

**Before the  
UNITED STATES DEPARTMENT OF AGRICULTURE  
RURAL UTILITIES SERVICE  
Washington, DC 20250**

**I/M/O** )  
 ) **RUS-18-TELECOM-0004**  
**Broadband E-Connectivity Pilot Program** )

**COMMENTS OF  
NTCA–THE RURAL BROADBAND ASSOCIATION**

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## CONTENTS

Executive Summary .....	i
I. INTRODUCTION .....	1
II. SUCCESSFUL APPLICATIONS MUST OFFER MEANINGFUL LONG-TERM CAPABILITY AND AFFORDABILITY.....	3
A. THE E-CONNECTIVITY PROGRAM MUST SUPPORT CONNECTIVITY FOR AREAS MOST IN NEED AND ENSURE SCALABILITY FOR FUTURE DEMAND ON NETWORKS BUILT IN SUCH AREAS. ....	3
B. THE RURAL UTILITIES SERVICE SHOULD LOOK TO GUIDANCE FROM THE TELECOMMUNICATIONS ACT STANDARD OF REASONABLE COMPARABILITY IN PROMOTING THE AFFORDABILITY OF SERVICES ON FUNDED NETWORKS. ....	14
III. THE PROGRAM MUST NOT PERMIT OR EVEN FACILITATE DUPLICATION OF EXISTING BROADBAND FACILITIES, AND AS A MATTER OF GOOD GOVERNANCE, IT SHOULD STEADFASTLY AVOID DUPLICATION OF GOVERNMENTAL PROGRAMS THAT PROMOTE BROADBAND DEPLOYMENT. ....	16
IV. THE CONSIDERATION OF APPLICATIONS SHOULD BE GUIDED BY A THOROUGH REVIEW PROCESS AND OBJECTIVE SCORING METRICS THAT ARE RECOGNIZE THE RELATIVE VALUE OF POTENTIAL BENEFITS. ....	22
A. THE FITNESS OF THE CANDIDATE AND THE PROPOSAL MUST BE EVALUATED. ....	22
B. THE INCLUSION OF A PARTNERSHIP SHOULD BE ACCORDED WEIGHT .....	23
C. AN OBJECTIVE SCORING PROCESS CAN CONFIRM THE MEASURABLE VALUE OFAPPLICATIONS. ....	25
V. CONCLUSION.....	27

## EXECUTIVE SUMMARY

Broadband is increasingly relevant, if not required, in daily life. The e-Connectivity program will be most effective and successful when it supports scalable broadband networks designed not only to meet current demands but also foreseeable future needs. Even current technology offerings supporting agriculture, industry, education, health care, and entertainment will soon, if not already, demand far more capacity than what a baseline service of 10/1 might support. Therefore, the Department must view 10/1 *only* as a starting point to identify areas that lack broadband service but must then construct the e-Connectivity program to not only accommodate but to *contemplate and plan* for successively higher speeds. Critically important, as well, the eligibility of those areas for program funds based upon their unserved nature must be verifiable. In particular, program resources must not support overbuilding, especially in conflict with other efforts by the federal government to enable broadband deployment and ongoing availability.

The e-Connectivity program must consider service quality along with "speed." Consistent, reliable performance is essential to support economic development, education, health care and other functions that are tied closely to the rural economic development goals of the e-Connectivity pilot program. While the program should be "technology neutral," it should not be "technology blind" or "quality neutral." Better services should be expected and demanded for rural America, meaning that both service capacity and quality must be considered and given relative weight, priority, or preference when evaluating proposals. Program-supported networks

should support the development and advancement of other vertical industries in the community, including, but not limited to, economic development, education, health care, and public safety.

Rates for services offered atop funded networks must be affordable to ensure consumer adoption. The benefits of broadband are delivered only when they are affordable and adopted by users. Applications that indicate services will be offered at higher rates or subject to aggressive data caps should be afforded less weight, priority, or preference as compared to those that satisfy a benchmark representing reasonable comparability with rates available to urban broadband consumers.

Finally, the fitness of the applicant both to successfully deploy and then operate the network over its useful life must be confirmed. The success of the e-Connectivity program will depend upon the ability of applicants and their deployed networks to support the improvements to rural prosperity. Toward this end, the fitness of the applicant and the application must be adjudged to demonstrate capability and a likelihood of success. Partnerships between service providers with demonstrable experience in delivering broadband services specifically in rural markets and others seeking to bring the benefits of broadband to rural communities offer unique opportunities that should be recognized. Applications evidencing committed partnerships between existing broadband providers and other entities with an interest in expanding community broadband access should be given greater weight, preference, or priority in an objective evaluation system.

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**NTCA–THE RURAL BROADBAND ASSOCIATION**

To the Department:

**I. INTRODUCTION**

NTCA–The Rural Broadband Association (NTCA)<sup>1</sup> hereby submits comments on the above-captioned Notice of Inquiry and Request for Comments of the Rural Utilities Service (RUS) of the United States Department of Agriculture (Department, or USDA) "Broadband e-Connectivity Pilot Program" (BECP).<sup>2</sup> NTCA supports the Department's current inquiry to allocate new resources to increase broadband availability and capabilities. As described more fully below, NTCA submits that the BECP will be most effective if the program regulations hew to the following principles:

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<sup>1</sup> NTCA represents nearly 850 independent, community-based telecommunications companies and cooperatives and more than 400 other firms that support or are themselves engaged in the provision of communications services in the most rural portions of America. All NTCA's service provider members are full service rural local exchange carriers (RLECs) and broadband providers.

<sup>2</sup> *I/M/O Broadband e-Connectivity Pilot Program: Notice of Inquiry and Request for Comments*, Rural Utilities Service, United States Department of Agriculture, Fed. Reg. 16,014 (2018) (NOI).

1. *The BECP will be most effective and successful when it supports scalable broadband networks that are designed not only to meet current demands but also foreseeable future needs.*
2. *Both service capacity and quality must be considered when evaluating proposals. BECP networks should support the development and advancement of other vertical industries in the community, including, but not limited to, economic development, telecommuting, education, health care, and public safety.*
3. *Rates for essential services such as voice and broadband offered atop funded networks must be affordable to ensure consumer adoption and comparability with what other Americans pay for those services.*
4. *BECP resources are best aimed to areas that lack broadband service today, and the eligibility of those areas as unserved must be verifiable. BECP resources must avoid overbuilding, especially in conflict with other efforts by the federal government to enable broadband deployment and ongoing availability.*
5. *The fitness of the applicant to successfully deploy and operate the network over its useful life and provide services using that network must be confirmed.*
6. *Partnerships between operators with demonstrable experience in delivering broadband services specifically in rural markets and local interests seeking to bring broadband to rural communities offer unique opportunities that should be recognized and benefits that should be leveraged.*

As described more fully below, these guide-posts will ensure that the benefits of broadband are supported effectively through the BECP program, and that the significant but still-finite resources of this program will realize their greatest potential.

