

**Before the
Federal Communications Commission
Washington, DC 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 CALIFORNIA INTERNET, L.P. DBA GEOLINKS

California Internet, L.P. DBA GeoLinks (“GeoLinks” or the “Company”) submits these Reply Comments in response to Comments received on the Report and Order and Second Further Notice of Proposed Rulemaking issued August 6, 2019 in the aforementioned proceedings.¹

I. INTRODUCTION AND SUMMARY

GeoLinks commends the Commission on its efforts to modernize its broadband data collection processes. While the 2nd FNPRM proposes several improvements to how the Commission currently collects broadband data some proposals fail to take into account the fundamental differences that exist between technology types and the resources available to small and mid-sized service providers. GeoLinks presents these reply comments to provide guidance to the Commission regarding data collection methods that are best suited for collecting fixed wireless broadband availability data.

¹ Digital Opportunity Data Collection, Report and Order and Second Further Notice of Proposed Rulemaking, WC Docket Nos. 19-195 and 10-90, FCC 19-79 (rel. Aug. 6, 2019) (“R&O” and “2nd FNPRM”).

II. DISCUSSION

A. The Commission Should Adopt the Safe Harbor Provisions Proposed by WISPA While Allowing Service Providers Flexibility When Submitting Availability Data.

GeoLinks supports the safe harbor approach proposed by the Wireless Internet Service Providers Association (“WISPA”).² WISPA’s proposal recommends “a two-pronged process to be used by fixed wireless providers to create propagation maps that better illustrate deployment coverage for various fixed wireless spectrum bands.”³ GeoLinks believes that WISPA’s proposed solution strikes the right balance between the Commission’s interest in securing granular broadband availability data and the realities of fixed wireless service. Especially for smaller providers that may not have in-house broadband mapping expertise or designated mapping resources, this safe harbor process will allow for easily calculable service area boundaries.

As GeoLinks explained in its opening comments, a variety of factors including the location of transmission towers, specific equipment used, available spectrum bands, and line-of-sight from a tower come into play when measuring broadband availability. This concept is also echoed by Alaska Communications, which explains that “coverage and broadband performance can vary widely” due to factors beyond a service provider’s control.⁴ This includes changing weather, foliage growth, new construction, etc.⁵ Moreover, as the Commission itself explains,

² WISPA Written Ex Parte Presentation, Modernizing the FCC Form 477 Data Program, WC Docket No. 11-10 and Connect America Fund, WC Docket No. 10-90 (October 22, 2018) (“WISPA Written Ex Parte Presentation”), at 1. *See also* Comments of WISPA, WC Docket No. 19-195 (filed September 23, 2019).

³ WISPA Written Ex Parte Presentation, at 1.

⁴ Comments of Alaska Communications, WC Docket No. 19-195 (filed September 23, 2019) (“Alaska Communications Comments”) at 7.

⁵ *See Id.*

determining the area that a broadband provider services “is highly idiosyncratic and determined by multiple factors.”⁶ These factors make the creation of fixed wireless service polygons difficult. In addition, as Connected Nation explains, “many providers, particularly small cable and fixed wireless companies, do not have the internal GIS expertise to software to create granular and accurate coverage polygons without assistance, regardless of how well the technical standards for polygon creation are defined.”⁷

Alaska Communications asserts that “in order to provide a reliable and uniform standard for reporting fixed wireless coverage...the Commission should adopt the fixed wireless safe harbor proposal submitted by [WISPA].”⁸ GeoLinks agrees. In the case of small fixed wireless providers, it stands to reason that while creation of a polygon from scratch may be difficult, the location of a company’s equipment and what frequency that equipment is using to provide service is known. Using WISPA’s safe harbors, fixed wireless service providers could utilize the equipment data they have readily available paired with reasonable estimations of coverage parameters based on the spectrum band utilized to create a polygon that is a reasonable representation of its service territory. This would allow the Commission to obtain more granular fixed wireless availability data without creating a data submission process that disproportionately affects one technology type/ company size over others. Therefore, GeoLinks strongly urges the Commission to adopt WISPA’s safe harbor parameters as a reporting option for fixed wireless service providers.

⁶ 2nd FNPRM at 2-4

⁷ Comments of Connected Nation, Inc. WC Docket No. 19-195 (filed September 23, 2019) (“Connected Nation Comments”) at 4.

⁸ Alaska Communications Comments at 8.

In addition to the safe harbor provisions, which GeoLinks believes will be broadly used by fixed wireless service providers, the Company also recognizes the value of allowing for reporting flexibility. As GeoLinks explained in its opening comments, there may be some instances where additional coverage area outside of the safe harbor parameters is realized. In order to ensure the most accurate data possible, GeoLinks urges the Commission to allow fixed wireless service providers the option to submit polygons that depict this expanded coverage. In doing so, GeoLinks urges the Commission to allow flexibility in how providers develop these polygons. As Verizon explains, providers should “be permitted to rely on their own services, network designs, and internal data to produce accurate and reliable polygon maps of service coverage.” GeoLinks agrees and provides as an example the suggestion made by ACA that the Commission “permit providers to file polygons in different file formats, including KMZ format which can be readily produced from Google Earth at lower cost than other formats.”⁹

Based on the foregoing, GeoLinks asserts that the Commission should allow fixed wireless providers to submit polygons that follow the safe harbor standards proposed by WISPA or polygons depicting alternative coverage data utilizing flexible methods that track how the provider measures its service territories internally.

