Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Inquiry Concerning Deployment of Advanced)	
Telecommunications Capability to All)	GN Docket No. 25-223
Americans in a Reasonable and Timely)	
Fashion; Nineteenth Section 706 Report)	
Notice of Inquiry)	

COMMENTS OF WTA – ADVOCATES FOR RURAL BROADBAND

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SUMMARY

The purpose of Section 706 of keeping Congress apprised on progress towards the goal of universal broadband service can only be met if the Commission performs an honest assessment by asking the right questions and using the best data. WTA believes the Commission appears to be largely fulfilling that role by assessing progress towards that goal rather than simply asking "are we there yet?" In determining what goals to use for evaluating progress for this year's report, it makes sense to continue to use both the short-term benchmark of 100/20 Mbps and the long-term benchmark of 1000/500 Mbps. Current applications and high-definition linear streaming require 100/20 Mbps presently, particularly if there is more than one person in a household, and the need for even greater speeds will be necessary in the not-too-distant future to accommodate applications that are starting to emerge now, such as 8K video streaming, and applications utilizing virtual reality, augmented reality and artificial intelligence.

The Commission should want to keep the "Gretzky test" front and center -- to keep its eyes on where the proverbial puck is going, not where it has been. Thus, WTA disagrees with the *NOI*'s proposal to abolish the use of a long-term benchmark. Use of such a benchmark does not "skew the market," nor does it violate the principle of technological neutrality. Technological neutrality does not require the Commission to ignore the different capabilities and limitations of different technologies.

With regard to data sources for fixed broadband, WTA supports continued use of the BDC information. While not without flaws, it is the best and most comprehensive information available. Among other flaws, it shows satellite broadband at 100/20 Mbps "available" everywhere, even though the shared, finite capacity among the system's customers within a satellite footprint limits the number of total customers a LEO satellite system could actually serve at those speeds. In addition, the speed that is reported is the "advertised" speed, and if a range is advertised, then the high end of that range is reported. Thus, the map does not necessarily reflect the actual speeds customers will be able to enjoy if they subscribe to that service.

Finally, WTA has several suggestions for steps the Commission should take to accelerate broadband deployment. In order to ensure that broadband services remain affordable, the Commission should continue and expand its universal service programs. The higher costs of operating broadband networks in rural areas are exacerbated by a number of unfunded mandates. WTA recognizes, that providing subsidies for these currently unfunded mandates could require the Congress and/or the Commission to address USF contribution reform, but such steps are essential unless the Commission significantly reduces these unfunded mandates. WTA applauds the Commission's efforts to reduce or streamline some of the burdens, such as its proposals with regard to pole attachments and retiring copper networks. WTA also urges the Commission not to needlessly meddle with rural broadband providers' revenue sources through mandatory de-tariffing of Telephone Access Charges and Business Data Services.

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COMMENTS OF WTA – ADVOCATES FOR RURAL BROADBAND

WTA – Advocates for Rural Broadband ("WTA") is submitting comments in response to the Notice of Inquiry¹ promulgated by the Commission in order to provide Congress with the Nineteenth Annual Report concerning the deployment of advanced telecommunications capability as required under Section 706 of the Communications Act of 1996.² WTA is a national trade association representing approximately 400 small, rural local telecommunications carriers. The typical WTA member company serves fewer than 5,000 customers per service area and has fewer than 50 employees. WTA's members provide voice, broadband and other communications-related services to some of the most remote, rugged, sparsely populated, and expensive-to-serve areas of the United States, and have been at the forefront of providing advanced services to these very difficult to serve territories.

Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion; Nineteenth Section 706 Report Notice of Inquiry, FCC 25-46, released August 8, 2025 (hereafter cited as "NOI").

² 47 U.S.C. §1302(b).

As an initial matter, WTA appreciates that the Commission appears generally to be making a good faith effort to follow Congress' directives in Section 706 to undertake an annual assessment of and report to Congress on the state of the broadband industry and "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion." In contrast, some of the previous Section 706 proceedings seemed to have been answering a different question than the one posed by Congress -- asking whether we had already achieved the goal of advanced services capabilities to all Americans, rather than whether we were making reasonable and timely progress towards that goal.

The purpose of Section 706 of keeping Congress apprised on progress towards the goal of universal broadband service can only be met if the Commission performs an honest appraisal of asking the right questions and using the best data. In that regard, WTA agrees with most of the *NOI*'s proposals with regard to the nature of the analysis and data sources. However, as explained below, WTA disagrees with the *NOI*'s proposal to drop the use of a long-term goal, as well as its misuse of the phrase "technologically neutral" at various places in the *NOI*.

