

**TESTIMONY OF JAMES M. ASSEY**

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**NCTA - THE INTERNET AND TELEVISION ASSOCIATION**

**on**

**Legislating to Connect America: Improving the Nation's Broadband Maps**

**before the**

**Subcommittee on Communications and Technology**

**Committee on Energy and Commerce**

**UNITED STATES HOUSE OF REPRESENTATIVES**

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Good afternoon, Mr. Chairman and Members of the Subcommittee. My name is James Assey and I am the Executive Vice President of NCTA – the Internet and Television Association. NCTA is the principal trade association for the U.S. cable industry, which supports 3 million jobs all over America – over 300 people in every congressional district in the United States – and has an estimated economic contribution of \$450 billion to the U.S. economy.<sup>1/</sup> Our members include the nation’s largest providers of high-speed broadband Internet access as well as small ISPs that serve the most rural areas of the country. We welcome this important hearing on the Broadband Deployment Accuracy and Technological Availability Act (the “Broadband DATA Act”) and other important broadband mapping legislation, as the Committee considers how best to bring broadband to all of America, and I am pleased to be here today to discuss how improvements to current broadband maps can play a key part in achieving that goal.

Over the last twenty years, we have witnessed the rapid expansion of broadband networks. The cable industry has invested over \$290 billion to deploy networks reaching roughly 93% of American households with broadband infrastructure and networks over the last twenty years. Federal and state governments, along with other industries, have also devoted billions more in annual subsidies through universal service and other government programs. Notwithstanding this progress, and the substantial capital invested in these efforts, we know that millions of Americans today still live in areas where high speed broadband service is not yet available. As Congress and the FCC continue to consider policies that will achieve the goal of delivering broadband service to all Americans, our collective challenge is to find those gaps

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<sup>1/</sup> *Investing in America*, [www.ncta.com/sites/default/files/2019-07/investing\\_in\\_america\\_factsheet.pdf](http://www.ncta.com/sites/default/files/2019-07/investing_in_america_factsheet.pdf).

and fill them. No doubt, new technologies and new strategies will be needed to confront the challenging economics of serving remote, less dense parts of the country. But we will also need better broadband maps to identify the problem, to target scarce resources where they are most needed, and to chart our continued progress toward achieving our national goal.

### **The Role of Form 477 and Broadband Mapping**

For nearly two decades, the FCC has relied on information submitted by providers about voice service and broadband deployment through “Form 477” to inform its policymaking. The data from Form 477 also enable the FCC to fulfill its statutory responsibilities, including assessing whether broadband deployment is increasing throughout the country in a timely fashion.

Over the years, the FCC has continued to refine the Form 477 data collection to obtain better information to meet changing policy goals. In 2013, it began requiring providers to report deployment data at a census block level, which was a far more granular level of data than had ever before been collected. The ability to identify which census blocks had broadband service – and then translate that data onto a map – gave the FCC a good picture of how broadband deployment was spreading throughout the country, which areas of the country had broadband competition, and the speeds that were being offered in various areas. It also enabled the FCC to identify unserved census blocks that should be eligible to receive new government subsidies for broadband deployment.

The FCC’s current Broadband Map remains the product of data collected by the FCC from the Form 477 reports – and a refinement of the original NTIA National Broadband Map. As in 2013, providers indicate whether broadband service is available in any part of a particular

census block or not. The result is that a census block may be reported as “served” even if broadband is only available in a small portion of the area, and some areas that may have benefitted from broadband funding support are not eligible because they are considered “served.” This has caused a particular concern in rural areas, where census blocks can be quite large and broadband service may only be available in limited areas.

Today, it is time for providers to report their deployment data in a more targeted fashion, to identify the remaining pockets of the country – often *within* census blocks – where broadband service is truly lacking. But the purpose of having a National Broadband Map has not changed. At its core, a National Broadband Map is not an end to itself, but a tool to identify where broadband service is available at a given point in time, and to aid policymakers in focusing scarce government resources where they are needed most – areas where broadband service is not available. Having this clear understanding is key to ensuring that broadband funding efforts are directed at the unserved areas that need it most. With appropriate support from the FCC and Congress, such as the legislation being considered today, broadband maps will continue to improve so that they are as useful as possible in helping to achieve the goal of ubiquitous broadband for all Americans.

