



Policy Brief

FCC Releases Report & Order on Broadband Data Collection

July 18, 2019

On July 11, the Federal Communications Commission (FCC) circulated a highly anticipated [Report and Order and Second Further Notice of Proposed Rulemaking](#) on the topic of broadband data collection and mapping, which will be considered for adoption at the FCC's August 1st Open Meeting. The *Report and Order (Order)* establishes the "Digital Opportunity Data Collection," distinct from the current data collection process called Form 477, which will gather geospatial broadband service availability data to advance the goal of universal service. In the *Second Further Notice of Proposed Rulemaking (Second Notice)*, the FCC asks stakeholders to respond to a variety of questions on the new Digital Opportunity Data Collection in order to enhance the "accuracy and usefulness of broadband deployment reporting."

Form 477 Background

As outlined in a previous [Connected Nation Policy Brief](#), leaders on both sides of the political aisle have frequently argued Form 477 data is inaccurate and lacks proper granularity to be useful for measuring the Digital Divide. The current Form 477 process requires providers to report census blocks where they provide service, and if even one household in a given block is served, the entire block is considered as having service, resulting in a significant overstatement of availability. Additionally, Form 477 data is not validated or verified, which contributes to significant misrepresentation of broadband coverage. These issues and more lead to inaccurate data that is not granular enough to be useful for identifying unserved areas.

There has been a plethora of broadband-focused legislation introduced in Congress this year, including some efforts to revamp Form 477 from the legislative branch. Most recently, U.S. Senator Roger Wicker (R-MS), who serves as chairman of the Senate Committee on Commerce, Science, and Transportation, introduced the [Broadband Deployment Accuracy and Technological Availability \(DATA\) Act](#). The legislation aims to improve FCC mapping by strengthening the data collection process via Form 477.

With pressure from the public, broadband providers, legislators, and various organizations to collect accurate and granular broadband availability data, the FCC announced at a recent Senate Commerce FCC oversight hearing that they would vote on measures to improve such reporting and data at the FCC's upcoming [August Open Meeting](#). The promise of this announcement resulted in the *Order* and *Second Notice* outlined here.

The Report and Order

In the *Order*, the FCC directs the Universal Service Administrative Company (USAC) to serve as a clearinghouse for both data submitted by service providers, as well as for “crowdsourcing” public feedback regarding the accuracy of provider-reported data, and charges them with creating a new portal to collect both sets of data. The portal and new data collection effort will initially be focused on collecting information from only fixed service providers and will require them to submit polygon shapefiles of their coverage areas. The information submitted must include maximum speeds, technology types deployed, and a differentiation between residential-only, business-only, or residential-and-business broadband services.

The *Order* states that “[f]or purposes of the Digital Opportunity Data Collection, service is actually available in an area if the reporting fixed provider has a current broadband connection or it could provide such a connection within **ten business days** of a customer request and without an extraordinary commitment of resources or construction costs exceeding an ordinary service activation fee. The filer must be able to establish a connection within this timeframe to every end-user location contained in the reported broadband coverage polygon.” With this definition of “served,” the FCC will not be prescribing technical standards to define if fixed broadband is available in an area at this time, but they are seeking comment on that subject in the *Second Notice*.

Regarding the public availability of submitted data, the *Order* says that all service provider data filed as part of the Digital Opportunity Data Collection will be considered non-confidential unless the FCC specifically states otherwise. For providers who wish for their data to remain confidential, they must submit a request and justification to the FCC.

The FCC also addresses the recent USTelecom pilot project to map broadband coverage on a location-by-location basis by first creating an underlying dataset (“fabric”) of “serviceable locations,” stating that such an approach has merit and should be explored further at the conclusion of the two pilots currently underway in Missouri and Virginia. However, they also state that the time to deploy such an approach would be much greater than the Digital Opportunity Data Collection method of polygon-based reporting, so the FCC will proceed with polygon-based reporting for now and will evaluate such alternative methods at a later date.

Provider Requirements and Timing

As outlined in the *Order*, USAC must issue a notice announcing the availability of the new data collection platform and any reporting deadlines. From there, fixed providers must file initial service availability reports within six months of USAC’s notice. Fixed providers must also submit updates within six months of completing any broadband deployments. Filers are required to certify by June 30 of each year that as of December 31 of the previous year, all of their service availability data continues to be accurate,

irrespective of whether their data has been updated during that calendar year. Connected Nation estimates that it may take 12-18 months for the first data collection that will result from the *Order* to be received by USAC.

Refining the Data

The FCC lays out a few methods for the refinement of provider-submitted data: crowdsourcing, a challenge process, and other validation techniques.