General Nature of the Assessment under Section 706

WTA agrees with the Commission that Congress in Section 706 tasks the agency with the assignment of annually assessing and reporting to Congress on the *progress* this country is making towards achieving the goal of the availability of "advanced services" to all Americans – not simply asking and answering the question posed by kids from the back seat of the car -- "are we there yet?" The *NOI*'s interpretation is consistent with the language employed by Congress in Section 706. As then-Commissioner Carr observed in the previous Section 706 proceeding:

Having inserted "universal service" and other terms into Section 706, the Commission then undertakes a simplistic, binary determination of whether advanced telecommunications capability has been deployed to all Americans. That interpretation reads the "reasonable and timely" language out of the statute and contradicts Congress's

use of the present progressive tense "is being deployed." It also disregards language Congress used for FCC inquiries that result in a negative determination. In such cases, Congress states that the FCC "shall take immediate action to accelerate deployment," thus confirming Congress's focus in Section 706 on the pace of deployment and the progress that providers are making.³

Moreover, looking at the extent and pace of progress provides the Commission (and Congress) more useful information on how best to achieve the goal of universal broadband services using the tools Congress mentioned in Section 706(a): "price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment"; and Section 706(b) – "action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market." Such an assessment also better informs Congress as to what additional steps it might take or what additional tools it might need to provide the Commission to bring "advanced telecommunications capability to all Americans."

Progress Towards What Goals?

Assessing the extent and pace of progress requires the Commission to determine what the relevant goals are. Section 706 establishes the goal of providing advanced telecommunications capability to all Americans, but defines "advanced telecommunications capability" only in general terms in Section 706(d)(2):

(1)Advanced telecommunications capability

The term "advanced telecommunications capability" is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.

Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 39 FCC Rcd 3247, 3578 (March 18, 2024) (citation omitted).

The Commission in previous Section 706 proceedings has selected for fixed broadband service various speeds that serve as the benchmark under that definition, for many years using 25 Mbps download and 3 Mbps upload as the minimum speeds for the assessment.⁴ That determination was based on the broadband service characteristics necessary to support common applications to provide "voice, data, graphics and video telecommunications" as reflected in Section 706. More recently, the Commission increased the minimum speeds to reflect the more robust services necessary to support those previously considered use cases as well as new applications, selecting 100 Mbps download and 20 Mbps upload as the proper proxy for "advanced telecommunications capability."⁵

WTA believes it certainly makes sense to view "advanced telecommunications services capabilities" on an evolving rather than a static basis. Congress defined the term broadly and based on functionality rather than on particular speeds. And as reflected in the Infrastructure Investment and Jobs Act ("IIJA"), Congress has demonstrated that it certainly knows how to define broadband in a more specific manner when it wants to.⁶ At the same time, the Commission's discretion in selecting broadband speeds that would qualify as "advanced telecommunications capabilities" is not unbounded. For example, Section 706 is aimed at accelerating "advanced telecommunications capabilities" to "all Americans," so it would not

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In its 2015 Section 706 Report, the Commission updated this speed benchmark to 25 Mbps download and 3 Mbps upload from 4 Mbps download and 1 Mbps upload. *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 30 FCC Rcd 1375, 1377 (August 6, 2015).

Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 39 FCC Rcd 3247, 3259 (March 18, 2024).

⁶ E.g., IIJA §§ 60102(a)(1)(C) and (D); IIJA §§ 60401(a)(16) and (17).

include assessing business services that require very high speeds -- such as connecting data centers or quantum computing centers.⁷

Moreover, from a practical standpoint, if the Commission views "advanced telecommunications capabilities" as defined by what sufficed in 1996 when Congress enacted Section 706 – dial-up access at 56 kbps⁸ and a handful of field trials of ADSL at speeds of a few Mbps – such services would be crippling if that was all that was available today. And yet under a static view from 1996 of what constitutes "advanced telecommunications capabilities," the Commission could report to Congress that the mission of universal broadband service was accomplished and that nothing more needs to be done.

The speeds necessary to support today's applications are significantly greater than what was required in 1996, or even the pre-pandemic needs of only five years ago. WTA thus believes that the speed set in the last Section 706 Inquiry – 100 Mbps download and 20 Mbps upload (with a latency under 100 msec) – still properly represents what Section 706 characterizes as "advanced telecommunications capabilities." But that may soon change. Consumers at home are now engaged in ever more linear video streaming, and requiring higher speeds to support the increased resolution for Full HD (15-25 Mbps download) or 4K Ultra HD (50+ Mbps download). And while still at the early stages of availability, some consumers are starting to watch 8K programs (requiring 100 Mbps download). Moreover, the COVID pandemic spurred the development of multiple applications for work-from-home, remote education and telehealth that will continue to be needed, notwithstanding the end of the pandemic. Gaming has also increased

⁷ *E.g.*, <u>https://www.quantumcorridor.com</u>.