### **Recent Improvements in Form 477 Data Collection and Mapping**

The FCC already has taken significant steps toward updating this process. Aided and spurred by discussions in this Committee and elsewhere in Congress, the FCC in August adopted new measures to reform and improve the quality of data it receives so that actual deployment can be more precisely reflected on a National Broadband Map, while still maintaining reasonable reporting burdens on providers. Once implemented, these changes will require

providers not only to continue to submit a list of census blocks where they make service available, but also to also submit more detailed information about the areas within those census blocks in which they can and do offer service.

Specifically, the new FCC rules adopt a proposal made by NCTA that will require providers to submit more granular representations of network coverage through the use of polygon “shapefiles” – electronic coverage maps that represent the areas where they make service available. Because the shapefiles that providers will now submit are not tied to census block boundaries, and are required to exclude areas where the provider cannot deliver service within a standard business practice period, those maps will show far more precisely where broadband service is available and where it is not. Using shapefiles also ensures that the FCC will receive far more accurate information without imposing unreasonably burdensome requirements on providers, which some other alternatives, such as mandated location- or address-based reporting, could do.

In addition to seeking more granular information from providers, the FCC also took another important step to improving data collection by adopting a process that allows for public feedback on the data submitted by providers. Under this “crowdsourcing” approach, the public will be able to submit data about whether service is, in fact, available in the areas identified on the shapefiles submitted by a provider as “served.” This data will supplement and fine-tune the deployment data submitted by providers.

As this new crowdsourcing approach is incorporated into the mapping process to further refine the map, it will be important to set up evidence-based standards and processes that ensure that any data relied on in creating its map is both relevant and accurate. There are

certain issues associated with the deployment of broadband that should be considered in order to create a meaningful process that minimizes administrative burdens. For example, an address might not currently have broadband service because no one has requested it, but a line could easily be extended to that household from the existing network without delays or extra fees if there were an actual consumer request for service. For purposes of mapping, that household would be – and should be – considered “served.”

Similarly, a consumer (or a state or local agency) might submit data gathered from online speed tests purporting to show that an area is not served because the customer is not receiving speeds at the level reported by the provider to the FCC. But there are many factors outside the network provider’s control that may contribute to aberrant performance. Such factors can include limitations, malware or viruses on the equipment in the home, whether the equipment is using a wired or Wi-Fi connection, the type and location of the router, the performance of other networks involved in the transmission of Internet traffic, and the configuration of the online speed testing platform – or even the simple fact that a customer has elected to purchase a tier of service that offers speeds below the highest advertised speed made available in a particular area. Unless the speed tests are performed on a platform that controls for each of these factors, such as the Measuring Broadband America (or “SamKnows”) platform used by the FCC, they cannot be considered dispositive of whether the provider makes service available at the relevant speed threshold.

Additionally, before awarding scarce broadband deployment subsidies based on the map, there should be a means of challenging a provider’s submission of deployment data, an opportunity for the provider to respond to the challenge, and a forum for resolution by the FCC

if the parties do not reach agreement. This ensures that funding is directed to truly unserved areas instead of overbuilding areas already served through other subsidies or private investment. Importantly, there should also be a means of ensuring that frivolous complaints are weeded out, so that providers are not flooded with household-by-household complaints each time they submit data.

Together, shapefile reporting and crowdsourcing data will create a faster, more efficient and more accurate picture of broadband availability than ever available before. While there will certainly be costs for providers and for the FCC in establishing this new reporting regime, we anticipate that the benefits will be significant, not only to legislators considering what types of broadband funding are needed, but to members of the public trying to evaluate what services are available in a particular area. In considering the Broadband DATA Act and the related legislation before you, we encourage the Committee to maintain the approach of building on what the FCC has done, and refraining from taking any steps that might delay its implementation.

