans and 61% of Hispanics report having broadband at home.<sup>2</sup> On rural Tribal lands, less than half of residents have access to fixed broadband.<sup>3</sup> This is why IIJA’s implementation must be strategic, comprehensive and executed without delay.

NTIA must consciously choose to protect consumers before bending to industry concerns. Many industry concerns that prevent them from building high-quality, affordable, and reliable networks are exaggerated, and reflect a desire to take the easiest and most profitable path. To compromise the needs of consumers to assuage the hesitancy of industry during implementation will guarantee that these billions of

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<sup>1</sup> John Busby, Juliana Tanberk, and Tyler Cooper, *BroadbandNow Estimates Availability for all 50 States; Confirms that More than 42 Million Americans Do Not Have Access to Broadband*, BroadbandNow (Oct. 21, 2021), <https://broadbandnow.com/research/fcc-broadband-overreporting-by-state>

<sup>2</sup> Andrew Perrin and Erica Turner, *Smartphones help blacks, Hispanics bridge some - but not all - digital gaps with whites*, (August 20, 2019), <https://www.pewresearch.org/fact-tank/2019/08/20/smartphones-help-blackshispanicsbridge-some-but-not-all-digital-gaps-with-whites/>.

<sup>3</sup> Consumer & Governmental Affairs Bureau et al., *Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018* at 3 (May 2019), <https://docs.fcc.gov/public/attachments/DOC-357269A1.pdf>.

dollars provide only a temporary patch for the digital divide, and that Congress will be forced to spend billions more taxpayer dollars to solve this problem moving forward. As President Biden has said, “we are America, we don't just fix for the day, we build for tomorrow.”<sup>4</sup> Therefore, we encourage NTIA to help build for tomorrow.

Building with this long-term vision will require alignment with the broadband work of other federal agencies. It also requires recognition of the complex nature of the digital divide and coordination with stakeholders—such as Tribes, community based organizations, and individuals on the wrong side of the digital divide—from the early stages of planning through the end of implementation.

To successfully implement the Broadband Equity, Access and Deployment (BEAD) program, NITA must prioritize building future-proof, open access, and municipal networks, and ensure those networks are built with high-quality jobs and adherence to net neutrality principles. It must also require that networks built with BEAD funds are reliable day-to-day, and resilient in the face of disasters and emergencies. Any funds used to build networks deployed in a discriminatory manner (built to provide high-speed networks in areas with higher incomes, while leaving lower income and minority areas with older legacy networks) should be clawed back and given to entities that will build with equity in mind. Moreover, NTIA should recognize that commitments to deploy broadband are not always kept, and so should be flexible in allowing funds to be used in areas with incomplete buildout requirements.

Universal connectivity is not just a problem of availability. It is also a problem of affordability, a lack of connected devices, and the lack of skills needed to use those devices and the internet. To ensure that broadband is affordable to all, NTIA must make the low-cost option broadly available and aligned with the Federal Communications Commission's (FCC) Affordable Connectivity program (ACP). It must also allow and promote the use of BEAD and digital equity funds for device voucher programs, digital literacy initiatives, and state digital equity offices. Combined, these actions will significantly narrow the digital divide for years to come.

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<sup>4</sup> Video, *Biden: High Speed Internet is Infrastructure*, CNN Politics <https://www.cnn.com/videos/politics/2021/04/07/joe-biden-infrastructure-plan-sot-vpx.cnn> (last accessed Feb. 4, 2022).

## **II. NTIA SHOULD ENGAGE IN FREQUENT AND SUSTAINED COORDINATION WITH BROADBAND STAKEHOLDERS**

Closing the digital divide will take working with a multitude of stakeholders to develop flexible programs because it will not be a one-size-fits-all proposition. To do it effectively and sustainably will require coordinating and engaging with a wide variety of stakeholders including other government agencies, Tribes, community-based organizations and individuals on the wrong side of the digital divide. This communication will shed light upon a community's particular barriers to connectivity, available resources, and best practices for closing the digital divide that will ensure that IJA implementation runs smoothly at every stage.

### **A. NTIA Should Align Priorities and Rules With Other Federal Agencies**

Numerous agencies besides NTIA are involved in efforts to close the digital divide. The Federal Communications Commission (FCC) is awarding \$20.4 billion through the FCC's Rural Digital Opportunity Fund to deploy broadband infrastructure in unserved areas.<sup>5</sup> The FCC also supports broadband deployment and adoption through other FCC programs like E-Rate, Lifeline, and the Affordable Connectivity Fund. Similarly, the U.S. Department of Agriculture's ReConnect Program is distributing more than \$1 billion to secure broadband access in rural, Tribal, and socially vulnerable communities. Moreover, the Department of Treasury is enabling states to use the \$10 billion in its Capital Projects Fund for broadband infrastructure and digital connectivity projects.<sup>6</sup>

To avoid confusion, and to ensure that the administration speaks with one voice and makes government dollars go further, NTIA should coordinate with any other agencies working to close the

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<sup>5</sup> *Implementing the Rural Digital Opportunity Fund (RDOF) Auction*, Federal Communications Commission, <https://www.fcc.gov/implementing-rural-digital-opportunity-fund-rdof-auction> (last accessed Feb. 4, 2022).

<sup>6</sup> See *What is the Rural Development Broadband ReConnect Program*, US Department of Agriculture, <https://www.usda.gov/reconnect> (last accessed Feb. 4, 2022); *Guidance for the Coronavirus Capital Projects Fund for States, Territories and Freely Associated States*, U.S. Department of Treasury at 4 (Sept. 2021), <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund>.

digital divide, and align programmatic requirements and practices whenever possible. In fact, Congress has strongly encouraged this type of coordination noting that “Federal agencies responsible for supporting broadband deployment, including the Commission... should align the goals, application and reporting processes, and project requirements.”<sup>7</sup> Throughout this comment we will note ways that NTIA can align its IJA projects with other government agency projects, including building future proof networks, promoting net neutrality and aligning broadband pricing with existing subsidies.

## **B. NTIA Must Promote and Enforce Coordination and Consultation with Tribal Communities**

Past programs aimed at closing the digital divide have failed to serve the needs of Tribal communities. Even in instances where consultation with Tribal governments and representative organizations are mandated—such as with FirstNet<sup>8</sup>—lack of accountability and dedicated coordination resources has resulted in programs that have repeatedly fallen short in respect for, and consultation with, Tribal communities.

Yet, the need for robust investment in these communities remains as important as ever. In fact, NTIA has already found that the need for broadband in Indian Country far exceeds what Congress appropriated directly for those regions. Tribes presented over \$5 billion in applications for the \$980 million allocated to the Tribal Broadband Connectivity Program (TCBP).<sup>9</sup> And these figures represent applications from only half of federally-recognized Tribes. This will make BEAD an important component of closing the digital divide in Indian Country. However, to effectively use BEAD, Tribes will need to be able to receive funds from states.