Ironically, it was only very recently that AOL discontinued its support of dial-up service. https://www.cnn.com/2025/08/11/tech/aol-dial-up-internet-discontinue.

in sophistication, as well as other virtual reality and augmented reality applications. Artificial Intelligence ("AI") applications are rapidly being deployed, also necessitating higher speeds, as the *NOI* itself acknowledges.⁹ All of these new data-intensive applications fall within the "advanced telecommunications capabilities" definition, which includes high-speed, switched, broadband telecommunications capability that enables users to access "high-quality voice, data, graphics, and video telecommunications."

The *NOI* also seeks comment on "how the benchmark that we select for defining advanced telecommunications capability may potentially impact the ability of individuals in rural communities and other underserved populations to fully participate in the digital economy." 10 WTA maintains that robust and reliable high-speed broadband is even more critical in rural areas. The lack of nearby health care facilities and providers renders telehealth applications even more important for rural areas. And given the absence of scale that would allow teaching of specialized subjects, remote education opportunities for rural students necessitates robust connectivity to rural homes and schools, which additionally provides teachers in rural areas the opportunity to learn remotely and to stay current on the best teaching practices. Robust broadband also allows rural businesses to maintain an on-line presence to participate in the digital marketplace. And increasingly, farms are transitioning towards precision agriculture, which will require symmetrical, high speed broadband service. 11 Given the reduction in the number of farmers, farms are turning to precision agriculture to provide the increased

 $^{^9}$ Cf., NOI at ¶ 11 ("How, if at all, will AI-driven, data-intensive applications redefine the minimum broadband speeds required for global competitiveness?").

NOI at \P 10.

E.g., <u>https://connecthumanity.fund/satellite-internet-wont-run-our-farms-and-factories-why-fiber-remains-the-right-priority-for-rural-america/.</u>

efficiencies and productivity necessary to continue to meet our nation's needs.

Moreover, use of the last report's speeds for this year's Section 706 assessment is also consistent with Congress' determination in the IIJA that speeds below 100 Mbps download and 20 Mbps upload are deemed "underserved," and that speeds below 25 Mbps download and 3 Mbps upload are deemed "unserved." Indeed, as the recent Trump Administration NTIA BEAD Guidance document observed:

The BEAD NOFO requires Funded Networks to deliver speeds of not less than 100 Mbps for downloads and 20 Mbps for uploads for broadband serviceable locations and 95 percent of latency measurements during testing windows to fall at or below 100 milliseconds round trip time. These standards are critical for supporting modern applications and services that require high-speed and low-latency connections.¹³

In light of all of these factors, WTA urges the Commission to continue to use 100 Mbps download and 20 Mbps upload as the proxy for fixed "advanced telecommunications capabilities" presently, although recognizing that this benchmark will need to be increased in the not-too-distant future.

In that vein, WTA disagrees with the *NOI* proposal to abolish (and not replace) the long-term goal benchmark of 1 Gbps download and 500 Mbps upload speeds.¹⁴ Particularly given the continually evolving and growing need for broadband capabilities, WTA believes it would be most helpful for the Commission to assess progress towards a long-term goal as well as the current requirements. Indeed, as Chairman Carr noted in a recent Notice of Proposed Rulemaking concerning the retirement of old copper networks:

¹² IIJA §§ 60102(a)(1)(C0 and (D).

Obligations for Subgrantees Deploying Network Projects, at p. 6 (https://broadbandusa.ntia.gov/sites/default/files/2025-08/BEAD Obligations for Subgrantees Deploying Network Projects.pdf).

NOI at para. 11.

When I announced the Build America Agenda, I said we will keep the Gretzky test front and center. We want to keep our eyes on where the proverbial puck is going, not where it has been. Today's action is a clear execution of this principle. We are looking to unleash the private sector to build the modern networks of the future and ensure that providers are no longer forced to invest billions of dollars in aging technology.¹⁵

WTA agrees with Chairman Carr's philosophy of being forward looking. After all, you are much more likely to reach your destination if you know where you should be going, and are looking through the windshield and not just the side windows and the rear-view mirror.

Moreover, such a focus on future broadband needs is consistent with Congress' inclusion of the requirement of "scalability" in the definition of "Priority Broadband Project" in the IIJA. 16

The NOI's Argument for Abolishing Use of a Long-Term Goal Does Not Withstand Scrutiny

As explained above, both the Commission and Congress would benefit from annually examining progress towards a long-term goal in addition to assessing progress towards universal availability of currently-defined "advanced telecommunications capabilities." However, in

(I) PRIORITY BROADBAND PROJECT.—The term "priority broadband project" means a project designed to—

Statement of Chairman Carr, *Reducing Barriers to Network Improvements and Service Changes; Accelerating Network Modernization*, FCC 25-37 (July 25, 2025)C. Although attributed to Wayne Gretzky, it may actually have been his father Walter who said that now-iconic phrase. https://jonathanbecher.com/2021/05/30/dont-skate-to-where-the-puck-is-going/#:~:text=Many%20of%20you%20might%20be,or%20business%20clichés%20too%20seriously.

