

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Inquiry Concerning the Deployment of Advanced)	GN Docket No. 19-285
Telecommunications Capability to All Americans)	
In a Reasonable and Timely Fashion)	
To: The Commission		

**COMMENTS OF
THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”),¹ pursuant to Sections 1.415 and 1.419 of the Commission’s Rules, hereby comments on certain aspects of the Notice of Inquiry (“*NOI*”) released October 23, 2019 in the above-captioned proceeding.²

¹ WISPA is a trade organization that represents the interests of hundreds of small fixed-wireless broadband providers (“WISPs”) that deliver internet connectivity services to more than four million consumers, businesses, first responders and community institutions in areas of the country where other service providers decline to invest. Most WISPs are small businesses, and many have only a handful of employees. To provide their services, WISPs use unlicensed, lightly-licensed and licensed spectrum at low and mid-band frequencies, predominantly in rural, unserved, and underserved areas. In many areas, WISPs provide the only terrestrial source of fixed broadband access. In areas with other broadband options, WISPs provide a local-access alternative that benefits customers by fostering competition, lowering costs and improving features. WISPA has been a regular participant in prior proceedings concerning the deployment of advanced telecommunications service under Section 706 of the Telecommunications Act. *See, e.g.*, WISPA Comments, GN Docket No. 18-238 (filed Sept. 17, 2018); WISPA Comments, GN Docket No. 17-199 (filed Sept. 21, 2017); WISPA Comments, GN Docket No. 16-245 (filed Sept. 6, 2016).

² *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Fifteenth Broadband Deployment Report Notice of Inquiry, GN Docket No. 19-285, FCC 19-102 (rel. Oct. 23, 2019) (“*NOI*”).

Discussion

I. THE COMMISSION SHOULD RETAIN ITS EXISTING FIXED WIRELESS BROADBAND EVALUATION CRITERIA AND SPEED BENCHMARKS

A. Fixed and Mobile Services Remain Distinct Offerings

The Commission seeks comment on whether mobile broadband should “be treated as a functional substitute for fixed wireline broadband.”³ While technology continues to evolve, considering the technology that is currently available or is likely to be deployed in the near term, it remains the case that, for the vast majority of users, the availability of advanced telecommunications capability requires access to *both* fixed and mobile services. As the Commission concluded in its *2019 Broadband Deployment Report*, “despite the increasing ubiquity and capabilities of mobile services, there is insufficient evidence in the record to conclude that mobile and fixed broadband services are full substitutes in all cases.”⁴ For this reason, these two distinct types of service are not functional substitutes, but remain complementary services, each independently required by most users to meet significantly different elements of their daily communications and information needs.

Generally, in addition to on-the-move voice telephony, users employ mobile connectivity for data applications, such as navigation, social media, and picture sharing, that require less throughput and data speed. Although mobile video traffic is increasing, use of handheld mobile devices to view full-length video entertainment programming is limited and situational, often a second choice use when higher throughput fixed broadband is not available on other devices or via fixed wireless connectivity. As one commentator observed earlier this year, “[m]obile

³ *NOI* at 4 (¶ 10).

⁴ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2019 Broadband Deployment Report, GN Docket No. 18-238, 34 FCC Rcd 3857, 3861-62 (¶ 11) (2019) (“*2019 Broadband Deployment Report*”).

broadband now is not a substitute for fixed broadband ... and we have yet to see any proof that 5G will make mobile broadband less restrictive or less expensive compared to fixed broadband.”⁵

As of June 2019, Xfinity reported that its customers’ median monthly fixed broadband data usage was 191 GB per month for the immediately preceding six months.⁶ This figure, however, is significantly lower than the average household monthly usage of 273.5 GB reported by Open Vault in its study covering the First Quarter of 2019.⁷ Regardless of the current level of average monthly fixed broadband use, which appears to be in the broad range of 190-275 GB, it is expected that such usage will continue to increase exponentially in the coming years with two factors as principal drivers: continuing upgrades by households from older, lower-speed connections, and increasing streaming of high-definition video programming available from an ever-increasing number of online platforms.⁸

The consumer website allconnect.com reported earlier this year that the average cost for residential fixed broadband continues to be about \$60 per month.⁹ In contrast, a mobile user accessing a volume of data over 150 GB would either incur huge overage charges, if on a capped data plan, or more likely, would choose to pay for an “unlimited” plan with a significantly higher upfront cost, and the potential that data use may still be constrained at peak usage times once internal benchmarks are exceeded. A middle tier, three-line unlimited family plan from Verizon

⁵ Amir Nasr, “Telecom Companies Are Seriously Overhyping 5G Networks,” Slate, Jan. 30, 2019, available at <https://slate.com/technology/2019/01/5g-mobile-wireless-network-hype-consumers-fcc.html>.

