Before the
DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

In the Matter of	)	
	)	NTIA Request for Comment
Improving the Quality and Accuracy of Broadband Availability Data	)	Docket No. 180427421-8421-01

COMMENTS OF
NTCA–THE RURAL BROADBAND ASSOCIATION

I. INTRODUCTION

NTCA–The Rural Broadband Association ("NTCA")[1] hereby submits these Comments in response to the National Telecommunications and Information Administration ("NTIA") Request for Comments on actions that can be taken to improve the quality and accuracy of broadband availability data, particularly in rural areas.[2] NTIA has initiated this proceeding to identify methods for improving broadband availability data, "with the intention of identifying gaps in broadband availability that can be used to improve policymaking and inform public investments."[3] NTIA noted expressly in its Request for Comments that it is not seeking to create a new data collection program,

[1] NTCA represents approximately 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 service provider members are full service rural local exchange carriers ("RLECs") and broadband providers, and many provide fixed and mobile wireless, video, satellite and other competitive services in rural America as well.

[2] Request for Comments on Improving the Quality and Accuracy of Broadband Availability Data, NTIA Docket No. 180427421-8421-01, 83 Fed. Reg. 24747 (May 30, 2018) ("Request for Comments").

[3] *Id.*

but rather to expand upon the data collected by the Federal Communications Commission ("FCC") through the FCC's Form 477.[4]

As NTIA noted in its Request for Comments, providers currently report broadband data on the Form 477 based on census blocks and, pursuant to the Form 477 instructions, if a provider offers service to *any* location in a census block, the provider reports the block as served, "even though it may not offer broadband services in most of the block."[5] Furthermore, a lack of either standardization in, or verification of, measurement of coverage reported on Form 477 raises concerns about the "vetting" of 477 data, without which the claims may not reflect facts on the ground. Accordingly, the 477 data can, and sometimes does, cause an unserved area to appear served, thus preventing providers interested in providing broadband service in the area to be eligible for crucial Federal funding needed to finance the cost of deploying broadband. This dynamic is particularly problematic in rural areas, where larger "served" census blocks can have one served customer residing miles away from multiple unserved "neighbors." The Request for Comments therefore seeks input on ways to identify more accurately areas that remain unserved by a broadband provider. To this end, NTCA recommends creating a single database developed through a standardized data collection process that would be used by all Federal, state, and local agencies and that – regardless of the much-needed standardization of data collection – also allows for a "challenge" process by other broadband providers and interested parties (including, but not limited to, affected consumers and communities) as a method of verifying the accuracy of information shown in the database prior to use for purposes of making public policy or funding decisions.

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[4] Telecommunications providers subject to the FCC's authority must file FCC Form 477 twice each year. The FCC uses the information provided on carriers' Form 477 for its annual Broadband Deployment Report.

[5] *See* Request for Comments.

II. THE NEED FOR MORE STANDARDIZED AND GRANULAR DATA MUST BE BALANCED WITH THE CREATION OF NEW REPORTING BURDENS FOR BROADBAND PROVIDERS.

NTCA supports the development of accurate and verifiable data that will more accurately identify on a standardized basis those areas where individuals and businesses currently lack access to much-needed broadband. However, as NTCA noted in its comments in the FCC's Modernizing the FCC Form 477 Data Program, any new data collection program should not increase reporting burdens, particularly for small providers.[6] A 2016 survey, for instance, found that NTCA's members already spend an average of 76 hours per year completing FCC Form 477 alone.[7]

Presently, a number of different Federal and state databases exist to demonstrate areas that have broadband Internet service. In addition to the Form 477, which all broadband providers must complete, carriers who participate in various Connect America Fund programs must also report on their broadband deployment to the Universal Service Administrative Company ("USAC") for compliance purposes via the HUBB ("High Cost Universal Broadband") portal.[8] Various states also have broadband data collection obligations, whose parameters are not consistent with Federal efforts. By way of example, broadband providers in Minnesota must report their deployment data, including speed, through the Minnesota Office of Broadband Deployment.[9] All of these databases contain varying information, however, as to availability.

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6 Comments of NTCA, WC Docket No. 11-10 (Oct. 10, 2017), at p. 3.

7 *See* Comments of NTCA-The Rural Broadband Ass'n, National Broadband Agenda, Docket No. 160831803-6803-01 (Oct. 11, 2016), available at https://www.ntia.doc.gov/files/ntia/publications/ntca.pdf.

8 Filing Geolocated Broadband Deployment Data, available at https://www.usac.org/hc/tools/hubb.aspx.

9 *See* Minnesota Office of Broadband Development, Maps and Data, available at https://mn.gov/deed/programs-services/broadband/maps/.