¹⁶ IIJA at § 60102(a)(1)(I):

⁽i) provide broadband service that meets speed, latency, reliability, consistency in quality of service, and related criteria as the Assistant Secretary shall determine; and

⁽ii) ensure that the network built by the project can easily scale speeds over time to—

⁽I) meet the evolving connectivity needs of households and businesses; and

⁽II) support the deployment of 5G, successor wireless technologies, and other advanced services. (emphasis added)

proposing to reject the prior decision to adopt a long-term goal, the NOI asserts:

Not only is a long-term goal not mentioned in section 706, but maintaining such a goal risks skewing the market by unnecessarily potentially picking technological winners and losers. It would also appear to violate our obligation to conduct our analysis in a technologically neutral manner.¹⁷

But selecting a benchmark to represent expected broadband speeds to support future video, graphic and data needs is technologically neutral. "Technological neutrality" does not mean that you have to ignore varying capabilities of different technologies and treat all broadband technologies the same regardless of whether they can meet the benchmark specifications.

Indeed, the BEAD program requires that qualifying services must offer "latency sufficient to support real-time, interactive applications," and the Commission's broadband subsidy programs likewise specify a round-trip latency requirement of no more than 100 milliseconds. The result of that latency requirement is to exclude geostationary satellite services. And yet if geostationary satellite service was included under a claim that you must do so to be "technologically neutral," then consumers' ability to use real-time applications, including VoIP, video calling, distance learning applications, telehealth applications and online gaming would be adversely affected. Specifying particular broadband speeds or other characteristics in order to ensure that critical applications can be supported is functional (and good policy), not "prejudicial."

In addition, the Commission specifying a benchmark goal for long-term broadband needs has nothing to do with "picking technological winners and losers." The Section 706 process results in a report to Congress, and may lead to the Commission or Congress taking further steps

 $^{^{17}}$ NOI at ¶ 11. The NOI in that same paragraph also asserts: "Further, assuming a long-term goal of 1,000/500 Mbps may be unreasonably prejudicial to technologies such as satellite and fixed wireless that presently do not support such speeds."

to accelerate broadband deployment. But service providers choose what technologies to deploy based on the relative costs and capabilities of the various options, not with an eye to a potential impact on the Commission's future Section 706 inquiries. Other Commission (and Congressional) actions in designing broadband subsidy programs can affect the technologies that broadband service providers will choose to deploy to qualify for that particular subsidy program. As mentioned above, incorporating latency requirements can preclude geostationary satellite service providers from participating. But those determinations are unrelated to the Section 706 proceedings.

In defending its preliminary decision to eliminate the long-term benchmarks, the *NOI* also claimed that: "At present, it is impossible to predict long-term technological developments and the evolution of consumer preferences." WTA respectfully disagrees. It is not impossible to make such predictions. Indeed, broadband service providers do it now for planning purposes, because they are making long-term investments. And what our members do know is that consumers continually want more broadband, and they do not want lag and buffering. Our members also know that as newer technologies and services come on board because of market demands, that they need to be in the position to meet those requirements and obligations for service demanded by consumers.

Although it may not be possible for the Commission to ensure with precision the accuracy of its predictions with regard to expected advances in technology and changes in consumer preferences, WTA still believes that is useful for Congress to learn about the expert agency's assessment of whether the United States is on the right path towards future goals as part of the annual Section 706 reports. Indeed, the *NOI* seems to recognize that important ability to

NOI at \P 11.

inform Congress when it asks: "What impact, if any, does the absence of a long-term goal have on innovation or on the nation's ability to remain competitive with emerging technologies such as artificial intelligence?" ¹⁹

Related to technological neutrality, the *NOI* also notes:

Section 706 defines advanced telecommunications capability 'without regard to any transmission media or technology.' We seek comment on how the Commission should treat satellite service as part of this inquiry. Should technological advances in the satellite broadband industry cause the Commission to re-evaluate its treatment of satellite service? Why or why not?²⁰

As explained above, taking into account the differences in technology is not incompatible with technological neutrality. WTA also acknowledges that there have been advances in satellite technology with the deployment of low-Earth orbit ("LEO") satellite technology, which has much lower latency than geostationary ("GEO") satellites. In addition, more spectrum has been allocated to LEO satellite services,²¹ making it possible for LEO satellite services to offer higher speed services than previously.²² And indeed, LEO satellite service is now certainly faster than dial-up service (to the extent anyone is still relying on that service for Internet access²³) and DSL

NOI at ¶ 11.