**II. SUCCESSFUL APPLICATIONS MUST OFFER MEANINGFUL LONG-TERM CAPABILITY AND AFFORDABILITY.**

**A. THE E-CONNECTIVITY PROGRAM MUST SUPPORT CONNECTIVITY FOR AREAS MOST IN NEED AND ENSURE SCALABILITY FOR FUTURE DEMAND ON NETWORKS BUILT IN SUCH AREAS.**

- 1. Although an Initial Speed Threshold of 10/1 Can be a Baseline for Identifying Areas of Greatest Need and Lacking Most in Access, Providers Should Aim For – and RUS Should Promote – Much Higher, Future-Proof Standards for Network Deployment in Such Areas.**

*SUMMARY: Consumer demand for faster, more capable networks is increasing rapidly throughout the Nation. Even current technology offerings supporting agriculture, industry, education, health care, telecommuting, and entertainment are demanding far more capacity than what a baseline service of 10/1 might support. Therefore, the Department must view 10/1 only as a starting point to identify areas that are most in need of broadband service and use of program resources, but then construct the e-Connectivity program to not only accommodate but to contemplate and plan for successively higher speeds.*

Although an initial speed threshold of 10/1 provides a useful baseline for identifying areas of greatest need and lacking most in access, providers should aim for – and RUS should promote – much higher, future-proof standards for network deployment in such areas. The BECP must support connectivity that meets current needs while ensuring scalability for future demand.

It is important at the outset therefore to avoid confusion over what the 10/1 threshold in the law represents. The 10/1 speed threshold does *not* represent a goal for broadband access. It does not represent *the target* for which the program should aim or *the standard* to which providers should design networks. Rather, the initial speed threshold of 10/1 is designed in the law merely as a means of, and should therefore be viewed only as a baseline for, identifying

those rural communities in greatest need of broadband access and the optimal targeting of limited BECP resources for new construction; it should by no means whatsoever represent what our Nation should aim for as an end-point for broadband access or what should be expected of providers seeking to obtain BECP funds. The BECP will realize its greatest success only when it supports connectivity that meets current needs and ensures scalability for future demand. Unlike the relatively static nature of “plain old telephone service,” demand for higher-quality, higher-capability broadband has increased at paces unimaginable even a decade ago.

Broadband is rapidly becoming an integral function of daily life; it has been characterized as necessary “not just for learning, entertainment and social purposes but also for managing small business, emergency services, access to government, health care, and daily life.”<sup>3</sup> Telehealth services, a valuable treatment option especially in rural communities, are predicted to grow by nearly 30 percent by 2021,<sup>4</sup> and streaming video, which is a significant component of successful telehealth, demands robust, reliable speeds of about 25 Mbps to secure desired results. Higher-capacity broadband connections – both at home (to overcome the “homework gap”) and in the schoolhouse – are also essential to the ongoing demand for distance learning, which has a projected global market size of \$65.41 billion by 2023.<sup>5</sup> Finally, the new “standard” in

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<sup>3</sup> *2018 Wireless Broadband Predictions and Trends*, Atul Bhatnagar (Dec. 14, 2017), available at <https://www.cambiumnetworks.com/blog/2018-wireless-broadband-predictions-trends/> (last visited Sep. 6, 2018, 9:07).

<sup>4</sup> *Growth Opportunities in the US Telehealth Market, Forecast to 2021*, Frost & Sullivan, (April 2017), available at <http://www.frost.com/sublib/display-report.do?id=K122-01-00-00-00> (last visited Sep. 6, 2018, 9:07); see also Schadelbauer, Rick, *Anticipating Economic Returns of Rural Telehealth*, Smart Rural Community (2017), available at [https://www.ntca.org/sites/default/files/documents/2017-12/SRC\\_whitepaper\\_anticipatingeconomicreturns.pdf](https://www.ntca.org/sites/default/files/documents/2017-12/SRC_whitepaper_anticipatingeconomicreturns.pdf) (last visited Sep. 6, 2018, 9:08).

<sup>5</sup> *Global E-learning Market 2018-2023* (Feb. 1, 2018), available at <https://www.researchandmarkets.com/reports/4455444/e-learning-market-global-outlook-and->



televisions – 4K resolution – requires at least a 15 Mbps to 25 Mbps Internet connection,<sup>6</sup> a speed unavailable in many rural communities. To be sure, then, while 10/1 may serve as a baseline to identify unserved areas, it falls short as the final end-goal of deployment.

In mid-2000, “less than one household in thirty could access the Internet at a download speed of 200 kbps or greater.”<sup>7</sup> In 2010, the FCC updated the benchmark for broadband Internet speeds from 200 kbps in both directions to 4 Mbps downstream and 1 Mbps upstream.<sup>8</sup> By 2014, NTCA member companies reported that nearly 83 percent of subscribers had access to broadband speeds at or above 10 Mbps, with such speeds also representing the most popular Internet service tier among subscribers.<sup>9</sup> And, the most-recently published survey of NTCA

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[forecast \(last viewed Sep. 6, 2018, 9:14\)\];](#) see also Cejda, Brent D., *Connecting to the Larger World: Distance Education in Rural Community Colleges*, Wiley InterScience (Spring 2007), available at <http://www.accbd.org/articles/index.php/attachments/single/107> (last viewed Sep. 6, 2018, 9:14); *The Impact of Broadband on Education*, U.S. Chamber of Commerce (Dec. 2010), available at [https://www.uschamber.com/sites/default/files/legacy/about/US\\_Chamber\\_Paper\\_on\\_Broadband\\_and\\_Education.pdf](https://www.uschamber.com/sites/default/files/legacy/about/US_Chamber_Paper_on_Broadband_and_Education.pdf) (last viewed Sep. 6, 2018, 9:15).

<sup>6</sup> See, e.g., *You're buying a 4K TV. How much Internet bandwidth do you need?* Rob Pegoraro, USA Today (Dec. 11, 2017), available at <https://www.usatoday.com/story/tech/columnist/2017/12/10/youre-buying-4-k-tv-how-much-internet-bandwidth-do-you-need/933989001/> (last viewed Sep. 6, 2018, 9:15).

<sup>7</sup> *The Effects of Broadband Deployment on Output and Employment: A Cross-sectional Analysis of U.S. Data*, Robert Crandall et al, Issues in Economic Policy, The Brookings Institution, No. 6 (July 2007), available at [https://www.brookings.edu/wp-content/uploads/2016/06/06labor\\_crandall.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/06labor_crandall.pdf) (last viewed Sep. 6, 2018, 9:16).