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<sup>7</sup> 47 USC 1702 Sec. 60102(m)

<sup>8</sup> Jacuqe Waring, Tribal Consultation Policy, FirstNet Authority, <https://firstnet.gov/public-safety/firstnet-for-tribal-nations> (last accessed Feb 4, 2022).

<sup>9</sup> Press Release, NTIA, NTIA’s Tribal Broadband Connectivity Program Receives More Than 280 Applications, Over \$5 Billion in Funding Requests (Sept. 8, 2021), <https://www.ntia.doc.gov/press-release/2021/ntia-s-tribal-broadband-connectivity-program-receives-more-280-applications-over>.

Although Tribes are prioritized as unserved areas, they still must compete against other unserved areas within a state. Historically, Tribes have had difficulty competing against localities for broadband deployment dollars, in part because they do not have comparable access to banking resources or the consultants needed to compete in those programs. To overcome these systemic challenges, and avoid the same pitfalls as past efforts, Tribal governments and/or representative organizations must be engaged during the earliest planning stages of any project or policy that may affect their communities or land. By working with tribal communities early on, non-tribal entities may be able to form mutually beneficial and lasting relationships. Furthermore, tribal governments will be empowered to play an active role in the projects and policies that impact their communities.

For its part, NTIA must invest in these relationships early on with dedicated resources. NTIA should hire tribal representatives to serve as liaisons with the states, Tribes, and localities implementing the IJA. These representatives can assist communities in navigating the applications for funding, enhance their participation in policy processes, and serve as a resource for tribal communities looking for vendors and potential partners.

Moreover, NTIA should enforce state coordination with Tribes to prevent repeats of the problems that have plagued past programs. For example, NTIA could require states to submit letters from Tribes confirming coordination along with their 5-year Broadband Action plan. NTIA should also require states to submit annual letters from Tribes confirming that coordination has continued in an acceptable manner. If Tribes do not feel appropriately consulted, NTIA should set up a reporting mechanism, and consider clawing back funds if complaints are not adequately remedied. Prioritizing consultation, without mechanisms for accountability, risks allowing states and service providers to fall back into the same patterns that have aggravated the continuing digital divide in Indian Country.

### **C. NTIA Should Encourage Coordination Between BEAD and Digital Equity Planning and Implementation**

NTIA should strongly encourage states to coordinate between their 5-year Broadband Action plan and their State Digital Equity plan because the components of both plans are necessary to narrow the digital divide. To encourage coordination, NTIA can suggest that the teams working on the 5-year Broadband Action plan and the State Digital Equity plan have members in common, or at least consult frequently throughout planning and implementation. NTIA could also develop optional templates, models, and standard benchmarks to make connected planning between Broadband and Digital Equity simple for states.

As discussed further below, stakeholder engagement is critical to ensuring the success of IJA programs and coordination between the Broadband and Digital Equity planning teams will enhance their ability to harness community and stakeholder feedback. For instance, information gathered from stakeholders that may impact the Digital Equity plan, uncovered during BEAD stakeholder engagement, should be shared with the Digital Equity planning team. Ensuring overlap and coordination between both teams will simplify this process and also reduce the burden and confusion on community stakeholders, especially should the states interface directly with residents through surveys, focus groups, or town halls during the planning processes. Given the interconnected nature of broadband availability and broadband adoption, when asked about broadband, information about a lack of access to their household or neighborhood is as likely to be discussed as a household's inability to adopt the service because of adoption barriers. Collecting all the experiences of the disconnected at once will robustly inform each plan, and lighten the burden placed on residents engaging in the planning process.

NTIA should also encourage states to design their efforts to complement other state and federal broadband initiatives (including any state funding, the USDA's Reconnect Program, the FCC's Rural Digital Opportunity Fund and Affordable Connectivity Fund).<sup>10</sup>

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<sup>10</sup> For example, California has allocated 6 billion dollars to establish middle-mile and last mile networks. *See* SB 156, Chap. 112 (July 20, 2021) (allocating \$3.25 billion for the construction of a state-owned open-access middle mile broadband network).

#### **D. NTIA Should Encourage Coordination with Individuals Impacted by the Digital Divide and Community-Based Organizations**

Individuals impacted by the digital divide, and the community organizations that work with them, are best positioned to understand what is needed to close the digital divide. Their engagement from the beginning is critical for ensuring the success of IJJA programs.

To promote engagement, NTIA should encourage states to add members of the public without access to the internet and community-based organization representatives working with these populations to the planning teams for both the 5-year Broadband Equity plan and the Digital Equity plan. Bringing these experiences into the planning process will provide a unique and invaluable viewpoint. Additionally, NTIA should encourage states to host focus groups and large public stakeholder sessions. NTIA and states could also attend established community meetings – such as those led by federal advocacy groups, and those organized by state and local community organizations. Finally, NTIA should require the annual reevaluation of state broadband and digital equity plans, in consultation with stakeholders, so that states can fix any problems with their rollouts in a timely fashion, using on-the ground knowledge of the situation.

### **III. NTIA SHOULD PRIORITIZE HIGH QUALITY, AFFORDABLE AND OPEN NETWORKS**

Congress has required states to prioritize projects that are located in persistent or high poverty areas, which offer faster speeds, or are completed more quickly.<sup>11</sup> However, Congress also authorized the NTIA to provide additional guidance on how the states should prioritize deployment projects.<sup>12</sup> Questions thirteen, fourteen and fifteen ask how NTIA can use BEAD funds to meet consumer needs, provide quality affordable service, and optimize public benefit. NTIA can promote these goals by requiring states to prioritize future proof networks, open access networks, municipal networks, and networks adhering to

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<sup>11</sup> 47 USC 1702 Sec. 60102(h)(1)(A)(i)

<sup>12</sup> See 47 USC 1702 Sec. 60102(a)(I) and (h)(1)(B)

net neutrality principles. The IIA clearly envisions a strong role for states, so these criteria should be treated as floors for state action, instead of caps.

### **A. NTIA Should Prioritize Future Proof, Scalable and Symmetrical Networks**

Modern household needs will quickly outpace networks that are built to the minimum speed Congress mandated in BEAD—100/20 Mbps. Therefore, NTIA must prioritize symmetrical future-proof networks—of which fiber is one type. Otherwise, our nation will need to invest billions of dollars more in the near future to upgrade networks to meet household needs.