⁶ See Xfinity website, FAQs <https://www.xfinity.com/support/articles/data-usage-average-network-usage>.

⁷ See Open Vault Broadband Industry Report (OVBI), 1Q 2019, at 3, available at https://www.telecompetitor.com/clients/openvault/report/OVBI_Q1_Report.pdf.

⁸ See Matthew Phelan, “A Complete Guide to Apple TV+, Disney+, and the Streaming Network Explosion,” Slate, Oct. 31, 2019, available at <https://slate.com/culture/2019/10/apple-tv-plus-disney-plus-hbo-max-peacock-streaming-prices.html>.

⁹ See David Anders, “What does high-speed internet cost? Are you paying too much?” allconnect.com, May 10, 2019, available at <https://www.allconnect.com/blog/cost-of-high-speed-internet>.

Wireless, for example, currently costs \$165 per month.¹⁰ But even this plan, while controlling total costs by eliminating variable overage fees, is both substantially more costly than a fixed broadband link and not really “unlimited” at all, in that it may offer reduced speeds in times of peak congestion once a plan-specific monthly data threshold is exceeded.¹¹ Due to these cost and convenience considerations, smartphone users connect far more often using fixed Wi-Fi, either at home or via out-of-home hotspots, than using their mobile network connection – and the traffic volume of smartphone users on Wi-Fi networks is typically higher because fixed broadband users seldom must worry about data caps.¹²

For all these reasons, the Commission should maintain its well-supported treatment of fixed and mobile broadband as separate, complementary categories of service that are not freely substitutable for each other. The Commission should continue to evaluate the availability of fixed and mobile broadband connectivity independently in determining whether each one of these distinct services is being made available to all Americans in a reasonable and timely fashion.

B. The Commission Should Maintain Its Current Speed Benchmark

The Commission proposes “to maintain the 25 Mbps/3 Mbps benchmark for fixed [broadband] services” download and upload speeds.¹³ This standard was adopted in the 2015 Section 706 proceeding, a step that produced substantial disagreement among the commenting

¹⁰ See Verizon Wireless website, Unlimited at <https://www.verizonwireless.com/plans/unlimited/>.

¹¹ *Id.*

¹² See, e.g., Mike Dano, “How much data we’re using, by network, operator and service plan,” Fierce Wireless, July 24, 2018 (a survey conducted by Fierce Wireless and Strategy Analytics found that approximately 75% of data traffic on Android smartphones originates via Wi-Fi rather than on a mobile network), available at <https://www.fiercewireless.com/wireless/how-much-data-we-re-using-by-network-operator-and-service-plan>.

¹³ See *NOI* at 4 ¶ 11.

parties, just four years ago, as to whether such an increase was warranted at that time.¹⁴ Given the fact that the speed required for the applications that most broadband consumers use has not changed substantially since then, and actual subscriptions have not yet consistently surpassed the benchmark level, WISPA agrees with the Commission’s proposal to retain the current standard.

As the Commission observed in the *2019 Broadband Progress Report*, released less than six months ago, “the current speed benchmark of 25 Mbps/3 Mbps remains an appropriate measure by which to assess whether a fixed service is providing advances telecommunications capability”¹⁵ and is consistent with the statutory language in that service at such speeds “enables users to originate and receive high-quality voice, data, graphics and video telecommunications.”¹⁶ Nothing has changed in the intervening few months to disturb this well-supported finding, which was based on the absence in the 2018 record of any “compelling justification for raising the benchmark.”¹⁷ The Commission specifically noted its agreement with WISPA that “because a significant number of ‘current fixed broadband users are subscribing to service at speeds below the 25 Mbps/3 Mbps benchmark, the adoption rate for service at higher speeds does not yet support an increase in the threshold.’”¹⁸ And it remains the case according to the Commission’s most recent Internet Access Service Report that about one-third of residential fixed connections receive service at speeds below this benchmark.¹⁹

¹⁴ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, 30 FCC Rcd 1375, 1390-1408 ¶¶ 19-55 (2015).

¹⁵ *2019 Broadband Deployment Report*, 34 FCC Rcd at 3862 ¶ 12.

¹⁶ *Id.* ¶13, quoting 47 U.S.C. § 1302(d)(1).

¹⁷ *Id.* ¶12.