<sup>8</sup> *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future*, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report, 25 FCC Rcd 9556 (2010).

<sup>9</sup> *NTCA 2014 Broadband/Internet Availability Survey Report* (June 2015), available at <https://www.ntca.org/sites/default/files/documents/2018-01/2014ntcabroadbandsurveyreport.pdf> (last viewed Sep. 6, 2018, 9:21).

member data reports that nearly 67 percent of NTCA member customers can access speeds greater than 25 Mbps.<sup>10</sup> A survey of NTCA members also revealed impressive fiber connectivity at anchor institutions in NTCA rural service areas: FTTP underpins broadband serving in NTCA member areas to 63.9% of public libraries; 82.4% of K-12 schools, and; 75.9% of hospitals and clinics.<sup>11</sup> In fact, more than 150 NTCA members have been certified as "Gig capable" providers.<sup>12</sup>

Just in the past year alone, fiber subscriptions in the U.S. grew by approximately 14.91% between June 2016 and June 2017, and constituted 11.8% of all broadband subscriptions in the U.S. during the same time period.<sup>13</sup> Over that same time frame, the average Internet speed in the U.S. increased by 22%, to 18.7 Mbps,<sup>14</sup> while Internet speeds globally increased an average of 15% in 2017.<sup>15</sup> In its most recent Section 706 report, the FCC found “year-to-year increases

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<sup>10</sup> *NTCA 2016 Broadband/Internet Availability Survey Report*, at 7 (July 2017), available at <https://www.ntca.org/sites/default/files/documents/2018-01/2016ntcabroadbandsurveyreport.pdf> (last viewed Sep. 2018, 9:23).

<sup>11</sup> *Rural Anchor Institution Survey Report*, NTCA–The Rural Broadband Association, at 7 (Aug. 2018), available at [www.ntca.org/sites/default/files/documents/2018-08/NTCA%20Rural%20Anchor%20Institution%20Survey%20Report\\_Final.pdf](http://www.ntca.org/sites/default/files/documents/2018-08/NTCA%20Rural%20Anchor%20Institution%20Survey%20Report_Final.pdf) (last viewed Sep. 6, 2018, 9:26).

<sup>12</sup> See, NTCA Certified Gig-Capable Providers List, [www.ntca.org/member-services/awards-recognition/certified-gig-capable-provider/gig-capable-providers-list](http://www.ntca.org/member-services/awards-recognition/certified-gig-capable-provider/gig-capable-providers-list) (last viewed Sep. 6, 2018, 9:27).

<sup>13</sup> Organisation for Economic Co-operation and Development, Penetration and data usage (June 2017), available at <http://www.oecd.org/sti/broadband/broadband-statistics/> (last viewed Sep. 6, 2018, 9:29).

<sup>14</sup> *Akamai's [state of the internet] Q1 2017 report*, at 12, available at <https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/q1-2017-state-of-the-internet-connectivity-report.pdf> (last viewed Sep. 6, 2018, 9:30).

<sup>15</sup> *Id.*

across the vast majority of areas, including Tribal lands, for adoption of 10 Mbps/1 Mbps, 25 Mbps/3 Mbps, and 50 Mbps/5 Mbps fixed terrestrial services.”<sup>16</sup> The FCC also found that “adoption of service at 25 Mbps/3 Mbps, our current speed benchmark for fixed advanced telecommunications capability, grew from just under 10 percent in 2011 to just over 50 percent in 2016, an increase of approximately 40 percentage points in just five years.”<sup>17</sup> And, perhaps even more notable is that adoption of services at 50 Mbps/5 Mbps leapt from just over 25 percent in 2014 to nearly 45 percent only two years later.<sup>18</sup> NTCA members report seeing reasonably comparable spikes in demand within their very rural customer bases. According to the 2017 NTCA Broadband Survey Report, “[w]hile the overall broadband take rate is generally the same (72% this year versus 73% last year), subscribers are moving up to higher speeds.” In fact, NTCA member customers subscribing to broadband service exceeding 25 Mbps *doubled* from 2016 to 2017, while subscriptions to services of 4 Mbps or greater also increased. In contrast, subscriptions to service between 1 and 4 Mbps *decreased*.<sup>19</sup> These data support the assertion that consumers are demanding ever-increasing broadband capacity to support residential and commercial use of broadband that drives rural economies and enables rural areas to remain viable and vibrant places to live, work and learn.

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<sup>16</sup> *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion: 2018 Broadband Deployment Report*, GN Docket No. 17-199, 33 FCC Rcd. 1660, 1698, at para. 73 (2018) (internal citation omitted).

<sup>17</sup> *Id.* at para. 77.

<sup>18</sup> *Id.* at Chart 1.

<sup>19</sup> *NTCA 2016 Broadband/Internet Availability Survey Report* (July 2017), at 14, available at <https://www.ntca.org/sites/default/files/documents/2018-01/2016ntcabroadbandsurveyreport.pdf> (last viewed Sep. 6, 2018, 9:32).

Independent third-party data also point to the need for high goals. Leading advisory and consulting firm Deloitte predicts that “streaming video and new forms of immersive media such as Augmented and Virtual Reality (AR/VR) will contribute to traffic growth estimated at 181 percent CAGR through 2020.”<sup>20</sup> Cisco predicts Internet video surveillance traffic, which already increased by 9% between 2015 and 2016, will “increase sevenfold between 2016 and 2021.”<sup>21</sup> Online shopping, already one of the most popular uses of the Internet, is expected to grow to 195 million people in the U.S. alone by 2019.<sup>22</sup> And a good portion of this online activity is being driven by better broadband access in rural America – a recent survey found, for example, that rural consumers account for 15% of all Internet-driven transactions, which are expected to reach \$14 trillion annually by 2022.<sup>23</sup>

For these reasons, while 10/1 offers a useful and appropriate metric to identify those rural areas most starved for broadband access, and consequent deployment with limited resources to address their most significant needs, this speed is of course hardly satisfactory as a *goal* of the BECP or a *requirement* of those that would build networks leveraging BECP resources. Instead,

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<sup>20</sup> *Communications Infrastructure Upgrade: The Need for Deep Fiber*, Deloitte, at 10 (2017) available at <https://www2.deloitte.com/us/en/pages/consulting/articles/communications-infrastructure-upgrade-deep-fiber-imperative.html> (last viewed Sep. 6, 2018, 9:36).