During a typical day, a family of four could have two children streaming online classes, while one parent joins a video conference and the other attends a telehealth appointment, while a Nest doorbell camera and Amazon Alexa run in the background. The FCC has noted 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.<sup>13</sup>

Furthermore, demand for broadband service speeds is only increasing. According to a report by the Fiber Broadband Association, households of four will need 2,141/2,044 Mbps by 2030.<sup>14</sup> Additionally, there will be a sevenfold growth in telehealth by 2025, which relies on high-speed connectivity.<sup>15</sup> Remote work – another high bandwidth activity – will also be the norm moving forward. A recent survey of HR leaders shows that 77 percent expect more employees to work remotely, even a year after COVID-19 has largely subsided.<sup>16</sup> These applications require significant download and upload capabilities as users are not just passive recipients of information, but instead are active participants. Our broadband networks must reflect that reality. This illustrates that the Congressionally mandated minimum of 100/20 Mbps will

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<sup>13</sup> *Household Broadband Guide*, Federal Communications Commission (last updated Feb. 5, 2020), <https://www.fcc.gov/research-reports/guides/household-broadband-guide>.

<sup>14</sup> *Press Release: New FBA Research Reveals Fiber Can Close the Rural Digital Divide*, Fiber Broadband Association (June 21, 2021), <https://www.fiberbroadband.org/blog/new-fba-research-reveals-fiber-can-close-the-rural-digital-divide>.

<sup>15</sup> 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>.

<sup>16</sup> The Conference Board, *From Immediate Responses to Planning for the Reimagined Workplace*, 8 (2020), <https://conference-board.org/pdfdownload.cfm?masterProductID=20874>.

barely meet some households speed needs today, let alone in the future. Instead, NTIA should set a floor, not a ceiling, requiring states to build networks that will offer future proof and symmetrical speeds.

### 1. *NTIA Should Require Networks to Offer Future Proof Symmetrical Speeds*

Future proof speeds will enable households to simultaneously connect now and in the future. These speeds should be symmetrical because many common activities require high upload speeds. According to OpenVault, upstream broadband traffic increased 63% between December 2019-December 2020.<sup>17</sup> Upstream traffic during the workday saw a 98.5% increase as more people began to work from home during the pandemic.<sup>18</sup> According to the Electronic Frontier Foundation analysis, if this rate of upload speed growth continues, upload demand will exceed 100 Mbps by 2026.<sup>19</sup>

The other agencies that administer broadband deployment funds require grantees to build out to future proof symmetrical speeds. For example, the U.S. Department of Agriculture requires that networks funded through its program be built to provide speeds of 100/100 Mbps.<sup>20</sup> Likewise, the U.S. Department of Treasury requires that networks funded through the Capital Projects Fund offer at least 100/100 Mbps.<sup>21</sup>

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<sup>17</sup> Dan O'Shea, *Pandemic Drove Upstream Broadband Traffic Boom: OpenVault*, Fierce Telecom (Apr. 1, 2021), <https://www.fiercetelecom.com/telecom/pandemic-drove-upstream-broadband-traffic-boom-openvault>.

<sup>18</sup> Dan O'Shea, *Pandemic Drove Upstream Broadband Traffic Boom: OpenVault*, Fierce Telecom (Apr. 1, 2021), <https://www.fiercetelecom.com/telecom/pandemic-drove-upstream-broadband-traffic-boom-openvault>.

<sup>19</sup> Ernesto Falcon and Katharine Trendacosta, *The Future Is in Symmetrical, High-Speed Internet Speeds* (July 2, 2021), <https://www.eff.org/deeplinks/2021/07/future-symmetrical-high-speed-internet-speeds>.

<sup>20</sup> Greg Guice, *USDA Seeks to Truly Help Bring Robust, Affordable Broadband to Tribal and Rural Communities*, Public Knowledge (Nov. 4, 2021), <https://publicknowledge.org/usda-seeks-to-truly-help-bring-robust-affordable-broadband-to-tribal-and-rural-communities/>.

<sup>21</sup> Capital Projects Fund, U.S Department of Treasury, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund> (last accessed Feb. 4, 2022).

## 2. NTIA Should Require Networks to be Scalable

Generally, public funds should strive to build networks that are scalable.<sup>22</sup> Scalable networks are designed to accommodate future demand for interconnections and new uses for data services. In a report discussing best practices for state broadband grant programs, the authors observed that successful programs consider current uses and future needs, and that funded infrastructure “should be capable of upgrades to higher speeds at reasonable cost, rather than requiring full redeployment.”<sup>23</sup> The report further notes that these programs “have used a range of technology-neutral selection mechanisms to either favor the fastest broadband technologies or eliminate technologies that cannot meet minimum criteria” and to prioritize “faster, scalable technologies.”<sup>24</sup>

In light of the speed of technological evolution, broadband services and the networks that support them will likely be used for purposes that are not even imagined today, and those needs will vary based upon area and infrastructure. Federal projects with a narrow vision of future needs would be a wasted opportunity.

### **B. Consistent with E.O. 14036, NTIA Should Prioritize Open Access Networks**

Creating a competitive broadband marketplace is essential for making broadband affordable. When new providers enter a region, consumers can access better and more affordable broadband options.<sup>25</sup> For example, AT&T customers with gigabit connections in areas without competitive providers

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<sup>22</sup> Scalability can be described as a network that can grow without losing availability and reliability. *See, e.g.*, Cisco’s definition of scalability, *Scalable Networks*, CCNA, (last accessed Feb 4, 2022), <https://ccna-200-301.online/scalable-networks/>.

<sup>23</sup> *Putting State Broadband Funds to Work: Best Practices in State Rural Broadband Grant Programs*, Ryland Sherman, Joanne Hovis and Jacob Levin, Broadband Equity Partnership- CTC Technology & Energy and HR&A Advisors, Published by the Benton Institute for Broadband & Society, June 2021, at p. 15.

<sup>24</sup> *Putting State Broadband Funds to Work: Best Practices in State Rural Broadband Grant Programs*, Ryland Sherman, Joanne Hovis and Jacob Levin, Broadband Equity Partnership- CTC Technology & Energy and HR&A Advisors, Published by the Benton Institute for Broadband & Society, June 2021, at p. 14.

<sup>25</sup> Jonathan Sallet, *Broadband for America’s Future: A Vision for the 2020s* at 49-50, Benton Institute for Broadband & Society (Oct. 2019), [https://www.benton.org/sites/default/files/BBA\\_full\\_F5\\_10.30.pdf](https://www.benton.org/sites/default/files/BBA_full_F5_10.30.pdf).

can pay up to \$60 more a month than those in areas with competition.<sup>26</sup> Unfortunately, the majority of the country doesn't have access to enough providers to reap the benefits of competition. More than 20% of households have a monopoly provider, and 44% of households have just two providers to choose from.<sup>27</sup>

On July 9, 2021, President Biden issued Executive Order 14036 to promote a “whole of government” approach to enhancing competition.<sup>28</sup> The E.O. singles out the broadband industry as an industry in need of policies to promote competition.<sup>29</sup> Although the E.O. does not reference the IJJA program (which did not exist at the time), the E.O. directs all agencies to use their authority to “[adopt] pro-competitive regulations and approaches to procurement and spending.”<sup>30</sup> Since the IJJA imposes significant limits on NTIA’s ability to subsidize competing networks directly, NTIA should weigh applications that encourage competition by building open access networks.

