

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Establishing the Digital Opportunity Data Collection)	WC Docket No. 19-195
)	
Modernizing the FCC Form 477 Data Program)	WC Docket No. 11-10
)	

**REPLY COMMENTS OF NEXT CENTURY CITIES; THE INSTITUTE FOR LOCAL
SELF-RELIANCE; CENTER FOR RURAL STRATEGIES; TRIBAL DIGITAL VILLAGE
NETWORK; NATIONAL DIGITAL INCLUSION ALLIANCE; AND X-LAB**

I. Introduction

Next Century Cities is a nationwide coalition of more than 200 mayors and local government leaders committed to ensuring the benefits of fast, affordable, reliable broadband Internet access for their communities. Working together, member communities collaborate on ways to build next-generation networks, increase affordability, and identify unserved and underserved populations.

The Institute for Local Self-Reliance’s (ILSR) mission is to provide innovative strategies, working models, and timely information to support environmentally sound and equitable community development. To this end, ILSR works with citizens, activists, policymakers and entrepreneurs to design systems, policies and enterprises that meet local or regional needs; maximize human, material, natural and financial resources; and ensure that the benefits of these systems and resources accrue to all local citizens.

II. Summary

We applaud the Federal Communications Commission (“FCC” or “Commission”) for its commitment to improve the broadband data collection process.¹ Collecting more granular data about where broadband is and is not available is critical for ensuring that all Americans have access to 21st century communications services. Information on latency and pricing, as well as adopting more nuanced methods to determine service availability and validate data submitted by providers, would help improve the accuracy and efficacy of broadband maps. The Commission should also work closely with local

¹ See generally *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket No. 19-195, 11-10, Report and Order (Aug. 1, 2019) (Digital Opportunity Data Collection).

governments to ensure that its data collection identifies unserved and underserved populations with more precision.

III. Latency

We join many commenters, including NTCA, ACA Connects, Connected Nation, WTA, et al. in believing that measuring latency is important today and will grow increasingly so. Tens of millions of homes use personal assistant and other “Internet of Things” devices which depend on low levels of latency. As such, the Commission should collect latency data.

The WTA proposal for providers to submit latency based on a range of values is reasonable and can help to provide useful data while limiting the burden on providers, particularly smaller ones.² Establishing a tier of less than 25 milliseconds is appropriate. The Commission may consider having tiers that overlap, such as 0-25 ms, 20-40 ms, 35-60ms, etc. to ensure ISPs are not stuck in the middle.

We disagree strongly with Hughes Network System’s claims regarding latency and subscriber experiences: “Given the relative insignificance of latency to the consumer experience of broadband, it would be difficult to justify increasing reporting burdens in order to reflect latency measurements.”³

Given that Hughes has stated that its service is available to nearly the entire United States, it offers broadband-capacity connections, and that the entire satellite Internet access market only comprises “1.7 percent of all fixed subscriptions at the end of 2017,”⁴ it seems that subscribers have a significant preference for lower-latency options. If Hughes could show in a side-by-side test that people have no preference between a 25/3 Mbps 30 ms broadband connection and 25/3 Mbps 500 ms connection, perhaps that would be compelling evidence.

Considering the goal to collect more granular information and society’s increasing reliance on low-latency devices, the Commission should collect latency data.

IV. Satellite Internet Access

Free Press offers a compelling argument on how to measure where satellite Internet access firms “compete,” info that is readily available to ISPs. The Commission should adopt the suggestion:

We emphasize the word “compete” because identifying whether or not there are

² See Comments of [WTA](#) – Advocates for Rural Broadband, WC Docket No. 19-195 (filed Sept. 23, 2019), at 18 (“WTA Comments”).

³ See Comments of [Hughes Network System](#), WC Docket No. 19-195 (filed Sept. 23, 2019), at 7 (“Hughes Network Comments”).