NOI at ¶ 17.

²¹ E.g., Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit, Fixed Satellite Service in the Ka-Band, 18 FCC Rcd 14708 (2003); Amendment of Parts 2 and 25 of the Commission's Rules to Enable NGSO Fixed-Satellite Service (Space-to-Earth) Operations in the 17.3-17.8 GHz Band, 39 FCC Rcd 11156 (2024); Satellite Spectrum Abundance; Expanding Use of the 12.7-13.25 GHz Band for Mobile Broadband or Other Expanded Use Shared Use of the 42-42.5 GHz Band, FCC 25-29, released May 27, 2025.

The original FCC-licensed LEO satellite services offered ubiquitous global coverage, but only provided low-speed data (ORBCOMM) or voice services (Globalstar and Iridium).

²³ See, fn. 8, supra.

service, and for some situations may be the best available broadband service, such as service to airplanes in-flight and ships-at-sea, as well as for service restoration after a disaster. However, LEO satellite broadband service also has some very significant drawbacks.

A LEO satellite system's licensed spectrum is shared amongst all that system's customers within a satellite's footprint, so there are limits on how many customers within that footprint can be served simultaneously before the speeds drop significantly.²⁴ The largest LEO constellation currently -- Starlink – periodically has stopped taking on new subscribers in some areas of the country.²⁵ And this problem of a system like Starlink limiting speeds or new customers will also

Yes, there are small areas in the United States where Starlink's residential service is not yet available and thus not accepting new customers immediately. According to recent reports, these "coming soon" zones—where potential customers can sign up for notifications but cannot order service yet—include small parts of New Mexico and West Virginia, along with very small, isolated areas in Washington, California, Iowa, Pennsylvania, and Maryland. Additionally, in certain high-demand regions, capacity limits can result in waitlists where new customers must place a reservation order (typically with a \$100 deposit) and wait for availability, such as in parts of rural California. Starlink's coverage otherwise extends to every state, including Alaska, Hawaii, Puerto Rico, and Guam, serving about 99.7% of U.S. households overall. To confirm for a specific address, check directly on Starlink's website by entering your location.

A study of Starlink capacity limits was submitted to the Commission by the Fiber Broadband Association and NTCA in connection with Starlink's RDOF application, and is available at https://www.fcc.gov/ecfs/document/10208168836021/2. That study was updated earlier this year, and has apparently been shared with State broadband offices, but not published publicly. *See*, https://fiberbroadband.org/wp-content/uploads/2025/01/4Q24-FBA-CEO-Update.pdf. Ookla recently observed this effect of shared capacity in connection with Starlink speeds being slowed at the Burning Man festival. <a href="https://www.ookla.com/articles/starlink-slows-down-during-burning-man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-man?utm_source=Ookla%20Insights&utm_medium=email&utm_source=Ookla%20Insights&utm_source=Ookla

man?utm_source=Ookla%20Insights&utm_medium=email&utm_campaign=Express_2025-09-04_13:00:00&utm_content=Starlink%20Slows%20Down%20during%20Burning%20Man.

While we cannot vouch for the accuracy of any AI responses, we note that when asked recently (September 8, 2025) "Are there areas in the United States where Starlink is not accepting new customers?" Grok AI responded:

be exacerbated, because the LEO satellite broadband spectrum must also be shared amongst the other LEO satellite systems, thus further limiting capacity as more of these systems become operational.²⁶ And while it is theoretically possible for additional spectrum to be allocated to LEO satellite uses, the global spectrum allocation procedures typically involve the long and tedious process of going through multiple ITU World Radio Communication ("WRC") Conferences (held four years apart), which also require the cooperation and consent of well over 100 countries (since the WRC Conferences operate by consensus, and typically 150 countries participate in those conferences).²⁷ Thus, when the NOI asks "What more should the Commission do to expand access to spectrum to support or supplement wireless and satellite broadband services?" - the answer is that there is not very much the Commission can do on its own with regard to LEO satellite spectrum allocations.

Finally, WTA notes that another solution to the capacity limits is to launch more

satellites. However, to the extent LEO systems launch and operate even larger constellations,

⁴⁷ C.F.R. § 25.261. Although LEO satellite systems from subsequent processing rounds must not cause interference to previous processing round licensees, that protection sunsets ten years after the first authorization of that earlier processing round. Revising Spectrum Sharing Rules for Non-Geostationary Orbit, Fixed-Satellite Service Systems, 39 FCC Rcd 12656 (2024)(NGSO FSS systems will be entitled to protection from systems approved in a subsequent processing round until ten years after the first authorization or market access grant in that subsequent processing round). Thus, first round licensees like Starlink currently share spectrum equally with other first round licensees, but will lose their spectrum-sharing priority over subsequent LEO licensees in less than two-and-a-half years, since Starlink was authorized on March 29, 2018. https://docs.fcc.gov/public/attachments/FCC-18-38A1.pdf