<sup>21</sup> *Cisco Visual Networking Index: Forecast and Methodology, 2016-2021* (Sep. 15, 2017), available at <https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/complete-white-paper-c11-481360.html> (last viewed Sep. 6, 2018, 9:38).

<sup>22</sup> *Internet Usage in the United States – Facts and Statistics*, Statista, available at <https://www.statista.com/topics/2237/internet-usage-in-the-united-states/> (last viewed Sep. 6, 2018, 9:39).

<sup>23</sup> *A Cyber Economy: The Transactional Value of the Internet in Rural America*, White Paper, iGR (2018), at 1, [https://www.frs.org/sites/default/files/documents/2018-03/A-Cyber-Economy\\_The-Transactional-Value-of-the-Internet-in-Rural-America.pdf](https://www.frs.org/sites/default/files/documents/2018-03/A-Cyber-Economy_The-Transactional-Value-of-the-Internet-in-Rural-America.pdf) (last viewed Sep. 6, 2018, 9:39).

those networks constructed in areas found to be lacking 10/1 must be capable of facilitating a much more robust, capable rural broadband journey toward economic viability, educational opportunity, regional resilience, robust healthcare, and overall strength. Put another way, deployment of *some* broadband where *no* broadband of even just 10/1 exists today is an important first step, but, and as described more fully below, final BECP program rules should contemplate a built-in pivot to support networks that are capable of higher speeds. In the future, as fewer and fewer rural consumers and communities lack access to 10/1 broadband due to the efforts of the BECP and the operators leveraging this program, RUS can consider then how to recalibrate this pilot or successor programs to tackle “the next tier” of those lacking broadband at even higher measures of speed -using these programs as a measure of “continuous improvement” wherein this financing program successively tackles those areas remaining most in need after others previously lacking have been improved.<sup>24</sup>

**2. The Program Rules Must Contemplate the Impact of Both Speed and Relative Service Quality When Assessing the Suitability of Proposals to Ensure that the Supported Service Enables the Development that is the Goal of the Program.**

*SUMMARY: The BECP program must consider service quality along with "speed."*

*Consistent, reliable performance is essential to support economic development, education, health care and other functions that are tied closely to the rural economic*

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<sup>24</sup> NTCA also notes that for the types of applications that will be critical to ensuring the viability of rural America - including, *inter alia*, business services (off-site back up, inter-office communication and general data transport), Agri-Business, telemedicine, and distance education - the uplink capability is a crucial element of the equation. Synchronous profiles will be necessary to support those services and attributes that rely as much on the rural user's ability to *export* information as the user's ability to *import* information. For these reasons, RUS should prioritize or otherwise weigh more favorably those proposals that would offer broadband at higher, symmetrical speeds upstream and downstream.

*development goals of the e-Connectivity pilot program. While the program should be "technology neutral," it should not be "technology blind" or "quality neutral." Those applications demonstrating in detail (and not merely asserting without proof) a technical capability to deliver higher speeds and better service quality should be afforded a higher weight, preference, or priority in an objective evaluation system.*

As the Department stakes out speed goals for the BECP program, it should rightly place great weight and priority on those networks that can in fact offer, on a proven basis in the marketplace, higher speeds now and that can evolve over time to meet the needs of consumers and businesses. At the same time, the Department must also recognize that "not all speeds are created equal." Commerce, health care, and education rely upon a reliable broadband connection that is not subject to damaging latency or jitter. Uneven performance is in some instances simply unwelcome, and in other instances untenable. A residential user viewing a streaming sports event may experience momentary frustration if the video buffers mid-game. By contrast, an industrial user, whether a farmer participating in a lightning-paced livestock auction, a financial trader bidding on securities, or a health care provider assessing a trauma case, must have access to secure, reliable, and consistent-quality capabilities. Moreover, these capabilities must be consistent throughout the day, including peak-hour usage times (this imperative has been recognized by the FCC, which requires that mandatory network performance testing be conducted during busy hour periods).<sup>25</sup> Toward this end, the BECP should include scoring criteria that accord preference to lower latency services.

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<sup>25</sup> *Connect America Fund: Order*, Docket No. 10-90, DA 18-710 (rel. July 6, 2018).

Although general web-browsing and email consume relatively small amounts of bandwidth, students and telecommuters are estimated to require between 5-25 Mbps.<sup>26</sup> This contemplates not simply downloading files (estimated at 10 Mbps) but streaming video that is integral to conferencing and distance education applications. These requirements are especially critical in rural areas where broadband offers the major point of connection to distantly-located resources. In the heart of America, where a significant amount of the world's grain is produced, broadband speed is crucial to efficient production to maintain a competitive edge in the increasingly global marketplace. Precision agriculture enables real-time data from tractors, combines, implements, and other sensor-imbued equipment used in production agriculture. This data is often stored "in the cloud," and a robust broadband connection is necessary to transmit that data to the cloud from the farm. Moreover, mapping applications that are used to track fertilizer application, crop production, chemical application and other functions are bandwidth intensive, supporting the need for "Fiber-to-the-Farm." The ability of a farmer to fully buy, sell, and trade in the marketplace also relies upon a robust connection. A fiber connection works in concert with wireless sensors that are embedded in equipment to ensure the accurate transmission of critical data from point A to point Z. Beneficiaries of these capabilities are not only the farmers, but vendors and ultimately consumers who enjoy a better product.

As noted above, streaming video generally requires a threshold of at least 25 Mbps (and, this is not contemplating the use of other devices in the home at that time that may strain that capacity). This application is necessary for farmers who participate in on-line livestock auctions. As a director of an NTCA member company who herself ranches explained, "The broadband

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<sup>26</sup> "Broadband Speed Guide," Federal Communications Commission, available at [www.fcc.gov/reports-research/guides/broadband-speed-guide](http://www.fcc.gov/reports-research/guides/broadband-speed-guide) (last viewed Sep. 6, 2018, 9:41).

most helpful to rural Americans is the high-speed data network. Streaming video and live performances (either livestock, family, or events) is the most critical infrastructure for our success. Anytime someone is buying or selling something that moves, the streaming data network is the most beneficial." Personal experience shared by NTCA members reinforces the need for robust facilities in farming communities. Streaming video supports virtual tours for real estate, tourist attractions, and other promotions. Virtual tours are used in agricultural industries for the promotion of livestock operations, processes and procedures to repair equipment, or to handle livestock. As one member in Iowa described, a farmer looking to modernize operations "could not use precision agriculture until the company put down fiber."<sup>27</sup>

Finally, the overall quality of life of agricultural communities must be considered.