⁴ See Comments of [Free Press](#), WC Docket No. 19-195 (filed Sept. 23, 2019), at 14 (“Free Press Comments”).

any available, unsubsidized but competing broadband services offered by non-ETCs in a given USF study area is one of the purposes for the National Broadband Map. Each ISP certainly knows where they compete. Satellite ISPs know where they market their services. The Commission could require satellite ISPs to submit a list of ZIP codes where they mail direct marketing materials to existing or potential customers and the null set would be a good indicator of where these ISPs are not competing for customers.⁵

Satellite providers understand that their service is a last resort, largely due to the significant latency challenges associated with that technology, and market it accordingly. Including satellite Internet access as an “option” for residents who have a choice among terrestrial broadband providers does nothing but confuse and mislead the public. Notably, we can find no evidence of households with a decent terrestrial option for broadband taking service from a satellite Internet access provider, with the exception of people who were confused about the technology and are locked into a contract, waiting for it to expire.

V. Pricing Information

We reiterate calls from numerous commenters that the Commission must collect pricing data to accomplish its goals. In particular, we support Free Press’ analysis, noting recommendations in the National Broadband Plan, that collecting and analyzing pricing data will provide policymakers with a better understanding of the market and allow for better policies to improve access.⁶

VI. Properly Measuring Internet Access

The Commission can and should ensure the result of this process provides meaningful and actionable information to policymakers, market participants, and the public at large rather than merely producing a less inaccurate map than we can derive from Form 477 data. To wit, we support NTCA’s formulation here:

Of perhaps the greatest importance, any serious effort to eliminate broadband gaps cannot enable a provider to claim the ability to serve everyone in a given area at a particular level of speed and latency performance, with certain usage allowances, simply because that provider believes it can serve any one consumer at those parameters. Put another way, to justify reporting an area as “served” on a map, providers should be required to assume adoption by all customers – each and every serviceable location – in that area. In the end, broadband maps must give the public and policymakers data based on realistic coverage claims. Thus, assumptions based on oversubscription, the reach of various spectrum bands, the capability of DSL at specific loop lengths, the capacity of individual satellites, and other measures of the actual capability of

⁵ Free Press Comments at 16.

⁶ *Id.* at 11-13.

certain technologies to serve every consumer that wants to purchase service at an asserted speed are all critical to this kind of realistic picture.⁷

The Commission should ensure this data collection has actionable information on where broadband Internet access is available, not where it might be under the right conditions. WISPA explains the challenges for fixed wireless providers:

For example, although technology continues to improve, a fixed wireless broadband provider may not be able to determine with absolute certainty whether its service is “available” until a skilled installer is on site at the potential customer’s premises. Each installation is unique because each customer’s geographic location, building, other structures and obstacles may provide different challenges.⁸

Though we sympathize with the challenges faced with these providers – and we appreciate their efforts to use these technologies to expand broadband Internet access throughout the entire country – we believe this data collection should include locations that are able to receive access. Even if they are on the wrong side of a hill and even if all their neighbors already have access on a system with limited resources.

As such, we reiterate our suggestion for the Commission to allow for some additional, voluntary reporting of where access *may* be available but cannot be certified. This data could include large apartment buildings in cities and rural areas with challenging terrain. These areas would not be considered served but would provide useful information to households looking for service and to policymakers. Fixed wireless providers, as well as firms offering DSL, would have some safe harbor here given the challenges of certifying specific levels of access for these technologies. The tradeoff is that these territories would not be automatically protected from subsidies aimed at ensuring that all Americans have high-quality Internet access.

In essence, the Commission has to choose between continuing to err in favor of ISPs (intentionally or unintentionally) overstating what they can deliver to premises or developing a map that can definitively claim where broadband is truly available.

Additionally, the FCC’s proposed definition for what constitutes access is a strong step in the direction of a map depicting actual broadband availability. Free Press correctly notes the importance of correcting past errors that have significantly overstated coverage:

It remains to be seen how this change will impact the stated availability of fixed wireless services, which (according to the June 30, 2018 Form 477 data) were deployed to 37 percent of the U.S. population. Despite this supposed widespread

⁷ See Comments of [NTCA](#), WC Docket No. 19-195 (filed on Sept. 23, 2019), at 4.