While the United States could allocate spectrum to LEO satellite services on a nonconforming basis for operations in the U.S. (ITU Radio Regulations No. 4.4), it is not clear that it would be economical (or practical) to incorporate new frequencies that could be used over only a small portion of the satellite system's capacity at any one time. The United States comprises less than 2% of the Earth's surface, and while U.S.-registered aircraft and ships could also use such U.S.-only allocated frequencies on a non-interference basis while in international airspace or waters, there are a limited number of those potential customers.

that will exacerbate the problem of space traffic management. Collisions between satellites would not only eliminate those satellites' capacity, but the resulting debris cloud could disable many other satellites, both further reducing capacity, and also leaving them unable to undertake collision avoidance maneuvers, thus leading to more collisions.²⁸ There is currently no global space traffic management system in place, and developing one would also require the cooperation of many other countries. Simply ignoring all of these differences and drawbacks between terrestrial and satellite broadband is not being "technologically neutral," and does not justify the proposed decision to abolish the setting and use of a long-term goal as part of the Section 706 proceeding.

Data Sources

The *NOI* also seeks comment on data sources and analysis for fixed broadband services.²⁹ The *NOI* proposes to use once again the Broadband Data Collection ("BDC") information as the primary data source for assessing fixed broadband availability. While not without its flaws, the BDC is probably the best source of data on the availability of fixed broadband deployment in the United States.³⁰ In addition, having been used previously makes it the best means of comparing deployment data with previous broadband availability assessments, which is critical to measuring progress. And as discussed above, the Commission in the Section 706 inquiries should be assessing progress, not merely "have we reached 100% availability."

This chain of events is known as the Kessler effect. https://en.wikipedia.org/wiki/Kessler_syndrome#:~:text=At%20higher%20densities%2C%20production%20exceeds.known%20as%20the%20Kessler%20syndrome.

NOI at ¶¶ 15-19.

Moreover, the BDC maps continue to be refined through the challenge process and as errors are discovered.

One of the problems with the BDC maps is that while the FCC challenge process allows inaccuracies to be corrected, WTA's members have found that they must constantly review each new iteration of the map as it comes out, because errors that were successfully challenged reappear, and new errors emerge. While such errors are probably not significant enough for purposes of assessing overall progress in broadband deployment, they can be very significant to a rural broadband provider in terms of adversely affecting eligibility for or the amount of broadband subsidies under various broadband subsidy programs.

A more significant problem with the BDC data, however, relates to the BDC treatment of particular technologies. In assessing fixed broadband service "availability" at a location, the Commission must bear in mind how the BDC defines service availability:

Regardless of the format chosen, providers of fixed broadband service must base their service availability footprints on the definitions and standards specified in the Broadband DATA Act and adopted by the FCC. Specifically, providers reporting fixed service must identify the locations in areas where they have actually built out their broadband network infrastructure and to which they either currently provide service or could perform a standard broadband installation. A standard installation is defined in the Broadband DATA Act as "[t]he initiation by a provider of fixed broadband internet access service [within 10 business days of a request] in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider."³¹

In addition, the speed that is reported is the "advertised" speed, and if a range is advertised, then the high end of that range is reported.³² Thus, the map does not necessarily reflect the actual

Advertised downstream speed of the service as sold in Mbps. Enter up to 3 places after the decimal (e.g., enter 768 kbps as 0.768). Report speeds greater than 10 Mbps as whole numbers or round to the nearest whole number (e.g., enter 12.25 Mbps as 12 Mbps). If the downstream speed of the service is advertised in a range (that is, an "up to" speed), enter the high end of that range. If no downstream speed is mentioned in marketing, enter

Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data (November 25, 2024) (https://www.fcc.gov/sites/default/files/bdc-availability-data-specifications.pdf) at p. 21.

E.g., *ibid* at p. 16:

speeds customers will be able to obtain if they subscribe to that service. Finally, as explained above, a LEO broadband system's capacity/speed is constrained by the spectrum that is shared amongst customers within the satellite footprint, so that speeds will be slowed down (or customers turned away) as more people within the footprint try to obtain service at the same time. However, given the definition of "available" and the use of "advertised speeds," the FCC's broadband map depicts 100% LEO satellite system availability at 100 Mbps download and 20 Mbps upload,³³ despite the fact that the LEO satellite system provider could not possibly provide service at that speed at any one time to more than a small fraction of the total locations on the map. Simply relying on the BDC data without acknowledging these shortcomings could provide a misleading picture of progress towards the goal of advanced services capability being available to all Americans.

