July 16, 2018

National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Ave. NW, Room 4725
Washington, D.C. 20230

Re Improving the Quality and Accuracy of Broadband Availability Data [Docket No. 180427421—8421—01]

I.   Introduction and Statement of Interest

ACT | The App Association (App Association) respectfully submits its views in response to the National Telecommunications and Information Administration's (NTIA) Notice and Request for Comment on Improving the Quality and Accuracy of Broadband Available Data (RFC).[1] Below, the App Association discusses the benefits of collecting and leveraging the most accurate broadband data available to advance a robust broadband infrastructure across America. This is a key policy priority because broadband networks fuel the app economy and enable countless consumer and enterprise end users to enjoy the array of software applications (apps) our members create. We believe having accurate data is crucial in order for the United States to remain a global leader in the broadband-enabled economy.

The App Association represents more than 5,000 small and medium-sized app development companies and technology firms across the globe. Mobile technologies are some of the most rapidly adopted technologies in human history, and the app ecosystem leverages these technologies to produce innovative and efficient solutions that drive the global digital economy and augment consumer experiences throughout their personal and professional lives.

As of 2013, only 73 percent of Americans had internet connectivity in the United States.[2] The cost of broadband deployment to providers—either wireline or wireless—remains a leading contributor to the lack of consumer access. Subsequent surveys

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[1] https://www.federalregister.gov/documents/2018/05/30/2018-11483/improving-the-quality-and-accuracy-of-broadband-availability-data.

[2] Caitlin Dewey, *The 60 Million Americans, Who Don't Use the Internet, in Six Charts*, The Washington Post (Published Aug. 19, 2013).

demonstrated a 6 percent drop in broadband adoption in 2015.[3] Meanwhile, new and innovative internet of things (IoT) technologies that depend on robust broadband connections have become ubiquitous in today's economy.[4] This divergence demonstrates the vital need to improve access to wireless broadband through decisions that are driven by the most precise data. However, we still face barriers related to collection of necessary data for government and industry stakeholders to best assess the issues involved in the digital divide. We support a collaborative approach amongst the Federal Communications Commission (FCC), NTIA, other federal government agencies, state governments, and the private sector to generate, and independently verify, the most actionable data moving forward.

I.   The FCC's 477 Form Should be Supplemented by NTIA Data Collection and Reporting Activities

A. FCC Form 477 is Improving and Could be Supplemented by NTIA Efforts

The FCC serves an important role in understanding the status of broadband connectivity in America, advancing policies to close the digital divide, and promoting competition. The FCC collects data through its Form 477, which voice service providers and all facilities-based broadband internet service providers (ISPs) must submit semi-annually.[5] Over the years, Form 477 has provided incredible insight into the status of American voice and broadband connectivity.

Still, Form 477 remains a work in progress. While the FCC requires reporting data that includes census blocks where they have deployed broadband, the form makes no distinction between a census block that enjoys full coverage and a census block that enjoys partial coverage. Thus, Form 477 makes it difficult to perform a diagnostic on broadband connectivity to discern how many consumers are with or without broadband in a particular census block. The NTIA should work with the FCC to ensure that Form 477 requests more granular data on which areas of the particular block providers they have served. Moreover, Form 477 would garner more actionable information if ISPs report on areas they are having difficulty deploying infrastructure and the reasons why such areas pose an issue.

Currently, the FCC cannot provide comprehensive information regarding broadband speeds in urban and rural areas. First, the FCC, NTIA, and other public and private stakeholders would benefit from a greater understanding of where, within the census blocks, there is not broadband coverage in conjunction with identifying what aspects of

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[3] Pew Research Center, http://www.pewinternet.org/three-technology-revolutions/.

[4] Amy Nordrum, *Popular Internet of Things Forecast of 50 Billion Devices by 2020 is Outdate*, IEEE Spectrum (Aug. 18, 2016, 1:00 PM) *founder here:* http://spectrum.ieee.org/tech-talk/telecom/internet/popular-internet-of-things-forecast-of-50-billion-devices-by-2020-is-outdated.