Families live in communities that must have access to broadband-enabled economic, educational, and health-care opportunities if those communities are to remain viable and thrive. Those regions of the Nation which are rightly referred to as "the Nation's breadbasket" must be assured of their

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<sup>27</sup> Another example of the importance of overall service quality comes in the form of "futures," agreements to purchase cattle at a set price in the future. In recent years, drastic price swings (in 3Q16, for example, cattle futures prices dropped nearly 33 percent) have cut into rancher earnings and prompted discussions about how pricing might be better guided in the \$13B annual market. Although the Department publishes price indices, the delay in disseminating price data reported by traders may result in indices that do not reflect actual market positions. On-line cattle auctions direct trading to a cash market that offers near-instant dissemination of pricing information which, when aggregated across hundreds of producers using the broadband-enabled platforms, provides a more current picture of pricing. This, in turn, is proposed to potentially reduce uncertainty in the futures market. To be sure, not all cattlemen agree, and there is concern that on-line trading might not produce a sufficient amount of data. Nevertheless, on-line auctions offer cattlemen three distinct benefits: (1) the ability to participate in a process that is far more economically efficient than traveling to live auctions; (2) the ability to participate in hundreds of distant auctions; (3) an alternative to cattle futures that may be more attractive in certain situations. These combine to serve greater economic efficiencies and opportunities for the agriculture industry.



ability to thrive as the balance of the Nation relies upon them for food and natural resources. One rancher observed,

The biggest problem with trying to explain the uses for high speed broadband is that they are endless. Rural life depends on many segments and the remoteness of our lives necessitates superior quality broadband infrastructure. Ag, healthcare, education, entertainment, communicating with family, tele-work, and so much more.

The BECP must ensure that deployments supported by the program facilitate the fulfillment of these rural needs by promoting the deployment of resilient and consistently-performing networks.

Indeed, even as speeds are important for such uses of broadband, it is important as well to have network facilities that offer reliability without the compromise of latency, jitter, or impacts of shared spectrum. For example, Pew Research Center reports that the typical American household hosts multiple connected devices, including smartphones, desktop or laptop computers, tablets, and streaming media devices.<sup>28</sup> And, these do not include devices that are connected constantly and passively collect and transmit data upstream and downstream, such as security systems, appliances, or medical monitoring systems. An NTCA member in Wyoming observes, "[T]elehealth visits are in the hundreds and even over a thousand monthly. Tele-psych, tele-cardiology, elder care, juvenile diabetes, oil field emergencies and on and on, are all being accomplished via telehealth with even greater demand for more bandwidth for diagnostic quality image transmission often a requirement." Toward this end and as described above, NTCA submits that, while higher speeds are essential and should be afforded significant preference,

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<sup>28</sup> Olmstead, Kenneth, "A Third of Americans Live in a Household with Three or More Smartphones," Pew Research Center (2017), available at [www.pewresearch.org/fact-tank/2017/05-25/a-third-of-americans-live-in-a-household-with-three-or-more-smartphones](http://www.pewresearch.org/fact-tank/2017/05-25/a-third-of-americans-live-in-a-household-with-three-or-more-smartphones) (last viewed Sep. 6, 2018, 9:44).

priority, or weight in considering the relative merits of applications for financing, focusing *only* on a defined speed threshold will not serve fully the purposes of the BECP. Rather, the Department is urged to recognize that speed, latency and reliability must all be considered and properly prioritized and weighted when evaluating the suitability of a specific technological deployment to the goals of the program.

**B. THE RURAL UTILITIES SERVICE SHOULD LOOK TO GUIDANCE FROM THE TELECOMMUNICATIONS ACT STANDARD OF REASONABLE COMPARABILITY IN PROMOTING THE AFFORDABILITY OF SERVICES ON FUNDED NETWORKS.**

*SUMMARY: The benefits of broadband are realized only when they are affordable and adopted by users. FCC data offer guideposts to determining whether rural services rates are reasonably comparable to those of urban areas, and those applications indicating that rates will be comparable should be afforded higher weight, priority, or preference.*

The Telecommunications Act of 1996<sup>29</sup> established a Universal Service principle of "reasonable comparability." Specifically, service in rural and insular areas should be made available at a quality and price that is reasonably comparable to that which is available in urban areas. This principle rightly recognizes that there is little value in deploying a network in a rural area if consumers must pay far more than what an urban customer would pay for the same service. RUS should look to ensure similarly effective adoption and use of the networks it funds, providing meaningful access to broadband for consumers in rural America.

To achieve this, RUS can rely upon data made available by the FCC. Specifically, every year, the FCC Wireline Competition Bureau (WCB) conducts a survey of broadband rates.<sup>30</sup> The

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<sup>29</sup> Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996) (1996 Act). The 1996 Act amended the Communications Act of 1934, 47 U.S.C. § 151 *et seq.*

<sup>30</sup> *Connect America Fund: Order*, Docket No. 10-90, 28 FCC Rcd 4242 (2013).

WCB uses data from the survey to establish benchmark rates, including a separate set of rates for Alaska. The survey contemplates 25 strata, which include: 13 strata for services with download rates of less than 500 Mbps; 10 strata for services with download rates higher than 500 Mbps; and two strata for Alaska. Usage caps, which are relevant in determining the true, total cost of broadband, are also measured as part of this analysis. In 2018, the survey included rates provided by Tier 1 and Tier 2 carriers and cable providers.<sup>31</sup> The reasonable comparability benchmark that is derived from the surveyed rates is equal to the estimated average monthly rate plus twice the standard deviation of rates for terrestrial fixed broadband service plans.

Without commenting on the merits of the FCC process, *per se*, and while this Communications Act standard of course does not bind or govern USDA and RUS undertakings, NTCA submits that these FCC data points provide a useful reference for RUS in determining whether an applicant's proposed service rates will enable rural consumers, businesses, and communities to make effective use of the broadband being built leveraging RUS funds. Reasonably comparable rates are critical to ensure that adoption can be embraced by a large population of users. According to NTIA, affordability is a primary factor for prospective users of broadband.<sup>32</sup> Similar findings have been documented by other organizations, which identify

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<sup>31</sup> See, 2018 Urban Rate Survey - Fixed Broadband Service Analysis, Wireline Competition Bureau, FCC (available at <https://www.fcc.gov/general/urban-rate-survey-data-resources>, last viewed Aug. 27, 2018, 13:14).