⁸ See Comments of [WISPA](#), WC Docket No. 19-195 (filed on Sept. 23, 2019), at 3-4.

availability, fixed wireless connections only accounted for 1.2 percent of all residential fixed connections.⁹

WTA similarly shares concerns that the Commission adopt a meaningful standard to ensure this data collection reflects locations that fixed wireless providers can actually serve.¹⁰ Though we recognize that fixed wireless technologies have improved remarkably in recent years and suspect future data will reveal that fixed wireless connections are now well over 1.2 percent, we do not believe this technology is truly competing for subscribers in many of the areas current maps claim.

We believe fixed wireless is a valuable technology that will help to connect all Americans and offer increasing (and needed) competition in coming years. However, this data collection must be focused on where service is available, not where it might be. If the Commission allows fixed wireless providers greater latitude to report locations where they may not be able to offer service, the Commission should adopt the Free Press recommendation to flag (for satellite as well as fixed wireless) where access is “available” but the provider has not reported any connections.¹¹

VII. Penalties for Inaccurate Submissions

The Commission is embarking on this data collection because the best existing source of broadband availability is rife with errors. The Commission must take steps to ensure that ISPs have the right incentives to submit accurate information to avoid nullifying this effort. This balance may be difficult to strike but cannot involve the fantasy proposed by some that an objective referee will be able to determine whether an ISP submitting inaccurate information has done so deliberately.

Joint comments from US Telecom, ITTA, WISPA, et al. would like the Commission to reserve penalties for those willfully submitted bad data:

The Commission should not implement a reporting regime that penalizes reporting entities for errors in their data unless it is demonstrated that such errors are the result of willful misrepresentation or repeated negligence in the gathering or presentation of data.¹²

Despite others also advancing this standard, no commenter offered a convincing explanation of how this process would work. The definition of willful misrepresentation is ambiguous and will inevitably be subject to debate. Ultimately, this approach is a recipe for no accountability.

⁹ Free Press Comments at 18.

¹⁰ See WTA Comments at 16.

¹¹ See Free Press Comments at 19.

¹² Joint comments of [US Telecom, ITTA, WISPA, et al.](#), WC Docket No. 19-195 (filed on Sept. 23, 2019), at 25.

The Commission should set a simple and transparent standard that offers multiple warnings before an escalating set of sanctions that takes into account the geographic reach of a provider. There is no need for an investigation that there are no resources to conduct. The Commission should also work with smaller providers, in the spirit advanced by ACA Connects below, to ensure they are able to comply with the requirements. Still, any other ISP offering widespread or repeated inaccurate data should be sanctioned, regardless of intent and after appropriate warnings.

VIII. Small Providers

The Commission should adopt the suggestions put forth by ACA Connects regarding small ISPs and efforts to assist them in submitting the required information:

ACA Connects thus appreciates that the Commission recognizes that smaller providers may need additional time to report, and it recommends that these providers, which the Commission should define as those with fewer than 1,500 subscribers, should be given an additional six months to report. The Commission also should establish an education and compliance regime that includes, among other things, working with associations like ACA Connects to educate providers, and it should permit providers to file polygons in different file formats, including the KMZ format which can be readily produced from Google Earth at lower cost than other formats.¹³

IX. Conclusion

We offer these suggestions in hopes of improving the broadband data collection process noting that the proposals that the Commissions adopts are neither a complete nor a permanent solution. The data collection process should be reviewed and updated periodically. Moreover, we urge the Commission to develop an outreach strategy that solicits feedback from local leaders, especially those in hard to reach municipalities that are disparately impacted by inaccurate data.

Respectfully submitted,

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¹³ Comments of [ACA Connects](#), WC Docket No. 19-195 (filed on Sept. 23, 2019), at 2.