B. The Commission Should Establish Polygon Reporting by Speed Tier

In the 2nd FNPRM, the Commission asks what additional steps the Commission “can take to improve the quality of fixed broadband coverage polygons while minimizing the associated reporting burdens.”¹⁰ GeoLinks agrees with commenters that propose that polygons be required for Commission-specified speed tiers. As Alaska Communications explains, to help mitigate the

⁹ Comments of ACA Connects – America’s Communications Association, WC Docket No. 19-195 (filed September 23, 2019) (“ACA Comments”) at 2.

¹⁰ 2nd FNPRM at para. 77.

burden associated with “developing separate polygons for every possible combination of download and upload speed, platform technology, and target customer,” the Commission should “establish bandwidth tiers (each covering a reasonable range of bandwidths) that may be represented by a single polygon.”¹¹ While GeoLinks may market specific speed tier offerings in some areas, the reality of fixed wireless technology is that almost any upload and download combination is possible with the appropriate engineering. And GeoLinks’ customers subscribe to a wide variety of speed combinations despite the standard “tiers” offered.

Reporting by standardized speed tiers would allow service providers to easily report relevant data pertaining to its availability without running the risk of potentially having to create numerous polygons for the same area to reflect customer subscription variation. For these reasons, GeoLinks urges the Commission to create standardized reporting bandwidth tiers.

C. The Commission Should Not Require Fixed Broadband Providers to Report Latency Levels

Several commenters agree with GeoLinks that the Commission should not impose latency testing on broadband service providers. Unlike CAF recipients, average service providers are not prepared at this time to roll out latency testing and don’t have the benefit of high-cost funding to supplement the costs. Therefore, requiring this now would impose significant burdens on broadband providers to develop and deploy testing measures unique to their networks.

Depending on the applicable protocol and engineering of a network, a service provider can provide high speed broadband to its customers and a high-quality user experience even with what may be considered higher latency. Therefore, so long as a customer is obtaining the speeds

¹¹ Alaska Communications Comments at 4. *See also* Comments of AT&T, WC Docket No. 19-195 (filed September 23, 2019) at 6.

they expect, latency is unimportant. Moreover, as NCTA explains, “in the past, the Commission has recognized that it is reasonable to presume that a provider that is meeting the applicable speed threshold is also meeting any applicable latency standards.”¹²

The imposition of requiring latency reporting hardly seems worth it given the minor value (if any) that would result from it. In fact, even some advocates of latency reporting admit there is no immediate need for this information.¹³ As Verizon succinctly explains, obtaining latency data to go along with coverage polygons “will impose significant burdens on providers and will provide little useful information beyond what already is available.”¹⁴

GeoLinks urges the Commission not to impose latency reporting on broadband service providers at this time. Instead, GeoLinks suggests that the Commission review latency testing data submitted under CAF and monitor consumer complaints for any latency-related issues. If latency becomes an issue that affects customers or if CAF providers chronically report higher latency than the maximum threshold allowed under CAF, then the Commission can revisit the concept of latency reporting for all broadband providers.

D. The Appropriate Timeframe for Filing Corrected Broadband Availability Data is with a Service Provider’s Next Reporting Opportunity

GeoLinks urges the Commission not to implement correction timeframes that impose additional burden on service providers. As explained by numerous commenters, smaller providers generally don’t have in-house broadband mapping teams that can easily revise

¹² NCTA Comments at 7.

¹³ Connected Nation Comments at 6, noting that it should be required “at some point in the future.”

¹⁴ Comments of Verizon, WC Docket No. 19-195 (filed September 23, 2019) (“Verizon Comments”) at 4; *see also* Alaska Communications Comments at 8 (“such reporting would be burdensome, broadly unnecessary, and unjustifiable based on any small incremental benefit the information might yield”); Comments of NCTA – the Internet & Television Association, WC Docket No. 19-195 (filed September 23, 2019) (“NCTA Comments”) at 6 (adding a latency data reporting requirement would “increase complexity and delay”).

availability polygons on a rolling basis. Instead, GeoLinks agrees with the Joint Commenters and Alaska Communications that service providers should be required to submit corrections in conjunction with their next scheduled semi-annual polygon update.¹⁵

E. The Commission Should Not Impose Enforcement Measures for Unintentional Filing Errors

Some commenters urge the Commission to impose enforcement measures on service providers for any mistakes made during the reporting process, even if inadvertent. The City of New York, for example, asserts that the Commission should “penalize providers for reporting errors, whether intentional or not.”¹⁶ Similarly Free Press “strongly urge[s] the Commission to adopt penalties for submitting inaccurate data, which should be particularly severe for ‘chronic filers of bad data.’”¹⁷ However, GeoLinks cautions against imposing strict penalties on service providers who make unintentional errors.