<sup>32</sup> "Exploring the Digital Nation: America's Emerging Online Experience," National Telecommunications and Information Administration, Economics and Statistics Administration, United States Department of Commerce at 3, 21 (2013) (available at [https://www.ntia.doc.gov/files/ntia/publications/exploring\\_the\\_digital\\_nation\\_-\\_americas\\_emerging\\_online\\_experience.pdf](https://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_-_americas_emerging_online_experience.pdf)) (last viewed Aug. 27, 2018, 13:49).

price as among the chief determinants of a prospective user's decision to adopt broadband.<sup>33</sup> To be sure, users must also identify a sufficient relevance, or value proposition, to support their election to subscribe. However, as described in detail above in Section II.A.1, consumer demand for broadband to support an array of residential and industrial applications is increasing steadily - not only in the sheer number of subscribers, but also in rapidly increasing demand for higher capacity services. This demand and adoption, however, and the resultant benefits, *cannot and will not be achieved* if the offerings are not also affordable. Put another way, the networks funded through RUS programs such as the pilot will be far less likely to succeed in making a difference in rural areas – and their very sustainability may be at risk – if consumers and businesses cannot afford to adopt broadband in the first instance and keep making effective use of broadband thereafter. Therefore, the BECP must include a scoring component that addresses the affordability of the proposed service and provides priority or scoring weight to those applications that pledge to offer services to consumers at rates that will remain reasonably comparable to those in urban areas. That will ensure that BECP funds are committed effectively and toward the projects most favorable to robust adoption results.

**III. THE PROGRAM MUST NOT PERMIT OR EVEN FACILITATE DUPLICATION OF EXISTING BROADBAND FACILITIES, AND AS A MATTER OF GOOD GOVERNANCE, IT SHOULD STEADFASTLY AVOID DUPLICATION OF GOVERNMENTAL PROGRAMS THAT PROMOTE BROADBAND DEPLOYMENT.**

To maximize the effectiveness and reach of public and private resources, and to ensure the sustainability of networks built in low-density rural markets, efforts to deploy broadband

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<sup>33</sup> See, *i.e.*, Schadelbauer, Rick, "Conquering the Challenges of Broadband Adoption," Smart Rural Community, NTCA, at 7-9 (2014) (available at [https://www.ntca.org/sites/default/files/documents/2017-12/SRC\\_whitepaper\\_CCBA.pdf](https://www.ntca.org/sites/default/files/documents/2017-12/SRC_whitepaper_CCBA.pdf)) (last viewed Aug. 27, 2018, 13:50).

under the BECP program must not facilitate the duplication of existing networks. The NOI explains that RUS will post publicly the service territories of applicants to "allow existing service providers an opportunity to comment as to whether 10/1 service exists for households in the proposed service area."<sup>34</sup> The NOI further explains that RUS will rely upon its online mapping tool, the National Broadband Map, and other data that "may be collected or obtained through reasonable efforts."<sup>35</sup> NTCA submits that the intent of the program to avoid overbuilding is logical, prudent, and consistent with sound public policy: it would be a waste of finite resources to direct funding to areas that already have sufficient service.

Use of some mapping resource as a starting point for identifying areas in need represents a significant and useful goal; NTCA is on record supporting the need for and usefulness of sound data sets to inform intelligent policy.<sup>36</sup> However, the National Broadband Map is no longer an effective tool. It was, by its own admission on the website, last updated in 2014, and is no longer maintained.<sup>37</sup> While that map now refers to FCC Form 477 data as a successor source of information, the Form 477 data itself suffers from imprecision and an inherent lack of granularity; and, although the Form 477 is certified by the provider, there is no independent validation of the data submitted. Finally, and as critical, the Form 477 data is submitted by census block – this unit of measure means that in a rural area, just one consumer with service can

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<sup>34</sup> NOI at 3.

<sup>35</sup> NOI at 3.

<sup>36</sup> See *Modernizing the FCC Form 477 Data Program: Comments of NTCA–The Rural Broadband Association*, Docket No. 11-10 (Oct. 10, 2017).

<sup>37</sup> See <https://www.broadbandmap.gov/> In fact, the FY18 Omnibus bill included \$7.5 million for NTIA to “update the national broadband availability map in coordination with” the FCC, even as the FCC recently updated the map with Form 477 data from 2016.

result in unserved consumers miles away looking “served.” This census block-based unit of measure simply will not work on an “apples to apples” basis in the context of a program like this pilot that is directed by statute to ensure that 90% of *locations* are unserved at a certain level.

For these reasons, the BECP program must accommodate a sufficient "challenge process" *beyond any initial reliance upon a national map of one kind or another* to both prevent overbuilding, and to ensure that funding can be directed to truly eligible areas. In the Universal Service Fund context, as one example, the FCC has implemented a “challenge process” that attempts to develop a record of better evidence to validate where service truly does and does not exist, notwithstanding the claims of Forms 477 received. But, even these efforts have been incomplete, and some have questioned whether some of the processes work well enough to achieve the desired result. Nevertheless, certain FCC challenge processes can serve as a good model for the e-Connectivity program.

Looking toward the FCC method that is intended to determine whether a certain percentage of locations are served,<sup>38</sup> NTCA submits that a robust challenge process must be incorporated to validate or disprove assertions that an area either served or not served by sufficient broadband. As noted above, Form 477 data lends itself to "false positives" that can lend the appearance of a provider where, in fact, no provider offers service. The data can be instructive but should not be taken as dispositive. Thus, when an applicant for BECP resources seeks funding in an area that another party claims already to serve on Form 477, RUS should serve a copy of the application on those parties that -- according to Form 477 data -- serve that area. The application should also contain the basis upon which the applicant for BECP resources

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<sup>38</sup> See, *Connect America Fund; ETC Annual Reports and Certifications; Rural Broadband Experiments: Report and Order and Further Notice of Proposed Rulemaking*, Docket Nos. 10-90, 14-58, 14-259, 31 FCC Rcd 5949, 5968, at para. 51 *et. seq.* (2016).

asserts that an area is *unserved* notwithstanding a contrary showing on the Form 477 data. The affected “existing” service providers should then be permitted a reasonable chance to present evidence to RUS that they indeed offer service in that area consistent with the Form 477 filing, including a demonstration (with reasonable technical detail) that:

- (a) sufficient broadband service is indeed available to individual locations in the proposed area;
- (b) the broadband service is available at rates that are reasonably comparable to those at which comparable service is offered in urban areas;
- (c) the service meets necessary performance standards, including speed and latency;
- (d) the service can be activated at a given location within 10 days of a request without special construction charges, and;
- (e) the service relies upon the provider's local access network and is not leased or otherwise delivered using local access facilities from another provider to connect to locations claimed as served.

Consistent too with the notion that the Form 477 data is informative but not dispositive, a party should be able to challenge an application filed even if there is no *prima facie* showing on Form 477 that service is available in that area. In particular, Form 477 is subject to a “lag,” in which the map may show availability as of months or even more than a year earlier, despite networks having been built and services provisioned in the interim. Providers therefore should be permitted with a reasonable opportunity to view public notice of applications, and then to come forward and challenge the identification of an area as “unserved” through the provision of information such as that noted above. For example, indications of reporting of locations served through the FCC’s “HUBB” portal for universal service compliance purposes should be deemed *prima facie* evidence that an area is now served even if it was not reflected as such on older Form 477 data.