[5] *See* generally, FCC, FCC Form 477 Local Telephone Competition and Broadband Reporting Instructions (Dec. 5, 2016), Section 2, "Who Must File This Form?" at 5-8 (Dec. 5, 2016), https://transition.fcc.gov/form477/477inst.pdf.

the area's infrastructure/governance/etc., are also presenting roadblocks to deployment of broadband. Form 477 provides information about the infrastructure in each census block with limited specificity making it difficult for the FCC and the industry at large to discern what is slowing broadband deployment, particularly in the rural context. Currently, the FCC considers census blocks "served" so long as ISPs offer some broadband connectivity without examining exactly what type of technology they are using. While the census blocks do vary in size and population, if the NTIA—using its past experience with broadband mapping—provides guidance to the FCC on how best to expand and improve the granularity of the data in the reports, we believe that the FCC can make significant progress in improving broadband connectivity and closing the digital divide through its Form 477 collections.

Form 477 requires ISPs to update their data sets semiannually to inform the FCC's annual reports and its related broadband coverage map. This makes assessing broadband connectivity difficult in rural areas. For instance, the App Association conducted its own study of the app economy where we examined, in part, the connection between the growth of the app economy and access to broadband.[6] The FCC's Form 477 enables an ISP to serve one household out of an entire census block and consider that block completely served by that ISP. As a result, policymakers noted that our report could be more informative if it relied on more granular and uniform data. Unfortunately, we were unable to access and implement uniform broadband data outside of the maps provided by the FCC. Though the census block level data offers an impressive level of detail, policymakers and other stakeholders are justified in seeking more.

To address these issues, the FCC has teed up proposals to require more granular data from Form 477 filers. This is a positive step forward and the NTIA could draw on its own future efforts, building on its State Broadband Initiative (SBI) work, to help inform the FCC process. NTIA's SBI efforts position the agency well to help bring state data sets in particular to bear on broadband mapping. In fact, the FCC might benefit from the results of this NTIA proceeding, especially with respect to the collection of information that assists with data visualization. As the FCC touched on in its Form 477 proceeding, requiring ISPs to file shapefiles or rosters could help stakeholders develop a clear picture of where broadband is currently deployed, where there are no subscribers, and where subscribers could be added within a standard interval. NTIA's questions in this proceeding could help both agencies identify meaningful methods of developing this kind of useful information, as well as the means of verifying it. The two agencies bring unique perspectives and capabilities in providing much-needed granular metrics to assess broadband connectivity in rural areas.

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[6] The State of the App Economy, ACT | The App Association (2018). Available at http://actonline.org/wp-content/uploads/ACT_2018-State-of-the-App-Economy-Report_4.pdf.

II. An Inclusive and Collaborative Approach to Broadband Deployment Data Collection is Needed to Drive Policies that will Close the Digital Divide

The NTIA should collaborate with the FCC and other public and private stakeholders to ensure data collected regarding broadband connectivity is as accurate and granular as possible. We recommend that the FCC require ISPs to provide visual data sets, often referred to as "shapefiles," to its reports, because this data format provides more in-depth analysis into exactly where ISPs are offering broadband. This framework is preferable to the current methodology the FCC employs, which simply requests ISPs to answer a binary "yes or no" question to whether they are offering broadband to a particular census block. The App Association believes that Congress' direction to NTIA to update the national broadband availability map in coordination with the FCC is a clear endorsement of a shared responsibility between FCC and NTIA in an interfacing of data collected by both agencies, and would provide more accurate and actionable data in the context of broadband deployment. The App Association supports the use of NTIA surveys alongside the FCC's Form 477 and three household broadband adoption questions on the American Community Survey as a combined federal broadband data source. To be clear, the App Association agrees with NTIA's statement that its efforts should be to "acquire and display available third-party data sets to the extent it is able to negotiate inclusion to augment data from the FCC, other federal government agencies, state government, and the private sector" in order to "identify regions of the country with insufficient broadband capacity, particularly in rural areas."

In short, there does not appear to be a way to identify various disparities and differences of broadband connectivity in various jurisdictions based on Form 477 alone, the accuracy of which rests solely on the FCC's ability to collect it. On this point, we are happy the FCC is seeking to enhance its Form 477 filing questions. Those updates could be immensely useful to the effort to provide a clearer picture of broadband adoption for policymakers and stakeholders. Government and the private sector need broadband mapping information to be as granular and timely as possible to ensure that policymakers make informed decisions to make certain no person is left on the wrong side of the digital divide. NTIA's collaboration with the FCC and other stakeholders should drive the collection of this necessary information. Therefore, the App Association supports the use of NTIA surveys, FCC Form 477, and three household broadband adoption questions on the American Community Survey – in addition to other state-level and private sector sources of information – to inform future broadband deployment policy decisions.

III. Conclusion

The App Association appreciates the opportunity to comment on this important topic and looks forward to working with both the NTIA and FCC on this matter.

Sincerely,

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