To begin with, the maps generated by the various databases are created separate from one another and at different times, which could result in an area appearing unserved on one map and served on another. Those relying on the maps to make deployment decisions would have to know to look at all the maps, and data behind the maps, to determine what areas truly are unserved. For instance, the map created by the FCC using Form 477 data is dated February 22, 2018,[10] while the Minnesota broadband map is "current as of December 2016."[11] Furthermore, the defined areas of deployment vary with each collection: Form 477 uses census blocks while Minnesota collects information at the county level, and the HUBB collects information based on geocoded locations (although these then track to census blocks).[12] As another example, the California Public Utilities Commission ("CPUC") requires broadband providers offering service in the state to file information annually demonstrating the locations where they provide broadband service; however, the CPUC defines broadband as "information-transfer rates exceeding 200 kbps in at least one direction."[13] There is also the additional hurdle of capturing data that change over time – ensuring that providers can report on where they are in the process of actually constructing networks even if a snapshot in time shows a given area as "unserved."

A single database could make the methodology for reported speeds consistent, or at least show consistent "layers" of data at different speeds, and thereby provide a somewhat more accurate

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[10] *See* Federal Communications Commission, Maps, Fixed Broadband Deployment, available at https://www.fcc.gov/reports-research/maps/.

[11] *See* Minnesota Office of Broadband Development, Maps and Data, available at https://mn.gov/deed/programs-services/broadband/maps/.

[12] HUBB Frequently Asked Questions, available at https://www.usac.org/_res/documents/hc/pdf/tools/HC-HUBB-FAQ.pdf.

[13] 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.

and standardized picture of served and unserved areas. Currently, for instance, the Form 477 requires providers to report "advertised" speed. This method, especially when combined with an entire census block being considered served with just one location, could make an entire census block appear to be served by 25/3 Mbps when in fact only the customers located close to the broadband provider receive that speed; the provider may not have yet extended high speed service to customers scattered across other portions of the census block. The HUBB, by contrast, will ultimately require filers to not only report locations served by geocoding, but also to conduct speed tests at random locations to validate the actual speeds available. (It should be noted that the HUBB's primary purpose is for compliance with universal service buildout performance obligations, and not mapping itself.) Any new database or reporting mechanism therefore must also clearly define whether "actual" or "advertised" speeds are to be used (regardless of what consumers may choose to subscribe to), the methodology for gathering the data, and how many locations (or what other geographies) are to be validated (if validation is to be required at all). Finally, consideration should be given as to how to depict projects in progress – those projects that, while not offering broadband yet, are in process and will, once completed, deliver high-speed broadband to areas that look unserved at a snapshot in time.

Another difficult question that arises is how to balance burden and granularity. Many NTCA members are now reporting into the HUBB, and have generally indicated that it is not an onerous process to report *new* installations or upgrades. However, even with geocoding's granular approach toward identifying precise locations, one location can appear as two if the geocoding method is not done precisely the same way by each broadband provider. At the same time, while geocoding might offer a reasonable means of achieving more granularity in determining availability, it could represent

a substantial burden if flexibility is *not* provided in terms of how geocodes can be established[14] or if providers are required to "retroactively" identify deployments of broadband already made.[15] Thus, even as geocoding may offer promise toward greater granularity and accuracy in measuring availability, it too requires further discussion and development – as well as a challenge process if used for purposes of determining where federal funds should flow.

The notion of creating a national map, and supplementing it with data that might be gathered by other agencies, is therefore a laudable and necessary goal, but one that requires multiple difficult trade-offs in terms of accuracy, granularity, and burden. Creating a single broadband database that would be used by NTIA, the FCC, and other Federal, state, and local agencies is an important first step toward identifying unserved areas in a way that does not impose new burdens on broadband providers who do the reporting. To work toward this goal of creating a single database, NTCA recommends that NTIA either participate more fully in, or wait for the results of, the FCC's current rulemaking proceeding governing changes to the Form 477.[16] The FCC initiated that proceeding to determine ways it can "collect better and more accurate information on Form 477" while also minimizing burdens on filing entities.[17] Given the fact that the FCC's goals in the Form 477 proceeding are consistent with NTIA's goals in the instant proceeding and the fact that the Form 477 database is currently the only nationwide broadband deployment database, working with the FCC to improve the method by which information is collected on the Form 477, and how areas are

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[14] See, e.g., *Geolocation Methods, A Guide to Successfully Collecting Broadband Deployment Data*. Universal Service Administrative Co., available at https://www.usac.org/_res/documents/hc/pdf/tools/HUBBGeolocationMethods.pdf.