Finally, the BECP must ensure that it does facilitate, encourage or otherwise allow overbuilding of networks enabled and supported by other governmental programs. As a primary example, the BECP should flatly disallow *any* applications in areas in which Connect America Fund (CAF) funding is distributed, *except* where the applicant itself is the recipient of the CAF support and seeks to use complementary BECP resources to upgrade its network to realize broadband speeds that go beyond CAF standards.<sup>39</sup> To be sure, this concern is not so great now given that 10/1 serves as the baseline in determining eligibility, but enshrining this principle now is essential as a matter of good government and to avoid conflicting, duplicative builds as the BECP evolves over time. This approach will ensure that rather than cannibalize each other, the CAF and BECP can work in tandem to build the type of scalable, forward-looking networks that rural American needs.

Similarly, the RUS has an active database that should be consulted: BECP funds also should not be committed to areas that are benefitting from either (a) active loans or (b) grants that are less than 10 years old. And, "active loans" must include *all* RUS loans that are extended for the purpose of building, extending, maintaining, or otherwise deploying broadband-capable facilities: the exclusion of areas from BECP eligibility must not be limited *only* to areas to which a loan specifically from the RUS Broadband Program has been extended. Similarly, the program

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<sup>39</sup> NTCA submits more specifically that if a company has accepted high-cost USF/CAF support to build to a lower-speed threshold, participation in the BECP should be contingent on the participant's agreement to build even higher-speed deployments if BECP funding is distributed to the participant for that area. This approach would leverage most effectively and efficiently the RUS pilot and USF/CAF support, and represent effective collaboration between the two governmental initiatives. For example, while USF/CAF may support a provider's deployment of 25/3 Mbps broadband in a given area, that same provider's use of BECP resources might enable upgrades of the network to 100 Mbps symmetrical or even greater speeds.



should not direct BECP funds to areas in which a CAF-funded project is in process, even if not yet completed.

Ultimately, a “mapping” exercise larger than the BECP pilot can encompass will be necessary to obtain more accurate and granular data on a national basis. In fact, the NTIA is currently investigating this very question,<sup>40</sup> and the FCC too is contemplating changes to its Form 477 reports to obtain more granular information. And, these processes will in turn need to (1) avoid unreasonable burdens in the data-gathering process; and (2) reconcile and coordinate data-gathering and mapping efforts among various Federal agencies (it is notable that some states, too, have data collection and mapping exercises).<sup>41</sup> However, until these goals are realized, the e-Connectivity process must contemplate a rigorous challenge and verification process consistent with the guidelines proposed above to make more effective use of the information that exists today.

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<sup>40</sup> See, *Improving the Quality and Accuracy of Broadband Availability Data*, NTIA Request for Comment Docket No. 180427421-8421-01, Department of Commerce (2018). NTCA's comments on request can be viewed at [https://www.ntia.doc.gov/files/ntia/publications/mapping-ntia\\_inquiry-ntca\\_comments-final.pdf](https://www.ntia.doc.gov/files/ntia/publications/mapping-ntia_inquiry-ntca_comments-final.pdf) (last viewed August 27, 2018, 11:31).

<sup>41</sup> See, *i.e.*, Minnesota Office of Broadband Development, Maps and Data, available at <https://mn.gov/deed/programs-services/broadband/maps/> (last viewed Sep. 6, 2018, 10:08); State of California Public Utilities Commission, Data Request, Feb. 5, 2018, available at <ftp://ftp.cpuc.ca.gov/Telco/BB%20Mapping/2018/Data%20Request/Broadband%20Data%20Request%202018.pdf> (last viewed Sep. 6, 2018, 10:08).

**IV. THE CONSIDERATION OF APPLICATIONS SHOULD BE GUIDED BY A THOROUGH REVIEW PROCESS AND OBJECTIVE SCORING METRICS THAT ARE RECOGNIZE THE RELATIVE VALUE OF POTENTIAL BENEFITS.**

**A. THE FITNESS OF THE CANDIDATE AND THE PROPOSAL MUST BE EVALUATED.**

*SUMMARY: The success of the e-Connectivity program will depend upon the ability of applicants and their deployed networks to support the improvements to rural prosperity. Toward this end, the fitness of the applicant and the application must be adjudged to demonstrate capability and a likelihood of success. These parameters can be scored using objective guidelines by which applications can be appraised.*

The review and scoring of applications should be guided by objective metrics that are defined by qualitative evaluations of potential benefit. Both the fitness of the candidate *and* the proposal must be evaluated. For these purposes, existing RUS rule 1738.101<sup>42</sup> provides an effective baseline for eligibility. This regulation defines, *inter alia*, several forms of corporate eligibility; build-out commitments; equity positions; and demonstrations of the ability to "furnish, improve, or extend broadband facilities." To this baseline, RUS may consider additional requirements for the BECP to ensure that the limited funds available for this program are directed to the best candidates. These criteria can include, *inter alia*, that the applicant has existed for at least two years prior to the application and has at least one-year prior experience providing broadband specifically in a rural market to consumers and businesses. A thorough review of the business plan and the technical specifications are important as well. As discussed below, for example, ensuring a proposal is backed by a business plan with careful identification

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<sup>42</sup> 7 C.F.R. § 1738.101.

of any subsidies that contribute to the project is essential to ascertain the success and sustainability of that proposal. Similarly, if a provider is proposing to deliver a service using a particular technology at speeds rarely seen in the marketplace as a commercial offering via that technology, the applicant's claims require careful vetting – and RUS should in fact disregard altogether any application that purports to deliver services at speeds never heretofore seen using a given technology.

**B. THE INCLUSION OF A PARTNERSHIP SHOULD BE ACCORDED WEIGHT**

Proposals that contemplate locally-oriented partnerships offer unique benefits. NTCA submits that the BECP is a fertile opportunity to support partnerships among parties with experience and roots in local rural markets. Providing “points” or priority for those applications that involve joint efforts between, for example, existing rural broadband operators and community interests and/or other rural utilities would help significantly in emphasizing local, rural focus and yield distinct advantages.