The Broadband Data Improvement Act, for example, would make a constructive improvement to the shapefile approach by adding a three-pronged data validation process. We also commend this legislation's appropriate focus on identifying where broadband is and is not, and its recognition that the Map should be used by all Federal agencies to identify areas that remain unserved and track where awarded funds have improved availability.

## **Important Considerations for Broadband Mapping Legislation**

As you consider legislation aimed at improving broadband maps and extending service to unserved households, there are a few lessons learned from the FCC process that could be useful to you. We urge you to take the following concerns into account.

First, it is important to ensure that mapping efforts produce demonstrably better information than what is available today and do not impose unreasonable burdens on providers to achieve this goal. For example, when considering the idea of estimating the precise geographic location of places that need broadband service, the Committee should carefully consider both the costs and potential benefits of such additional data through a transparent public process. In particular, the FCC is looking at the costs and benefits of creating a “broadband serviceable location tool” that would function as a database/map of every home and business in America, with detailed address and latitude and longitude information purporting to represent the precise location where broadband service is needed for that home or business. In that regard, recent experiments conducted by telecom providers in select states should have the benefit of public examination, and the FCC has appropriately teed up a number of questions associated with this effort in a pending proceeding.

Importantly, public examination of this proposal should evaluate the costs and burdens associated with creating and maintaining such a tool to guard against costs that are significant and that might fail to produce substantially more benefits than are already available through the improved process that has already been put in place in conjunction with existing mapping tools. Tough questions should be asked -- How would such data be generated so as to ensure that it focuses on unserved locations and does not slow progress or add new burdens in served



areas? How would procedural transparency be guaranteed? What incremental benefits would be expected? And what are the true costs of such a process?

It is also important to consider the challenges associated with creating and maintaining the location tool transparently. The Broadband DATA Act appropriately recognizes that the FCC, with its contractor, should be responsible for creating and maintaining this dataset as opposed to providers. Any attempt to create a location-by-location map, however, should have to take into account not only the overwhelming initial burden to create and compile such data, but also the constant updating that would be required to take into account the hundreds of thousands of new homes built each year, as well as all the homes lost to wildfires, hurricanes, flooding, and other disasters. It could be nearly impossible to keep up with such a task, or for other providers or the public to ensure that locations are properly identified and validated. The government could easily spend many millions of dollars to create a tool that fairly quickly proves unworkable. Especially in non-rural areas, this effort could be a waste of limited resources, because existing mapping tools, plus shapefiles and crowdsourcing data, will reliably show the requisite deployment information in most cities and suburban areas.

Second, it is important that any mapping track not only where providers have already deployed, but where they have been awarded funds to deploy in the future, whether from federal or state programs. Since the core function of a National Broadband Map is to ensure that government funds are dedicated where they are needed most, areas that already have been awarded funding should be properly designated, and all federal agencies should be required to consult the map before issuing subsidies so that scarce funds are not awarded in a duplicative fashion.

Finally, as we strive to improve data sets designed to identify the geographic areas that cannot yet get access to broadband, it is critical that we avoid getting sidetracked by attempts to layer in extraneous types of data that are not relevant to the consideration of whether broadband service is or is not available in a particular geographic area. The FCC already collects a wealth of data from broadband providers. It collects subscription data through the Form 477 process, which shows how many people purchase service at a particular speed threshold in a particular area. It collects pricing data through the Urban Rate Survey. It collects network performance data for fixed broadband providers – including data on actual speeds and latency – through the Measuring Broadband America process that relies on rigorous, independent network testing. None of these types of data, however, addresses broadband *availability*, and attempts to combine all information into one resource or to insert new data collection into this process would be more likely to muddy the waters and increase costs, and could delay funding to unserved areas. Instead, we encourage you to appreciate the relevance of specific data to the specific context, so as to identify the “signal” from the “noise” and keep mapping efforts moving forward as cleanly and efficiently as possible.

Thank you again for inviting me here to speak with you today. NCTA’s members welcome this hearing and are committed to working with you to improve the quality of broadband maps so that we, you, the FCC and the public have the best deployment information possible while minimizing unnecessary administrative burdens. With improved maps to use as a tool for guiding broadband funding support, we will all be better positioned to extend broadband to help achieve the goal of making broadband available to every American.