- **“Crowdsourcing:”** The USAC-created provider portal must also be used for crowdsourced data collection efforts as the FCC hopes public feedback will help to refine the maps and improve the accuracy of broadband data.
- **Challenge Process:** The *Order* calls on USAC to create an additional portal that will allow for challenges to be filed to existing data. USAC is required to make public the areas and details of disputes, though no timeline is prescribed for the publication of such information.
- **Other Validation:** The FCC calls on USAC to develop a validation plan and suggests use of the High-Cost Universal Broadband (HUBB) portal to cross-check data submitted by providers. Currently, USAC maintains the HUBB portal where CAF-support recipients report latitude and longitude coordinates, addresses, deployment dates, speeds, and numbers of units for locations where service is now available using federal subsidies. The FCC calls for this data to be overlaid with polygon data to “benefit [the FCC’s] overall understanding of how high-cost support dollars are used in conjunction with overall broadband deployment and will aid the data collection verification effort.” The *Order* states that many of the methods USAC uses for validation of the CAF can be used for validation of Digital Opportunity Data Collection information, including automated checks. It should be noted that currently, USAC’s validation is extremely limited—as USAC presently validates the type and format of the data—but does not confirm the physical presence of broadband services to each submitted location. In the *Order*, the FCC charges USAC with developing a plan for the independent verification of the data submitted under the new *Order*. This plan may or may not include field validation.

Updating Form 477

Despite calling for the establishment of the Digital Opportunity Data Collection, providers will not see an immediate end to the current Form 477 reporting process. Form 477, the FCC says, will still be used for purposes such as evaluating local telephone competition, gathering broadband deployment and voice subscription data, and collecting certain public safety information. In the *Second Further Notice of Proposed Rulemaking*, however, the FCC does propose transitioning to the same USAC-administered portal created for fixed service and seeks comment on sunsetting Form 477.

In the interim, however, the FCC will maintain its current Form 477 data collection for mobile broadband and voice data but will take several actions to reduce the burden on service providers required to submit the form. Some of the changes that the *Order* outlines include:

- The elimination of the requirement to report each spectrum band separately (for mobile and voice)
- A new requirement for providers to report 5G technology deployments
- The change for mobile reporting codes to be simplified into four categories: 5G-NR (New Radio), LTE (Long Term Evolution), CDMA-based, and GSM-based
- A new requirement for mobile and voice providers to submit subscriber data at the census tract level, based on place of primary use.

The Second Further Notice of Proposed Rulemaking

In the *Second Further Notice of Proposed Rulemaking*, the FCC requests comment on a vast array of questions pertaining to the future evolution of the Digital Opportunity Data Collection program. With so much yet to be determined in the *Order*, the FCC has a long way to go in terms of establishing final rules and procedures that lead to a truly accurate and granular national broadband map. Questions in the *Second Further Notice* include, but are not limited to:

- What guidance should be offered to providers regarding polygons depicting fixed broadband coverage?
- Should the FCC prescribe rules for reporting fixed service that will provide consistently reliable results for similarly situated filers (for example, should fixed buffers around network facilities define coverage)?
- If the FCC adopts standards for reporting mobile data, should they require terrestrial-fixed wireless providers to report broadband deployment using similar standards? Are there fundamental differences between fixed wireless and mobile technologies that would caution against using mobile wireless standards for fixed wireless deployment reporting?
- Should fixed broadband providers include latency levels along with the other parameters in reporting their coverage polygons?
- Is there a size or type of fixed provider that will be able to file high-quality data without any additional support or added cost? Are there unique burdens on smaller fixed providers that would not be burdens for larger fixed providers?
- What is the best method to ensure providers submit accurate data? What penalties would be appropriate?
- How should satellite data be handled?
- The FCC proposes that USAC “track coverage disputes, follow up with providers to ascertain whether there is agreement that there is a problem with the data, and ensure that providers refile updated and corrected data in a

timely fashion.” USAC is therefore directed to create a system to track complaints. How should USAC efficiently track this information?

- How can USAC involve Tribal governments in the data collection process?
- If bad data has been identified, how quickly should providers be required to fix the data?
- How should USAC handle cases in which providers and the stakeholders disagree about whether the broadband coverage polygons are correct? How should USAC implement any dispute resolution process?
- How should the FCC incorporate location data and how should the location of a parcel be defined (for example, at the center of the parcel or at the location of a building on the parcel)?
- How should multi-tenant housing be treated in respect to location identification?
- How should the FCC approach the quality of broadband-serviceable location databases?
- What should be considered for incorporating mobile wireless voice and broadband coverage into the Digital Opportunity Data Collection, and what additional steps should the FCC take to obtain more accurate and reliable mobile broadband deployment data?
- In December 2018, the FCC launched a Mobility Fund Phase II (MF-II) investigation into potential violations of MF-II challenge process rules by one or more major providers. With the MF-II investigation still in progress, how should the FCC require mobile data be reported?
- How can crowdsourced data be incorporated into a mobile data collection process?
- Should the FCC establish partnerships to collect drive test information? For example, should the FCC explore creating a pilot program with the U.S. Postal Service or other delivery organization with a nationwide fleet to gather mobile performance data?
- Can drones be used for data verification, and if so, how?

Next Steps

After the FCC votes on the *Order* at its August 1st Open Meeting, assuming it is adopted, USAC will begin the process of creating both a data collection and public feedback portal. Once completed, USAC will issue a notice that service providers must submit their polygon shapefiles within six months. CN estimates it will be 12 to 18 months until the first new data can be reported via the new portal and two to three additional months for the data to be analyzed and ultimately reflected on a new version of the national broadband map. The timeline for the *Second Further Notice*, which will seek to answer the questions above, is still yet to be determined.

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