Open access networks are built and owned by one entity (often local governments, but sometimes private companies) and leased out to service providers who offer broadband service products to consumers. They create a competitive and more affordable marketplace for broadband service without adding significantly to the cost of broadband deployment. They also reduce the barriers to entry for providers hoping to serve an area, since they do not need to build their own broadband network.

Areas with open access broadband networks have seen significant reductions in price or improvement in service quality. For example, the municipally owned open access network launched in Ammon, Idaho, “reduced the cost of a 1 Gbps connection available via one of the ISPs from \$99 a month... to \$9.99 a month.”<sup>31</sup> In Utah, the Utopia fiber open access network is currently offering

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<sup>26</sup> Karl Bode, Harvard Study Shows Why Big Telecom Is Terrified of Community-Run Broadband, Vice (January 12, 2018), [https://www.vice.com/en\\_us/article/d345pv/harvard-study-shows-why-big-telecom-is-terrified-ofcommunity-run-broadband](https://www.vice.com/en_us/article/d345pv/harvard-study-shows-why-big-telecom-is-terrified-ofcommunity-run-broadband).

<sup>27</sup> Federal Communications Commission, *2020 Communications Marketplace Report* at 87, GN Docket No. 20-60 (Dec. 31, 2020), <https://docs.fcc.gov/public/attachments/FCC-20-188A1.pdf>.

<sup>28</sup> Executive Order 14036, *Promoting Competition in the American Economy*, (July 9, 2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/>.

<sup>29</sup> *Id.* Section 5(l).

<sup>30</sup> *Id.* Section 2(g).

<sup>31</sup> Jay Woodruff, *The City with the Best Fiber-Optic Network in America Might Surprise You*, FastCompany (Oct. 21, 2019), <https://www.fastcompany.com/90416863/the-city-with-the-best-fiber-optic-network-in-america-mightsurprise-you>.

consumers the choice of 16 providers.<sup>32</sup> Utopia customers report significant improvements in customer service. For example, one Google review from a former Comcast customer noted that they no longer have “twenty five minute waits on hold, no maze of robots leading you in circles, just a ring or two followed by a real human ready to help. And of course the best part of all, an affordable price!”<sup>33</sup>

### C. NTIA Should Prioritize Municipal and Cooperative Networks

Bigger is not always better. The large incumbent internet service providers have been building and deploying their networks for years. They have received billions of dollars in deployment funding over the past decade from multiple federal and state agencies, and yet many communities remain disconnected. Municipal broadband networks, on the other hand, have repeatedly succeeded in delivering affordable and high-quality service to their communities. The industry giants do not serve areas without the promise of sustained profitability over time—even when subsidized by federal deployment funding—so NTIA should prioritize supporting community and municipal broadband deployment projects instead.

Municipal networks are also shown to reduce the cost of broadband and offer faster speeds. In Fort Collins, CO, the municipal network offers a 1,000 Mbps plan for \$40 less than the same speed plan offered by Comcast.<sup>34</sup> Likewise, the municipal network in Chattanooga, Tennessee offers significantly faster service than its incumbent rivals at half the price.<sup>35</sup> According to the Open Technology Institute, cities with municipal networks advertise average download speeds of 712.88 and upload speeds of 675.40, as compared to download speeds of 393.59 and upload speeds of 236.83 in cities without a municipal network.<sup>36</sup> Additionally, municipal networks can drive economic growth. According to a 10-year study, Chattanooga Tennessee’s fiber system has created over \$2.69 billion in economic activity

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<sup>32</sup> Utopia Fiber, Residential Pricing, <https://www.utopiafiber.com/residential-pricing/> (last visited Feb. 2, 2022).

<sup>33</sup> See *Google Review for Utopia Fiber from Ethan Carter* (Jan 2022).

<sup>34</sup> Becky Chao & Claire Park, *The Cost of Connectivity 2020* (Jul. 15, 2020), New America, <https://www.newamerica.org/oti/reports/cost-connectivity-2020/focus-on-the-united-states>.

<sup>35</sup> P.E. Moskowitz, *Chattanooga Was a Typical Postindustrial City. Then It Began Offering Municipal Broadband*, *The Nation* (June 3, 2016), <https://www.thenation.com/article/archive/chattanooga-was-a-typical-post-industrial-city-then-it-began-offering-municipal-broadband/>

<sup>36</sup> Becky Chao & Claire Park, *The Cost of Connectivity 2020* (Jul. 15, 2020), New America, <https://www.newamerica.org/oti/reports/cost-connectivity-2020/focus-on-the-united-states>.

by luring new businesses to the area, and accounts for about 40% of all jobs created in the county.<sup>37</sup> All factors combined, municipal networks are a key factor for closing the digital divide and improving the viability of their communities.

#### **D. NTIA Should Prioritize Providers Offering High-Quality Jobs for Skilled Workers**

As noted in question 11, “one objective of the Bipartisan Infrastructure Law is to ensure American workers have access to high quality jobs, especially those who were impacted the most by the pandemic, including women and people of color.” To further this goal, NTIA can ensure that employers are held accountable for upholding labor laws and regulations by creating a priority for subgrantees that use a directly employed workforce and/or ensure the accountability for good working conditions. NTIA can also improve safety on the job by prioritizing employers using a well-trained and qualified workforce.

NTIA can require eligible entities to collect data on job quality, workforce, and subcontracting as part of proposals from subgrantees. Subcontracting by subgrantees can create poor work conditions. Requiring transparency around subcontracting and work conditions, and shared subgrantees can occasionally evade rules around working conditions that direct employers cannot avoid. However, subgrantees who sign contracts claiming liability for violations of labor laws and regulations can ensure that all subcontracted employees are treated as well as full employees. All told this will ensure that those working to build BEAD networks have high quality jobs.

Moreover, some subcontractors cut corners and fail to adequately train and invest in their workers in order to cut costs or use unqualified workers who cut corners—creating unsustainable networks and potentially dangerous conditions.<sup>38</sup> By prioritizing entities that can demonstrate they are using a trained

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<sup>37</sup> Bento Lobo, *Ten Years of Fiber Optic and Smart Grid Infrastructure in Hamilton County, Tennessee* (Aug. 31, 2020), [https://assets.epb.com/media/Lobo%20-%20Ten%20Years%20of%20Fiber%20Infrastructure%20in%20Hamilton%20County%20TN\\_Published.pdf](https://assets.epb.com/media/Lobo%20-%20Ten%20Years%20of%20Fiber%20Infrastructure%20in%20Hamilton%20County%20TN_Published.pdf).