With respect to the data sources and analysis, the *NOI* also asks whether the Commission should consider locations that are presently unserved, but where there is an enforceable commitment to deploy service under a Commission or other federal deployment funding program.³⁴ WTA supports the Commission's consideration of enforceable broadband deployment commitments as part of its Section 706 inquiry. Such commitments are strong evidence of the likelihood of broadband deployment to those locations in the not-too-distant future, and thus help paint a picture of the progress being made towards advanced services capabilities for all. In addition, WTA suggests the Commission also track State broadband

the speed the end user should expect to receive.

https://broadbandmap.fcc.gov/area-summary/fixed?version=dec2024&zoom=4.00&vlon=97.000000&vlat=38.000000&br=r&speed=100_20&tech=5.

NOI at ¶ 19.

subsidy programs, since enforceable commitments under those programs are also an indicator of expected progress towards broadband deployment. However, the Commission must also recognize that enforceable commitments under any of these federal or State programs do not always translate into actual deployment, as demonstrated by the Commission's experience with the Rural Digital Opportunity Fund ("RDOF") program.³⁵ In addition to using information on the various broadband subsidy programs as part of its Section 706 inquiry, as a public policy matter the Commission (and the other State and federal agencies) should also be tracking all of the various broadband deployments so as to avoid subsidized overbuilding of areas where service providers have already built out fiber networks. Given the limited resources available to these subsidy programs, such subsidized overbuilding would be wasteful. Moreover, such synthetic, subsidized competition would distort the marketplace.

Steps the FCC Should Take to Ensure Continued Progress of Advanced Services Availability in a Reasonable and Timely Fashion

The *NOI* also asks what additional efforts the Commission should take to accelerate broadband deployment.³⁶ WTA has several suggestions for Commission action to help speed up the deployment of advanced services capabilities to all Americans. But as an initial matter, WTA notes that the *NOI* recognizes that the ultimate goal is not just furthering broadband deployment, but also "closing the digital divide."³⁷ And closing the digital divide requires the

According to a study performed by the Benton Institute for Broadband and Society ("Benton Institute"), over 36% of the locations and slightly under 36% of the revenues awarded in the RDOF auction were defaulted as of January, 2025 (https://www.benton.org/headlines/rdof-defaults). And subsequent to that Benton Institute analysis, the Commission announced additional RDOF defaults: https://docs.fcc.gov/public/attachments/DA-25-484A1.pdf; https://docs.fcc.gov/public/attachments/DA-25-670A1.pdf; https://docs.fcc.gov/public/attachments/DA-25-670A1.pdf.

NOI at ¶¶ 27-28.

NOI at ¶¶ 3, 5 and 28.

Commission to consider affordability of broadband services, in addition to deployment of broadband services, in determining whether we are making reasonable and timely progress towards the longstanding³⁸ goal of universal service encapsulated in "closing the digital divide." Towards that end, WTA suggests several actions the Commission should undertake.

First, the Commission should continue with and in some respects expand its various Universal Service Fund ("USF") broadband subsidy programs.³⁹ There needs to be ongoing support under these programs to ensure that rates remain affordable, because in these high-cost areas the operating costs as well as the deployment costs are high. And the Commission recognizes this because the USF High-Cost programs our members participate in are not focused solely on deployment, but also are designed to provide support for the higher ongoing operating expenses in these sparsely populated areas. In what are now former Regional Bell Operating Company (and thus ineligible for High-Cost USF support), we have seen that they made the investment to build broadband networks in their most rural areas, but then abandoned them as

Federal Communications Commission v. Consumers' Research, decided June 27, 2025, https://www.supremecourt.gov/opinions/24pdf/24-354 0861.pdf.

As the Supreme Court observed in the introduction to its recent decision affirming the constitutionality of the Commission's USF program:

Nearly a century ago, Congress charged the then-new Federal Communications Commission (FCC or Commission) with making communications services available, at affordable prices, to all Americans. That objective became known as "universal service." Some decades on, near the turn of the 21st century, Congress reaffirmed its commitment to universal service while providing new and more detailed instructions to the FCC about how to achieve it. ... In the Act's very first provision, Congress instructed the FCC to pursue the goal now called universal service. The FCC, Congress stated, was "to make available, so far as possible, to all the people of the United States," reliable communications services "at reasonable charges." 47 U. S. C. §151.

There are a dozen FCC high-cost support programs and another five legacy funds. https://www.usac.org/high-cost/funds/.

they could not afford to maintain them.