As an initial matter, the collection procedures the Commission proposes are largely new. There will inevitably be growing pains as service providers develop internal best practices for collecting, compiling, mapping, and submitting availability data. Therefore, at a minimum, the Commission must allow reasonable time for service providers to shore up processes before considering enforcement actions – and should allow additional time (or offer additional resources) to smaller providers. Secondly, and most importantly, the risk of enforcement action for *any* mistakes, even if unintentional, will only serve to encourage service providers to underreport service availability to avoid the potential of having something challenged. This does

¹⁵ See Joint Comments of USTelecom – the Broadband Association, ITTA – the Voice of America’s Broadband Providers and WISPA, WC Docket No. 19-195 (filed September 23, 2019) (“Joint Commenters”) at 19 and *see* Alaska Communications Comments at 14.

¹⁶ Comments of the City of New York, WC Docket No. 19-195 (filed September 23, 2019) at 3.

¹⁷ Comments of Free Press, WC Docket No. 19-195 (filed September 23, 2019) at 21.

nothing to move forward the Commission’s goals of creating an accurate snapshot of broadband availability.

Instead, the Commission should focus its efforts on improving data submissions and helping service providers perfect collection practices. As NCTA notes “when errors are identified, the Commission should focus on correcting data so that its future maps are as accurate as possible, not punishing providers for good-faith mistakes.”¹⁸

F. The Commission Should Create an Evidence-Based Challenge Process

GeoLinks asserts that any service availability disputes must include not only a certification but also proof that the service provider declined to provide service. This concept was also proposed by NCTA, which asserts that the Commission should create an “evidence-based challenge process that places substantive evidentiary requirements on the party submitting the challenge.”¹⁹ Similarly, Verizon explains that certification by itself “does not go far enough to ensure that the Commission and providers are not bogged down...from meritless public challenges” and suggests that the Commission “consider other ways to ensure that its process to make its maps more informed does not become consumer by bad data or open the door to unnecessary or cumbersome procedures.”²⁰ For these reasons, GeoLinks urges the Commission to require that disputes not only include a certification but also include proof that the service provider declined to provide service. This should be true for individual disputes and bulk disputes alike.

¹⁸ ACA Comments at 5.

¹⁹ NCTA Comments at 12.

²⁰ Verizon Comments at 6.

G. Crowdsourced Data Should be Used for Informational Purposes Only

In the 2nd FNPRM, the Commission seeks comment on how to best use crowdsourced data “to improve the quality of the service-availability dataset going forward.”²¹ While crowdsourcing data can be used to assess customer experience trends, GeoLinks agrees with commenters that assert that not all crowdsourced data is reliable or relevant. As Alexicon asserts that “the effectiveness of crowd sourcing is only as good as the crowd, so the Commission must adopt rules that ensure the process takes into account only legitimate concerns, provides for a simple process for addressing any undisputed discrepancies, and allows reporting carriers to make any necessary corrections without fear of immediate reprisal.”²²

In GeoLinks’ experience, factors outside of the service provider’s control can affect crowdsourced broadband speed data (for example). Such factors include customer equipment, the reliability of the speed data test platform, etc. When present, these factors can yield results that are not reflective of a service provider’s network performance and, if relied on at face value by USAC, could paint an inaccurate picture of a service provider’s network availability footprint, skewing the Commission’s mapping efforts. As WTA explains, “the overriding problem with crowdsourcing is that it seeks to test the entire Internet experience of the customer, which is impacted by multiple factors...not just the network of the providers.”²³ Moreover, as NCTA asserts, “online speed tests that do not control for factors outside the control of the provider should not be used for the purpose of assessing the validity of a provider’s reported deployment.”²⁴ In light of these potential limitations of crowdsourced data, GeoLinks

²¹ 2nd FNPRM at para. 88.

²² Comments of Alexicon Telecommunications Consulting, WC Docket No. 19-195 (filed September 23, 2019) at 5-6.

²³ Comments of WTA – Advocates for Rural Broadband, WC Docket No. 19-195 (filed September 23, 2019) at 11.

²⁴ NCTA Comments at 10-11.

encourages the Commission to heed the suggestion posed by WTA and use crowdsourced data for informational purposes only and consider crowdsourcing “a complement to, and [not] a substitute for, robust and meaningful evidentiary challenge processes.”²⁵

III. CONCLUSION

GeoLinks commends the Commission on its efforts to modernize its broadband data collection processes. In order to ensure that the process takes into account the fundamental differences that exist between technology types and resources available to small and mid-sized service providers, GeoLinks urges the Commission to adopt the recommendations set forth herein.

Respectfully submitted,

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²⁵ *Id.* at 14.