<sup>38</sup> See Communications Workers of America, *AT&T's Web of Subcontractors: Building Next-Generation Networks with Low-Wage Labor*, [www.cwa-union.org/AT&TContractors](http://www.cwa-union.org/AT&TContractors).

workforce that can carry out work safely and effectively, NTIA can ensure worker safety and the longevity of the networks built with IJJA funding. Some indicators of high-quality training include in-house training programs with hands-on training and classroom instruction, certifications like OSHA 10 and OSHA 30, uniform wage scales, and wage progressions showing that employees are building their skills.

#### **E. NTIA Should Prioritize Networks Adhering to Net Neutrality Principles**

NTIA should create a priority for networks which promise to adhere to net neutrality principles. These principles require ISPs to treat all internet traffic the same by not blocking, throttling, or offering paid prioritization of certain websites. This would align with the USDA ReConnect program—which is awarding applicants program priority points for committing to net neutrality.<sup>39</sup>

Adhering to net neutrality is key for ensuring that consumers can connect to all facets of modern society—the very reason Congress and the administration have sought to achieve universal connectivity. Absent net neutrality protections, ISPs can force consumers to use one service over another, or simply block a website all together. In fact, there are numerous examples of ISPs prioritizing their own services, or throttling speeds to a crawl in order to charge consumers more. For example, Verizon throttled first responder's data plans after they exceeded 25GB of data (despite having purchased an unlimited plan) during the California wildfires.<sup>40</sup> Likewise, CenturyLink decided to block all internet access for customers in Utah until they acknowledged an advertisement for filtering software.<sup>41</sup> These types of practices can prevent consumers from meaningfully engaging online, and are in direct conflict with the goals of IJJA.

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<sup>39</sup> Rural E-connectivity Program, 86 FR 58860 (Oct 25, 2021),

<https://www.federalregister.gov/documents/2021/10/25/2021-23128/rural-econnectivity-program>.

<sup>40</sup> Colin Leccher, *Verizon Throttled California Fire Department During Wildfire Crisis*, The Verge (Aug. 21, 2018), <https://www.theverge.com/2018/8/21/17765682/verizon-california-throttled-wildfires>; See, also, Brief for Govt. Petitioners at 23-24 & n. 13, *Mozilla Corp. v. FCC*, No. 18-1051 (D.C. Cir. Aug. 20, 2018). See also, Addendum to Brief for Government Petitioners, Declaration of Anthony Bowden (August 17, 2018) at paras. 5, 9.

<sup>41</sup> Jon Brodtkin, *CenturyLink Blocked Its Customers' Internet Access In Order to Show an Ad*, ArsTechnica (Dec. 17, 2018), [https://arstechnica.com/tech-policy/2018/12/centurylink-blocks-internet-access-falsely-claims-state-law-required-it/?mc\\_cid=241c935dca&mc\\_eid=771aa08db7](https://arstechnica.com/tech-policy/2018/12/centurylink-blocks-internet-access-falsely-claims-state-law-required-it/?mc_cid=241c935dca&mc_eid=771aa08db7).

#### **IV. NTIA MUST ENSURE THAT BEAD FUNDS ARE USED TO DEPLOY RELIABLE AND RESILIENT NETWORKS**

It is imperative to both consumers and businesses that their broadband networks work all the time. In fact, lives can depend on the ability to access public safety information online, navigate road closures, and communicate with loved ones and first responders. However, our nation's networks are growing increasingly fragile – due to frequent natural disasters, targeted attacks, carrier neglect, or simple mistakes. For example, it took nearly a year after Hurricane Maria for Puerto Ricans to have internet speed approaching pre-storm levels,<sup>42</sup> and in 2020, there was a multi-state blackout of T-Mobile's network because of a server failure in Georgia.<sup>43</sup>

Congress has required that broadband networks built with BEAD funding to be reliable and resilient. To this end, Congress gave the NTIA the explicit authority to prescribe mandatory best practices to meet this goal.<sup>44</sup> But this work is not required in a vacuum, in 2021 the FCC released a Notice of Proposed Rulemaking seeking comment on ways to improve the reliability and resiliency of networks during emergencies.<sup>45</sup> Once these FCC rules are final, they will go a long way towards improving the reliability and resiliency of our networks. However, until those rules are final, NTIA can fill-in the gaps by requiring BEAD fund recipients to have on-site backup power, to participate in the FCC's data collections about network resiliency and to coordinate with relevant stakeholders. This approach is a practical way for NTIA to ensure that BEAD funded projects further the congressional goal of reliable and resilient broadband networks.

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<sup>42</sup> Nick Thieme, *After Hurricane Maria, Puerto Rico's Internet Problems Go From Bad to Worse*, NOVA (Oct. 23, 2018), <https://www.pbs.org/wgbh/nova/article/puerto-rico-hurricane-maria-internet/>.

<sup>43</sup> Jon Brodtkin, *T-Mobile Screwups Cause Nationwide Outage, but FCC isn't Punishing Carrier*, ArsTechnica, Oct. 23, 2020,

<https://arstechnica.com/tech-policy/2020/10/fcc-not-punishing-t-mobile-for-outage-that-ajit-pai-called-unacceptable>.

<sup>44</sup> Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. at § 60102 (g)(1)(C) (2021).

<sup>45</sup> See Federal Communications Commission, Notice of Proposed Rulemaking in the Matter of Resilient Networks; PS Docket No. 21-346 (Oct 1, 2021),

<https://www.fcc.gov/document/fcc-acts-improve-communications-reliability-during-disasters-0>.

### A. NTIA Should Require that Providers to Have On-Site Backup Power

Broadband networks need power to run, as do consumer devices like mobile phones and computers. Thus, power outages prevent people from connecting when they need to most. Unfortunately, most providers do not invest in backup power at every site, including the sites needed for broadband or other services to function in natural disasters. For example, in California, 77% of cell sites operate without backup generators.<sup>46</sup> When there is no fixed backup power at a site, the carriers may deploy portable generators to provide backup power.<sup>47</sup> However, portable generators do not prevent service outages. After Hurricane Maria, AT&T had to fly in portable generators to Puerto Rico—leaving residents without service in the interim during a record-breaking natural disaster.<sup>48</sup> In other cases, downed trees or fires can make it difficult or impossible to get the portable generators where they need to go, leaving networks down and service interrupted for consumers and businesses until communications staff can safely transport and install backup generators. This exercise is further complicated when the portable generators need to sustain communications service for days, weeks, or even months. Portable generators must be fueled to provide power so extended periods of relying upon portable generators require additional logistics to transport fuel to operate the portable generators. In these situations, the lack of fixed backup power planning or investment can turn into extended detrimental consequences for both consumers and businesses.

To ensure that networks built with BEAD money work when we need them, NTIA should require providers to offer on-site backup power for all components of the network. According to the Government Accountability Office, the median duration for wireless outages attributed to power failure is 13-26 hours, and the median duration of outages attributed to natural disasters ranged from 19-36 hours.<sup>49</sup> However,

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<sup>46</sup> Proposed Decision of Commissioner Batjer, Decision Adopting Wireless Provider Resiliency Strategies, Rulemaking 18-03-011 at 82 (June 11 2020), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M343/K633/343633733.PDF>.