¹⁸ *Id.*, citing WISPA Comments, GN Docket No. 18-238 (filed Sept. 17, 2018), at 2.

¹⁹ See Internet Access Services: Status as of December 31, 2017, Industry Analysis Division, Office of Economics & Analytics (August 2019), at 3-5 (Figures 2(a), 2(b) & 3).

C. The Commission Should Continue Its Progress-Based Approach to Evaluating Broadband Deployment

WISPA urges the Commission to continue using “a progress-based approach” in completing its next Broadband Deployment Report, as it proposes in the *NOI*.²⁰ As stated in the *2019 Broadband Deployment Report*, this methodology “enables the Commission to determine whether advanced telecommunications capability ‘is being deployed’ in the manner that section 706 requires.”²¹ The approach recognizes that improvement in the availability of advanced services is an incremental process that must be measured empirically based on year-over-year advancement rather than by setting artificial *a priori* goals that may be more aspirational than realistic. By maintaining consistent criteria, the Commission is better able to track changes in service availability and performance over time.

D. The Commission Should Continue to Use Its Form 477 Reporting Mechanism While It Develops a More Accurate Broadband Data Collection Approach

The Commission also proposes to continue its use of Form 477 data “to evaluate deployment of fixed broadband services.”²² The Commission’s proposal is sound given the absence of a fully-developed, near-term alternative to Form 477. For the immediate future, therefore, the Commission should continue to rely on the data collected in this format.

Concurrently, however, the Commission should move forward in implementing the improved broadband serviceable location fabric and reporting mechanism proposed in its ongoing Digital Opportunity Data Collection proceeding.²³ WISPA has endorsed this effort to collect more accurate and granular data by establishing a location “fabric” and requiring

²⁰ See *NOI* at 3 ¶ 7.

²¹ *2019 Broadband Deployment Report*, 34 FCC Rcd at 3859-60 ¶ 8.

²² *NOI* at 7 ¶ 16.

²³ *Digital Opportunity Data Collection*, Report and Order and Second Further Notice of Proposed Rulemaking, WC Docket Nos. 19-195 and 10-90, 34 FCC Rcd 7505 (2019).

reporting entities to submit polygons into a portal to define served areas that are not restricted by census-block designations or other geopolitical boundaries.²⁴ Polygons (geospatial data that define coverage areas) will be less likely to overstate or understate broadband availability in rural areas than geopolitical boundaries, providing more accurate and precise data on where the Commission should be supporting broadband through its high-cost programs. Such data would also be a less burdensome reporting metric for WISPA's members than reporting via census blocks, road segments, or street addresses, or conducting geocoding. The anticipated availability of a broadband serviceable location "fabric" will provide considerable assistance in determining those areas where broadband is available and where future subsidy dollars should be allocated.

II. THE COMMISSION CAN CONTINUE NARROWING THE DIGITAL DIVIDE BY MAKING ADDITIONAL SPECTRUM AVAILABLE FOR FIXED SERVICE USE AND BY USING IMPROVED BROADBAND DEPLOYMENT DATA TO TARGET HIGH-COST SUPPORT TO THE LEAST-SERVED AREAS

The Commission seeks comment "on the ongoing effects of [its] efforts in spurring broadband deployment, as well as additional efforts [the Commission] might undertake" to achieve its goals.²⁵ WISPA believes that there continues to be a significant shortfall in achieving universal access to advanced telecommunications in many parts of the country, a circumstance that should prompt the Commission to continue affirmative steps toward correcting this imbalance and closing the "digital divide."

A. Access to Spectrum

The Commission queries "[w]hat more could or should [it] do to expand access to spectrum to support or supplement wireless and satellite broadband services?"²⁶ The Commission's decision to modernize the 2.5 GHz band and conduct auctions for unassigned

²⁴ See, e.g., WISPA Comments, WC Docket Nos. 19-195 & 11-10 (filed Sept. 23, 2019), at 2-3.

²⁵ NOI at 11 ¶ 26.