Moreover, the problem of very high operating costs is exacerbated because the Commission and other federal and state agencies impose a whole host of "unfunded mandates" on these rural carriers, including: excessive and redundant reporting burdens (such as duplicative HUBB and Broadband Data Collection reporting); network resiliency requirements; cybersecurity obligations; 40 broadband testing, which requires providers to purchase equipment or service to facilitate testing, as well as additional reporting requirements; STIR/SHAKEN, which requires providers to incur expenses to obtain the tokens, as well as the infrastructure required to comply with the requirements, further compounded by the related Robocall mitigation plans and plan tracking; Broadband Data Collection, which imposes reporting requirements as well as expense to gather the data and complete the challenges; monitoring (and challenging) the broadband data map; broadband pricing transparency and labelling requirements; DIRS and NORS reporting obligations; NG911 implementation costs (particularly for service providers that do not presently have all-IP networks); and state requirements to mark the locations of fiber in areas that will be under construction (such a highway widening). While some of these burdens may be reduced by future Commission action, the cumulative cost of all

As just one example, one of our members reported spending over \$400,000 annually on trying to ensure cybersecurity hygiene, broken out as follows:

Category	Spend
Staffing (security share)	\$124,000
Software & Licensing (security share)	\$95,000
Hardware Refresh (security %)	\$60,000
Patch/Systems Mgmt (security share)	\$50,000
Outside counsel/Consulting	\$20,000
Incident Response/Insurance	\$65,000
Total	\$414,000

of these unfunded mandates will remain significant. WTA recognizes, that providing subsidies for these currently unfunded mandates could increase the need for Congress and/or the Commission to address USF contribution reform,⁴¹ but such steps are essential unless the Commission significantly reduces these unfunded mandates.

With respect to USF broadband subsidy program reform, the *NOI* also asks whether there "are changes that would help ensure that supported providers receive no more support than is necessary, or that the programs would select the most efficient provider of advanced telecommunications capability?"⁴² WTA cautions the Commission to remember that while "efficient" and "no more than necessary" as general concepts are good, the specific implementation of such goals matters greatly. The lowest cost is not the same thing as the best value, particularly when taking into account factors such as the positive externalities of fiber broadband.⁴³ Fiber deployments have proven to be more economic and efficient in the long-term. Carriers that have deployed fiber have seen fewer truck rolls for instance, meaning cost savings. If there are breaks in the fiber, they can see it from the Central Office and then travel to the exact location to fix it, as opposed to rolling a truck and trying to figure out where the line break is along the route. Looking only at short-term, up-front costs lowest-priced bids can certainly lead to poor choices, as demonstrated by the significant number of defaults in the

Under Section 254(d), USF contribution requirements are not limited to Title II service providers, but can also be assessed on the "telecommunications" component of Internet access service: "Any other provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires." On the other hand, extending USF contribution requirements to edge providers would presumably require legislation.

NOI at ¶ 27.

See, e.g., https://www.brattle.com/wp-content/uploads/2024/11/Economic-Benefits-of-Fiber-Deployment.pdf.

RDOF reverse-auction program.⁴⁴

In addition to USF reforms, the Commission can take other steps to help accelerate the deployment of networks capable of supporting advanced telecommunications capability. WTA supports the Commission's efforts in ongoing proceedings that would accelerate pole attachment activities and environmental reviews, as well as reducing delays in approving the replacement of legacy services with all-IP networks.⁴⁵

Finally, WTA urges the Commission to avoid needless meddling with service providers' revenue flows at a time when such funds are necessary to support network upgrades. Thus, for example, the Commission should not adopt its proposals to impose mandatory de-tariffing of Telephone Access Charges or Business Data Services. And as mentioned above, the Commission should avoid expanding any unfunded mandates and consider how to fund service providers' current expenses in the context of high-cost support programs.

Conclusion

WTA appreciates that the Commission appears to be poised to answer the question posed by Congress in Section 706 – are we are making reasonable and timely progress towards the goal

⁴⁴ See fn. 35, supra.

Reducing Barriers to Network Improvements and Service Changes; Accelerating Network Modernization, FCC 25-37, released July 25, 2025; Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, FCC 25-38, released July 25, 2025. In the case of legacy services, the Commission should not hold up approvals just because some customers complain about needing to upgrade their CPE.

Public Notice, Parties Asked to Refresh the Record on Telephone Access Charges Notice of Proposed Rulemaking, WC Docket No. 20-71, DA 25-508, released June 11, 2025; Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers, FCC 25-44, released August 8, 2025.

of advanced telecommunications capability to all Americans? WTA also supports the continued use of the benchmark of 100 Mbps download and 20 Mbps upload for this year's assessment. However, WTA also urges the Commission to continue to assess progress towards a long-term goal to provide Congress (and itself) a better understanding on what steps the Congress (or the Commission) should take to ensure that meeting future needs will also occur on a reasonable and timely basis. The advent of new applications like Artificial Intelligence and 8k video will drive consumer demand for increasingly faster speeds, and Americans deserve much better than "just good enough for now."

Respectfully submitted,

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