<sup>47</sup> Adam Beam, *California Lawmakers Eye Back-Up Power for Cellphone Towers*, NBC Bay Area (Jan. 8, 2020), <https://www.nbcbayarea.com/news/local/california-could-mandate-backup-power-at-cell-phone-towers/2212284/>.

<sup>48</sup> Joan Marsh, *The Tale of Three Storms*, AT&T Public Policy (Sept. 28, 2017), <https://www.attpublicpolicy.com/public-safety/the-tale-of-three-storms/>.

<sup>49</sup> *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, Government Accountability Office at 14 (December 2017), <https://www.gao.gov/assets/gao-18-198.pdf>.

our networks should be prepared to last for longer outages, especially in areas prone to natural disasters. It is simply too important to leave networks vulnerable to natural or other disasters despite the public safety implications if the networks are not equipped with backup power. Thus, NTIA should require that critical infrastructure elements like the central office, wire center or network nodes, should have at least seven days of on-site backup power. Other parts of the network, like cell towers, should have at least 72 hours of on-site backup power, as California has already mandated.<sup>50</sup> NTIA should encourage entities offering consumers devices with IJJA funds to offer a source of backup power for free, or for purchase so that consumers can charge their devices even if the power is out.

## **B. NTIA Should Require Subgrantees to Participate in the Disaster Information Reporting System and the Network Outage Reporting System**

Data about network performance and outages is critical for getting through a current outage and preventing a future outage. The FCC has two databases that collect outage information. The first system, the Disaster Information Reporting System (DIRS) is a voluntary collection of information from many types of providers about outages, and is only used during disasters. The second system, the Network Outage Reporting System (NORS) is a mandatory collection of information about outages lasting for more than 30 minutes. However, NORS just covers some types of providers (legacy and mobile voice, and Voice over IP) but does not cover broadband or broadcast providers. Public Knowledge has suggested in comments to the FCC that it combine these networks, and make reporting into both mandatory for all providers.<sup>51</sup> Until that happens, we urge NTIA to ensure that BEAD recipients report information about their outages into both NORS and DIRS, so that we know how networks perform during disasters, and on sunny days when disasters are not the obvious cause of the problem.

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<sup>50</sup> For example, the California Public Utilities Commission requires certain wireline providers, among others, to have 72-hours of backup power. *See* Order Instituting Rulemaking Regarding Emergency Disaster Relief Program. R. 18-03-011, D. 21-02-029 (2021), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M366/K625/366625041.PDF>; Danielle Echeverria, *Fearing Fire Season Blackhouse, California Regulators Require Cell Towers to Add Backup Power*, San Francisco Chronicle (Jul. 16, 2020), <https://www.sfchronicle.com/california-wildfires/article/Fearing-fire-season-blackouts-California-15413495.php>.

<sup>51</sup> Comments of Public Knowledge, In the Matter of Resilient Networks, PS Docket No 21-346 (Dec. 16, 2021).

### **C. NTIA Should Require Subgrantees to Coordinate with First Responders, Utilities, and Agencies to Mitigate Outages**

Many entities are involved in responding to disasters, including first responders, utility companies, and local/state/federal agencies. Coordination between these various entities is key to keeping networks up and running. In the past, a lack of coordination has led to extended outages. For example, the Public Safety and Homeland Security Bureau of the FCC found that poor service after Hurricane Michael can be attributed in part to “a lack of coordination and cooperation between certain wireless providers on the one hand and utilities and debris clearance crews on the other.”<sup>52</sup> This failure to communicate prolonged repairs that could restore service.

The FCC and Congress are both considering rules to ensure coordination during disasters.<sup>53</sup> However, until this happens, NTIA can encourage BEAD recipients to engage in best practices for coordination. These best practices include: (1) designating a point person to handle communication about outages; (2) coordinating with power companies and first responders to understand the damage and when things may return to normal; (3) working with various agencies to gain access to off-limits areas to fix broadband infrastructure; (4) and developing an action plan beforehand that can work during all outages, and not just those caused by disasters.

### **V. NTIA SHOULD CLAW BACK FUNDS VIOLATING DIGITAL DISCRIMINATION RULES**

As Secretary of Commerce Gina Raimondo has said, “if we want to build a strong economy where everyone can prosper, we need to ensure no one is left behind and achieve full digital equity in America.”<sup>54</sup> Unfortunately, many low-income or majority minority communities have access to slower or

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<sup>52</sup> October 2018 Hurricane Michael’s Impact on Communications: Preparation, Effect, and Recovery, Report and Recommendations, PS Docket No. 18-339 ¶ 5 (PSHSB 2019).

<sup>53</sup> See Federal Communications Commission, Notice of Proposed Rulemaking in the Matter of Resilient Networks; PS Docket No. 21-346 at 9 (Oct 1, 2021), <https://www.fcc.gov/document/fcc-acts-improve-communications-reliability-during-disasters-0>; RESILIENT Networks Act, H.R. 5926, 116th Congress (2020).

<sup>54</sup> Gina Raimondo, *Broadband Will Help Correct Inequities Native Americans and Underserved Communities Face*, The Arizona Republic (July 27, 2021),

more expensive internet than more wealthy or more white areas.<sup>55</sup> In the IJIA, Congress directed the FCC to develop rules prohibiting “digital discrimination” (another term for digital redlining) in order to ensure that no one in the country is left behind. These rules will likely require providers to offer comparable service to their entire service area. Should the FCC find any provider taking BEAD funds to have violated these rules, NTIA must claw back those funds. We should not be using federal money to build networks whose deployment is done in a discriminatory manner. If the funds are clawed back, they can be given to another provider who will build with equity in mind.

## **VI. NTIA MUST NOT PROHIBIT FUNDING DEPLOYMENT IN AREAS WITH INCOMPLETE BUILDOUT REQUIREMENTS**

In question sixteen, NTIA asks how it should treat areas with incomplete prior buildout commitments. Existing broadband maps are widely disdained because they prevent areas with no broadband from receiving federal funding by falsely claiming the area has service. Areas could face this same problem again if NTIA is not flexible. We urge NTIA to not automatically make areas with existing funding commitments ineligible for funds. There are numerous examples of ISPs who did not meet their buildout requirements. For example, Frontier and CenturyLink both failed to meet deadlines to deploy 10/1 service funded through the Connect America Fund Phase II grants. CenturyLink failed to meet obligations across 23 states, and Frontier failed to meet obligations across 17 states.<sup>56</sup> Likewise, New

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<https://www.azcentral.com/story/opinion/op-ed/2021/07/27/everyone-benefits-broadband-investment-especially-rural-areas/8078139002/>.