²⁶ *Id.*

spectrum should provide new opportunities for WISPs to acquire spectrum, as early as 2020, to reach unserved and underserved rural communities.²⁷ And, as the Commission is well aware, there remain several ongoing proceedings looking toward the establishment of additional spectrum allocations for terrestrial fixed wireless service. Final action in these proceedings would facilitate new broadband service in rural and other underserved areas. Among other critical steps, finalizing bidding procedures for the auction of Priority Access Licenses in the Citizens Broadband Radio Service will create opportunities for a wide range of potential providers looking to use this spectrum to provide new or expanded service.²⁸ The Commission also should allocate a portion of the 3.7-4.2 GHz band for coordinated, shared fixed point-to-multipoint wireless use in its pending proceeding,²⁹ and should adopt WISPA's proposal to allow higher-power shared unlicensed use of the U-NII-5 and U-NII-7 portions of the 6 GHz band.³⁰

B. Universal Service Fund Subsidies

The Commission specifically seeks comment “on the effectiveness of USF funding in driving the deployment of advanced telecommunications capability.”³¹ The Connect America Fund (“CAF”) Phase II auction that was completed in August 2018 is now beginning to direct significant new funding to critical fixed wireless broadband deployment.³² A number of WISPA members were successful auction winners and were allocated a substantial portion of the

²⁷ See *Transforming the 2.5 GHz Band*, Report and Order, 34 FCC Rcd 5446 (2019).

²⁸ See *Auction of Priority Access Licenses for the 3550-3650 MHz Band; Comment Sought on Competitive Bidding Procedures for Auction 105; Bidding in Auction 105 Scheduled to Begin June 25, 2020*, AU Docket No. 19-244, FCC 19-96 (rel. Sept. 27, 2019).

²⁹ See *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, 33 FCC Rcd 3915 (2018).

³⁰ See *Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Proposed Rulemaking, 33 FCC Rcd 10496 (2018).

³¹ *NOI* at 11 ¶ 26.

³² See, e.g., *Public Notice*, “Connect America Fund Phase II Auction Support Authorized for 593 Winning Bids,” AU Docket No. 17-182 & WC Docket No. 10-90, 34 FCC Rcd 7081 at Attachment A (2019); *Public Notice*, “Connect America Fund Phase II Auction Support Authorized for 1,031 Winning Bids,” AU Docket No. 17-182 & WC Docket No. 10-90, 34 FCC Rcd 8009 at Attachment A (2019).

nearly \$1.5 billion in support that was allocated, funding that will allow them to provide new, affordable and cost-effective service throughout the country.

While the CAF process is proving to be successful in achieving the Commission's objectives, Chairman Pai has rightfully acknowledged that the proposed Rural Digital Opportunity Fund ("RDOF") can offer deployment benefits "on an even greater scale" connecting "more Americans to faster broadband networks than any other universal service program has done."³³ By building on the experience of the CAF Phase II reverse auction, the RDOF, envisioned as a \$20.4 billion rural subsidy program, can create an even greater opportunity to accelerate the deployment of fixed broadband to communities where access is lagging behind urban areas. To better ensure that the RDOF auction does not award support for overbuilding areas that meet the Commission's speed threshold, the Commission should quickly adopt the location "fabric" and use that process to target RDOF support.

In the recent past, USF subsidies have erected barriers to expansion by new wireless service providers in some cases due to the ability of some large incumbent carriers to obtain funding to overbuild in areas that they have not previously served, but where WISPs or other small providers have already utilized their own capital to invest in new equipment and infrastructure. To minimize the possibility of additional subsidized overbuilding of areas with existing unsubsidized service providers, the Commission should grant WISPA's long-pending petition for partial reconsideration of the *2011 USF/ICC Transformation Order*.³⁴ The current definition legitimizes overbuilding of existing broadband services by allocating support to an incumbent carrier even when an existing competitor is already meeting the broadband speed

³³ *Rural Digital Opportunity Fund; Connect America Fund*, WC Docket Nos. 19-126 and 10-90, 34 FCC Rcd 6778, 6835 (2019), Statement of Chairman Ajit Pai.

³⁴ Petition for Partial Reconsideration of the Wireless Internet Service Providers Association, WC Docket No. 10-90, et al. (filed Dec. 29, 2011).

threshold required for an area to be deemed “served” based solely on the fact that the competing broadband provider has chosen not to offer voice because others in the market are providing that service or there is no business case for offering it. The artificially narrow definition of “unsubsidized competitor” that the Commission adopted in 2011 has thus allowed overbuilding of operational broadband networks simply because the relevant “unsubsidized competitor” does not offer *both* broadband and voice service. The proposed reform of the definition would encourage greater participation in the RDOF auction, foster expedited broadband service to rural areas, and make more support and investment capital available to auction winners.

Conclusion

The Commission should retain its existing criteria for defining “advanced telecommunications capability” while maintaining its existing distinction between fixed and mobile wireless services. It should also continue to promote accelerated deployment of high-quality broadband services by quickly implementing the RDOF auction, and by allocating additional fixed wireless spectrum and expediting its availability for new service offerings.

Respectfully submitted,

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