Rural communications providers are uniquely suited to evaluate the best technology and manner of deployment for a rural area. A rural broadband provider can also provide insight into legal requirements that may attend the deployment and operation of a communications infrastructure, including local public utility or Federal regulations that may govern issues as disparate as access to 911 emergency services to periodic reporting obligations that may be required under applicable laws. A local energy provider or community interest may be able to navigate certain permitting, easement and other aspects that may affect construction or provide resources that help with the pace and costs of deployment. Proposals that contemplate a joint venture among a rural broadband provider and a rural energy provider or other community interest also benefit from the rural broadband firm's knowledge relating to purchasing and

installation of vital network components. The rural broadband provider can also incorporate experience from its incumbent territory, including, but not limited to: network design and construction; management of network operation and customer-facing relationships; and as a contractor for construction and operation.

This type of partnership or joint venture approach contemplates several advantages. First, focusing BECP funding to areas that are served by rural energy firms, but *not* rural broadband firms, targets resources to areas that lack and are very much in need of broadband. Second, this focus avoids overbuilding CAF-supported areas, ensuring that scarce resources are not squandered on wasteful duplication. Third, this approach brings firms with rural broadband service experience together with locally-operated firms that have local track-records of corporate citizenship in their communities. NTCA along with others, actively promotes these types of ventures to bring broadband to areas where rural broadband providers do not yet serve. NTCA utilizes several vehicles, including the "Partners in Broadband" website,<sup>43</sup> which serves as clearinghouse to introduce interested parties to each other, and discussion manuals to guide investigatory conversations.<sup>44</sup> And, the value of partnerships has been recognized by state laws, as well. In North Carolina, a new state grant program gives priority to communities whose

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<sup>43</sup> See, [www.partnersinbroadband.com](http://www.partnersinbroadband.com) (last viewed Sep. 6, 2018, 10:13).

<sup>44</sup> See, Navigating Partnerships for Rural Broadband: A Discussion Guide for Municipalities and Rural Providers, NTCA (2018) (available at [https://www.ntca.org/sites/default/files/documents/2018-02/Navigating%20Partnerships%20for%20Rural%20Broadband\\_1.pdf](https://www.ntca.org/sites/default/files/documents/2018-02/Navigating%20Partnerships%20for%20Rural%20Broadband_1.pdf)) (last viewed Aug. 27, 13:28). The paper notes that although it addresses collaborative work with municipalities, the analytical framework is transferable to work among rural broadband and rural energy providers.

broadband infrastructure projects include community support and local businesses, governments and institutions.<sup>45</sup>

**C. AN OBJECTIVE SCORING PROCESS CAN CONFIRM THE MEASURABLE VALUE OF APPLICATIONS.**

An objective scoring process can confirm the measurable value of applications. Toward this end, NTCA submits that the following analytical construct may be applied to applications to adjudge their fitness and the likelihood of their success in meeting the program goals of improving rural prosperity. Weights assigned to each of the criteria enumerated below can be summed to arrive at an objective starting point by which applications might be considered. Moreover, publishing these criteria will help guide applicants toward the development of complete applications that will best address the aims and interests of the program.

The NOI affirms that the goal of the e-Connectivity pilot is to "provide improvements to rural prosperity."<sup>46</sup> NTCA proposes that several major criteria can be the first steps toward evaluating an application: (1) is the applicant an existing provider, with at least two-years' experience providing telecommunications services, which would tend to evidence (a) viability as a going concern, and (b) ability to provision the broadband service; (2) whether the application contemplates a partnership; (3) the type of service to be provided, with higher capabilities, lower latency, and high or no data caps earning more points. Critically, however, the applicant must demonstrate its financial standing. This may be accomplished through the provision of various documentation that may include, but need not be limited to: operating reports, financial report,

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<sup>45</sup> N.C. Session Law 2018-5 (creating the Growing Rural Economies with Access to Technology (GREAT) grant program).

<sup>46</sup> NOI at 3.

and/or audited financial statements, including balance sheets, net income and cash flow. If the applicant is a holding company, then RUS should require that it submit its own statements; if the applicant is a wholly-owned subsidiary that bases its wherewithal upon the capabilities of the parent company, then it should be required to submit the financial statements of the parent company.<sup>47</sup>

NTCA submits, as well, that the Department require applicants to demonstrate the infusion of their own capital to ensure sufficient incentive for sustainable projects. This element may be included in the overall business plan that the Department should require and review carefully. The business plan must address long-term sustainability and identify *any* cross subsidies or other subsidies that may be directed to the proposed project, including, but not limited to, unregulated, non-telecommunications activities, poles and other network facilities, or other assets or benefits of the business being brought to bear to operate the telecommunications network specifically.

The table below offers a representative set of issues that the Department could consider as a template. Not every application will be able to incorporate all these elements, but the table offers alternative criteria that can be weighed against each other, subject to the recommendation that certain overarching criteria, as enumerate above, carry the most weight:

**Applicant**

Is the applicant a currently-operating firm?

Has the applicant been in existence for two or more years?

Does the applicant have experience providing facilities-based broadband?

Does the applicant have experience providing broadband in a rural area?

Does the applicant have experience deploying network facilities?

Does the applicant have deployment experience in rural areas?

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<sup>47</sup> NTCA submits that FCC rules for the CAF II program provide a framework that can define the BECP program requirements. *See, generally, Connect America Fund Phase II Auction: Notice and Filing Requirements and Other Procedures for Auction 903*, Docket No. 10-90, 33 FCC Rcd 1428 (2018).

Is the applicant a past or current RUS borrower?  
Is the applicant a recipient of a prior RUS grant?  
Is the applicant a recipient of CAF or USF support?

**Proposed service**

What are the maximum upstream speed and maximum downstream speed?  
What are anticipated latency and jitter levels?  
What is the anticipated time to deploy?

**Supported vertical industries**

Does the application identify an ability to support agriculture, economic development, education, health care or other community functions?

**Partnerships**

Does the application include a partnership with:  
Local government  
Local public utility, including but not limited rural electric provider  
Local commercial industry  
Local or other philanthropic organization

**Community interest**

Does the application demonstrate support from:  
Local government  
Local vertical industries, including schools and libraries  
Prospective residential users

**V. CONCLUSION.**

For the reasons stated herein, NTCA submits that the goals of the e-Connectivity pilots will be best assured by directing resources toward the deployment of scalable networks that serve current needs and which will meet future demands. The program can leverage Federal Communications Commission CAF/USF programs by enabling e-Connectivity resources to enable the improvement of networks. However, the e-Connectivity pilot must not overbuild or duplicate existing networks. An objective scoring process that considers the fitness of the applicant and the proposal, including consideration of whether partnerships with local utilities are contemplated, will be essential to ensuring a sound structure for the evaluation of applications. Undertaken properly, the e-Connectivity pilot can offer the Nation a valuable path

toward the National goal of increased broadband deployment, and the resultant benefits that broadband-enabled applications can bring to rural and farming communities.

Respectfully submitted,

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