<sup>55</sup>See, for example, Greenlining Institute, *On the Wrong Side of the Digital Divide* (June 2020)

<https://greenlining.org/publications/online-resources/2020/on-the-wrong-side-of-the-digital-divide/>;

Communications Workers of America and National Digital Inclusion Alliance, *AT&T’s Digital Redlining: Leaving Communities Behind for Profit* (October 2020)

[https://www.digitalinclusion.org/wp-content/uploads/dlm\\_uploads/2020/10/ATTs-Digital-Redlining-Leaving-Communities-Behind-for-Profit.pdf](https://www.digitalinclusion.org/wp-content/uploads/dlm_uploads/2020/10/ATTs-Digital-Redlining-Leaving-Communities-Behind-for-Profit.pdf); Hernan Galperin, et al. USC Annenberg Research Network for International Communication and the USC Price Spatial Analysis Lab, *Who Gets Access to Fast Broadband? Evidence from Los Angeles County 2014-17* (September 2019)

<http://arnicusc.org/wp-content/uploads/2019/10/Policy-Brief-4-final.pdf>; Since this writing, Dr. Galperin has since published an updated version of the 2019 publication. See Hernan Galperin, et al., “Who gets access to fast broadband? Evidence from Los Angeles County, *Government Information Quarterly*, (July 2021)

<https://www.sciencedirect.com/science/article/abs/pii/S0740624X21000307>.

<sup>56</sup> Jon Brodtkin, *Frontier, amid Bankruptcy, Is Suspected of Lying About Broadband Expansion*, *ArsTechnica* (May 1, 2020),

<https://arstechnica.com/tech-policy/2020/05/frontier-amid-bankruptcy-is-suspected-of-lying-about-broadband-expansion/>.

York accused Charter of failing to meet its broadband deployment commitments resulting from its 2016 purchase of Time Warner Cable.<sup>57</sup>

Given that a commitment to building broadband does not necessarily mean that broadband will be built, areas that haven't seen significant progress towards their committed deployment projects should be eligible for BEAD funds. To determine whether ISPs have made significant progress towards deployment, NTIA should coordinate with state and federal agencies to certify that the ISP is meeting deadlines, or will soon complete deployment. If NTIA does not do this, it will leave some areas falsely deemed served without any internet.

## **VII. NTIA MUST MAKE THE LOW-COST OPTION BROADLY AVAILABLE AND ALIGNED WITH THE AFFORDABLE CONNECTIVITY PROGRAM**

A broadband provider's presence in a market is not an appropriate proxy for broadband adoption. According to an NTIA survey of American households, the inability to afford broadband is one of the key reasons that consumers who have internet available do not subscribe.<sup>58</sup> Studies show that \$10 per month is the most that many low-income Americans can afford to pay for broadband.<sup>59</sup> However, according to US Telecom, the most popular broadband plans cost on average \$47.15, and the fastest broadband plans cost on average \$68.96.<sup>60</sup>

Congress has required that the recipients of BEAD funding offer a low-cost broadband option for eligible subscribers.<sup>61</sup> In its notice and request for comment, NTIA asks how to define "eligible subscriber" and whether NTIA should set standards for that option. We believe that NTIA should define

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<sup>57</sup> Jon Brodtkin, *NY Threatens to Kick Charter Out of the State After Broadband Failures*, ArsTechnica (July 26, 2018),

<https://arstechnica.com/tech-policy/2018/07/ny-threatens-to-kick-charter-out-of-the-state-after-broadband-failures/>.

<sup>58</sup> Rafi Goldberg, *Unplugged: NTIA Survey Finds Some Americans Still Avoid Home Internet Use*, National Telecommunications and Information Administration, (Apr. 15, 2019), <https://www.ntia.gov/blog/2019/unpluggedntia-survey-finds-some-americans-still-avoid-home-internet-use>.

<sup>59</sup> Jonathan Sallet, *Creating an Affordability Agenda*, Benton Institute for Broadband and Society (Jan. 23, 2020), <https://www.benton.org/blog/creating-affordability-agenda>.

<sup>60</sup> Arthur Menko, *2020 Broadband Pricing Index*, U.S. Telecom at 4 (Sept. 16, 2020), <https://www.ustelecom.org/research/2020-broadband-pricing-index-report/>.

<sup>61</sup> Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. at § 60102(h)(5)(A) (2021).

eligible subscribers broadly and align the low-cost option with the FCC's Affordable Connectivity Program (ACP) to ensure that affordability is not a barrier to connectivity.

#### **A. NTIA Should Use a Broad Definition of Eligible Subscriber**

According to New America's Open Technology Institute, the average monthly price for fiber broadband averages \$79.92 in the U.S., compared to just \$47.63 in Europe.<sup>62</sup> Furthermore, ancillary fees (like modem rental fees, data overages, and early termination fees) can add up to 75% more to the cost of monthly internet service.<sup>63</sup> The high cost of broadband is one of the primary reasons why the United States has such a staggering and persistent digital divide. According to an NTIA survey of American households, the inability to afford broadband is one of the key reasons that consumers who have internet available do not subscribe.<sup>64</sup> This is particularly stark for low-income consumers, but because of the high price of broadband, it is also felt by many middle-income consumers.

Thus, NTIA should make the low cost option available to everyone who wants to take advantage of it. Without access to a low-cost option, lower- and middle-income households could easily find themselves priced out of the broadband service. Others, particularly those in areas without competition, might be able to afford broadband service but don't value it enough to purchase the only plan available (as it is likely expensive). Older Americans in particular may find that the cost of the service versus the perceived value they may derive outweighs adding this expense to a fixed income (even when that fixed income may be sufficient to cover the cost). Potential subscribers should have options in the market that align the cost of service with their expected use of the service. Therefore, broad eligibility will prevent our nation from spending billions to replace a deployment gap only to leave an adoption gap. Broadband service is an important tool to assist people in accessing government services, news and information, and

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<sup>62</sup> Becky Chao & Claire Park, *The Cost of Connectivity 2020* at 28 (Jul. 15, 2020), New America, [https://d1y8sb8igg2f8e.cloudfront.net/documents/The\\_Cost\\_of\\_Connectivity\\_2020\\_\\_XatkXnf.pdf](https://d1y8sb8igg2f8e.cloudfront.net/documents/The_Cost_of_Connectivity_2020__XatkXnf.pdf).

<sup>63</sup> *Id.* at 7 ("Modem rental fees in the United States can add an additional 75 percent to the cost of monthly internet service,").

<sup>64</sup> Rafi Goldberg, Unplugged: NTIA Survey Finds Some Americans Still Avoid Home Internet Use, National Telecommunications and Information Administration, (Apr. 15, 2019), <https://www.ntia.gov/blog/2019/unpluggedntia-survey-finds-some-americans-still-avoid-home-internet-use>.

staying connected to family, friends and their community. Offering a low-cost option that is broadly available will allow those who may have a lower perceived value to avail themselves of the benefits of being connected.