[15] *See* Comments of NTCA, WC Docket No. 11-10 (Oct. 10, 2017), at fn 10.

[16] *See Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Further Notice of Proposed Rulemaking, FCC 17-103 (Aug. 3, 2017).

[17] *Id*.

considered served, offers the best results for both providers doing the reporting and agencies and carriers who rely on an accurate, consistent and up to date database. Put another way, if the sensible goal here is to complement, coordinate with, and expand upon the FCC's Form 477 process, NTIA's initiative would be most productive by waiting until the target stops moving.

III. REGARDLESS OF HOW BROADBAND AVAILABILITY DATA ARE GATHERED, ESTABLISHING A ROBUST AND MEANINGFUL "CHALLENGE PROCESS" IS AN ESSENTIAL METHOD OF VALIDATION PRIOR TO USE OF SUCH DATA BY INDIVIDUAL AGENCIES.

In the Request for Comments, NTIA asks "what methodologies, policies, standards, or technologies can be implemented to validate and compare various broadband availability data sources…."[18] As noted above, if all Federal, state, and local agencies rely on one reporting database, users of that data will not need to create any methodologies for comparing data and the agencies could presumably rely upon one validation method as well. This would not only make the reporting process less burdensome for broadband providers, but also would ensure that all agencies, as well as any entities interested in providing broadband service to unserved areas, are relying on the same information, reported the same way, by the same entities, and for the same boundaries.

To verify the data submitted accurately identifies unserved and underserved areas, NTIA should develop, and then promote use by other agencies of, a standardized process that would allow broadband providers and other stakeholders to "challenge" deployment locations and broadband speeds to correct any errors contained in the database. This would not only save individual agencies who then utilize the broadband database from having to create – and save broadband providers from having to spend more hours on – yet another form or process, but also would ensure the data are more accurate than any other verification method. Indeed, a robust and data-driven "challenge process" of some kind will be needed whenever the initial mapping data are being used to make

[18] Request for Comments.

policy or funding determinations even if some level of preliminary validation is conducted by the submitting provider, as no test will cover every location; ultimately the only truly effective means to verify claims of coverage is to permit other interested parties to weigh in on such claims as well.

For example, as NTIA noted, Form 477 data can make an entire census block appear to be served by a broadband provider when in fact large areas of the census block may remain unserved. NTCA suspects that NTIA and other agencies will not have the resources or capability to perform thorough "independent" vetting of data upfront as and when submitted by providers. This then necessitates that a challenge process be performed at such time as the data may be used to drive policymaking and/or funding decisions. This subsequent validation must be an essential component of mitigating the risk of "false positives" in coverage and helping to ensure that limited resources to promote broadband availability are directed as effectively as possible.[19]

Similarly, the HUBB uses geocoded locations to identify served and unserved areas and provides "real-time validation of geolocated broadband deployment data by conducting a series of automated checks of the information."[20] However, this validation process only applies to whether the location(s) submitted are within the proper census blocks - not to the speed reported to have been deployed (*i.e.*, not as to actual availability). Thus, even with a very granular level of reporting and data collection such as geolocation, a challenge process "on the back end" prior to use will *still* be essential to ensure the data collected accurately reflect coverage on the ground, so that neither

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19 *See, e.g.*, *Wireline Competition Bureau Concludes the 100% Competitive Overlap Challenge Process*, WC Docket No. 10-90, Public Notice (rel. Nov. 2, 2017); *Mobility Fund Challenge Process*, Universal Service Administrative Co., available at https://www.usac.org/hc/MFII-challenge-process.aspx.

20 HUBB Frequently Asked Questions, available at https://www.usac.org/_res/documents/hc/pdf/tools/HC-HUBB-FAQ.pdf.

mistakes in reporting nor differences in methodology of collecting data lead to false indications of coverage that ultimately may deny consumers access to broadband.

IV. CONCLUSION

NTCA supports NTIA's intention to enable creation of a national broadband deployment database that reflects accurately whether consumers do or do not have broadband Internet service. An accurate database would benefit all Federal, state and local agencies who rely on broadband deployment data for issuing funding for new broadband deployment; providers looking to expand into unserved areas; and broadband providers who would only need to report their deployment data to one agency. Even with the most carefully crafted methods for reporting broadband deployment data, however, a challenge process will still be essential to allow data to be confirmed and errors to be corrected. Furthermore, any undertaking to improve broadband deployment reporting must not impose any new burden on reporting entities generally and small businesses in particular.

Respectfully submitted,

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