### **B. NTIA Must Align the Low-Cost Option with the Affordable Connectivity Program**

Congress created the ACP, administered by the FCC, to bridge the gap between what broadband costs, and what low income consumers can afford. In order to promote connectivity among low-income consumers, the Department of Treasury required recipients of the Capital Projects Fund to participate in low-income subsidy programs such as the ACP.<sup>65</sup> NTIA should do the same so that *all* consumers can use their ACP benefit towards the low-cost option. Absent the requirement to participate, many consumers in areas with just one provider would not be able to access both benefits.

In addition, NTIA should set a floor (not ceiling), for the low-cost option that enables ACP recipients to get free broadband. As noted earlier, many low-income consumers can only afford to pay \$10 a month for broadband.<sup>66</sup> However, the ACP offers most eligible consumers just \$30 a month, leaving most consumers with a co-pay far higher than \$10. Beyond being able to afford a co-pay, many low-income consumers do not have the means through which to pay a copay. For example, a 2021 survey by NaLA of Lifeline and EBB subscribers found that the vast majority have household incomes below \$20,000 a year, nearly 60 percent are unbanked, and almost half don't have a credit or debit card.<sup>67</sup> Thus, it is important that low-income consumers can access free internet.

A baseline standard option should be priced at less than \$30 a month (to enable ACP subscribers to get free internet) but should also meet quality standards identified by NTIA in collaboration with the FCC and states. The standards should be set to such a level that they meet the needs of the average

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<sup>65</sup> *Guidance for the Coronavirus Capital Projects Fund for States, Territories and Freely Associated States*, U.S. Department of Treasury at 4 (Sept. 2021), <https://home.treasury.gov/system/files/136/Capital-Projects-Fund-Guidance-States-Territories-and-Freely-Associated-States.pdf>.

<sup>66</sup> Jonathan Sallet, *Creating an Affordability Agenda*, Benton Institute for Broadband and Society (Jan. 23, 2020), <https://www.benton.org/blog/creating-affordability-agenda>.

<sup>67</sup> Ex Parte of National Lifeline Association (NaLA), WC Docket Nos. 11-42,20-445 at 34-36 (Oct 6, 2021).

household; meaning that family members can simultaneously engage in high bandwidth activities like remote learning and teleconferencing. NTIA should also reevaluate its baseline annually based on the cost of broadband, existing subsidies, and the average use case.

## **VIII. NTIA MUST PROMOTE DIGITAL EQUITY INITIATIVES TO CLOSE THE DIGITAL DIVIDE**

Having access to affordable internet is not enough—consumers must also have the devices and digital skills to connect. In order to close the digital divide, NTIA must encourage states to use BEAD funding for a connected device voucher program and for digital literacy training programs by adopting a broad definition of “broadband adoption.” NTIA should also promote digital equity initiatives by allowing the use of which funds to create state digital equity offices. The IJA permits states to use funding for these purposes and NTIA should structure its grant program to accommodate and encourage that decision by states.

### **A. NTIA Should Encourage States to Use BEAD funds for a Device Voucher Program**

A lack of a device is one of the biggest barriers to connectivity. Thirty-one percent of non-broadband users cite the cost of a computer as one of the reasons they do not have broadband at home.<sup>68</sup> Many more people share just one device amongst a whole household, forcing families to choose which activities to prioritize when they occur simultaneously. For example, one child may have to forgo remote learning in favor of another child, or a one adult must forgo a virtual medical appointment so another may work.

Congress recognized the necessity of devices by explicitly authorizing states to use BEAD funding for “programs to provide affordable internet-capable devices.”<sup>69</sup> Although states may also use Digital Equity Act funding to get low-income households the devices they need to connect—that funding

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<sup>68</sup> 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/>.

<sup>69</sup> Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. at § (2021).

will not get everyone a device who needs one. An estimated 14 million households lack a computer.<sup>70</sup> To get each of those households even one low-cost device, it would cost upwards of \$5 billion dollars—nearly double the amount of funding for the Digital Equity Act.<sup>71</sup> Thus, NTIA should encourage states to use some of their BEAD funding to help people get the devices they need so that they can connect.

There is already a strong framework that NTIA could use as a model for getting computers and tablets to low-income consumers. In 2021, Senator Warnock and Representative McEachin introduced the Device Access for Every American Act.<sup>72</sup> This legislation would establish a voucher program that enables low-income households to get up to two connected devices directly from a retailer or refurbisher. NTIA should encourage states to use their funding to create a program based on the Device Access for Every American Act at the state level.

### **B. NTIA Should Authorize the Use of BEAD funds for Digital Literacy**

Congress has authorized states to use BEAD funds for “broadband adoption.”<sup>73</sup> NTIA should include digital literacy programs as an eligible use for “broadband adoption” money in BEAD and encourage states to use it for that purpose. Digital literacy is a key component of broadband adoption – without it, many are hesitant to use the internet. According to the National Skills Coalition, one-third of Americans lack digital skills they need to successfully navigate digital devices.<sup>74</sup> Others lack the skills they need to navigate the web. Universal digital literacy will require more funds than those allocated through the Digital Equity Act. And yet, many community based organizations stand ready to assist those in need with learning digital literacy skills. Allowing the use of BEAD funds for this purpose will give consumers the tools they need to meaningfully connect.

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<sup>70</sup> *The Issue*, Digitunity, <https://digitunity.org/the-issue/> (last accessed Feb 4, 2022) (estimating that 14 million households lack a computer).

<sup>71</sup> This math is based on the author’s assumption that a low-cost computer costs \$400.

<sup>72</sup> See Device Access for Every American Act, S. 2729, 117th Congress (2021).

<sup>73</sup> See Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. at § 60501(f)(5) (2021).

<sup>74</sup> National Skills Coalition, *Applying a racial equity lens to digital literacy* (March 20, 2020), <https://www.nationalskillscoalition.org/resources/publications/file/Digital-Skills-Racial-Equity-Final.pdf>.

### **C. NTIA Should Authorize the Use of Administrative Funds to Support State Digital Equity Offices**

State broadband offices help states understand the reasons for their digital divide and offer tailored solutions to closing it. Just as states benefit from state broadband offices, they will also benefit from a digital equity office that can help states implement targeted solutions for digital inequity.

NTIA should allow states to use both BEAD and State Capacity Grant administrative funds to build and maintain digital equity offices. Where possible, NTIA should encourage states to place their digital equity offices within their state broadband offices, and should authorize the resources for each office to have at least one full time employee.

## **IX. CONCLUSION**

NTIA can significantly narrow the digital divide with strategic implementation focused on coordination and consumers' needs over industry wants. We suggest that NTIA prioritize and promote networks that are fast, open, reliable, and equitable. NTIA must also keep in mind that without affordable broadband, devices and digital literacy skills, our deployment divide will switch to an even more stark adoption divide. By taking action now in a consumer focused manner, millions more people will be able to adopt what is an essential service to our modern society – broadband.