

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Inquiry Concerning Deployment of Advanced)	GN Docket No. 17-199
Telecommunications Capability to All Americans in)	
a Reasonable and Timely Fashion)	

To: The Commission

REPLY COMMENTS OF CTIA

CTIA respectfully submits these reply comments in response to parties’ initial filings addressing the *Notice of Inquiry* (“*NOI*”) released by the Federal Communications Commission (“Commission”) seeking input on its forthcoming 2017 report to Congress regarding “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.”¹

I. INTRODUCTION.

As CTIA demonstrated in its initial comments,² and as the record broadly reflects, mobile broadband deployment in the U.S. has been and remains reasonable and timely. Commenters agree that the Commission’s Section 706 inquiry should evaluate whether *progress* has been reasonable and timely – not whether all Americans *already* have access to advanced telecommunications capability. With regard to mobile broadband, commenters also support an evaluation of whether mobile wireless services are meeting consumers’ expanding needs, not whether such services achieve arbitrary benchmark levels.

¹ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Thirteenth Section 706 Report Notice of Inquiry, FCC 17-109, GN Docket No. 17-199 (rel. Aug. 8, 2017) (“*NOI*”), quoting 47 U.S.C. § 1302(b).

² See generally Comments of CTIA, GN Docket No. 17-199 (filed Sept. 21, 2017) (“CTIA Comments”).

In order to maintain the reasonable and timely deployment of mobile broadband, the Commission should pursue regulatory policies that will positively spur continued deployment. These policies include making more spectrum available for broadband services, eliminating unwarranted delays in infrastructure deployment, removing the burdens of Title II regulation of broadband services, and providing timely and sufficient universal service support.

II. THE RECORD SUPPORTS A FINDING THAT MOBILE WIRELESS BROADBAND DEPLOYMENT IS REASONABLE AND TIMELY.

A. Commenters Agree That the Commission’s Section 706 Inquiry Should Evaluate Reasonable and Timely Progress.

As CTIA previously noted, the Commission “is correct to focus its examination on whether advancement in broadband deployment is reasonable and timely,” based on Congress’s use of the phrase “*is being deployed*” in the statute rather than language indicating completion, such as “has been deployed.”³ Numerous commenters echoed this reasoning, explaining that the Commission’s Section 706 inquiry should – per proper statutory construction – evaluate *progress* towards ensuring that all Americans have access to advanced telecommunications capability.⁴

As a result, the Commission should reject those proposals asking it, by contrast, to determine whether advanced telecommunications capability *has been* ubiquitously deployed.⁵ Such an approach, regardless of the arbitrary threshold assigned to “ubiquity,” would hinder the

³ CTIA Comments at 2; 47 U.S.C. § 1302(b) (emphasis added).

⁴ See, e.g., Opening Comments of AT&T Services, Inc., GN Docket No. 17-199, at 4-5 (filed Sept. 21, 2017) (“AT&T Comments”); Comments of NCTA – The Internet & Television Association, GN Docket No. 17-199, at 2-3 (filed Sept. 21, 2017) (“NCTA Comments”); Comments of USTelecom Association, GN Docket No. 17-199, at 14 (filed Sept. 21, 2017) (“USTelecom Comments”); Comments of Verizon on the Thirteenth Section 706 Report Notice of Inquiry, GN Docket No. 17-199, at 12 (filed Sept. 21, 2017) (“Verizon Comments”).

⁵ Comments of the Open Technology Institute at New America, GN Docket No. 17-199, at 3 (filed Sept. 21, 2017) (“New America Comments”); Comments of ITTA – The Voice of America’s Broadband Providers, GN Docket No. 17-199, at 9-10 (filed Sept. 21, 2017) (“ITTA Comments”); Comments of Benton Foundation, GN Docket No. 17-199, at 2-4 (filed Sept. 20, 2017) (“Benton Comments”).

agency’s ability to meaningfully measure progress – and accordingly, would unlawfully read Congress’s “reasonable and timely” standard out of the statute. As AT&T explains, the language of Section 706 “clearly indicates that Congress wanted the Commission simply to evaluate whether the industry is maintaining a reasonable, ongoing *process* of deployment . . . the statute does not say that the Commission can find timely deployment only if all 320 million Americans already have the most advanced technologies available – a standard that could never be met.”⁶

A wide range of commenters in the record also correctly recognize that mobile broadband is important to consumers, and therefore must be accounted for in the Commission’s Section 706 analysis.⁷ As NCTA notes, “it is long past time for the Commission to take a more inclusive approach and consider all broadband technologies in its analysis.”⁸ Because the proper inquiry under Section 706 is whether *progress* is being made in deployment, and not into whether broadband deployment is *already* ubiquitous, it is unnecessary for the Commission to decide whether mobile broadband is a “substitute” for fixed, contrary to what some commenters suggest.⁹ The agency should therefore once again adhere to the plain meaning of Congress’s language and reject calls in this proceeding to determine whether mobile wireless is a substitute for fixed broadband service. The proper question is whether the totality of the evidence shows

⁶ AT&T Comments at 4-5 (emphasis in original).

⁷ See, e.g., AT&T Comments at 8-11; ITTA Comments at 6-7; Comments from the Colorado State Broadband Office Regarding the Deployment of Advanced Telecommunications Services, GN Docket No. 17-199, at 1-3 (filed Sept. 21, 2017) (“CSBO Comments”); Comments of the City of New York, GN Docket No. 17-199, at 1-2 (filed Sept. 21, 2017) (“New York City Comments”); NCTA Comments at 7-9; Verizon Comments at 2, 4-9 (the Commission should “take into account the presence of either mobile or fixed broadband service, without assuming that both fixed and mobile broadband options must be present in order to conclude that advanced telecommunications capability is being deployed in a reasonable and timely manner”).

⁸ NCTA Comments at 7.

⁹ See, e.g., Comments of Public Knowledge *et al.*, GN Docket No. 17-199, at 9-11, 20-21 (filed Sept. 21, 2017) (“Public Knowledge Comments”); New America Comments at 5-19; Comments of INCOMPAS, GN Docket No. 17-199, at 8-9 (filed Sept. 21, 2017) (“INCOMPAS Comments”).

that improvements in broadband service deployment are occurring. As shown in CTIA’s comments, the deployment of mobile wireless broadband services clearly is progressing in a reasonable and timely manner, with wireless broadband providers offering faster speeds, more expansive coverage, and lower prices.

B. The Record Supports Measuring Mobile Broadband Based on Consumer Usage and Experience.

The question of whether the deployment of advanced telecommunications capability to all Americans is reasonable and timely fundamentally demands an analysis of whether Americans’ evolving broadband needs are being met. Thus, the Commission’s analysis should be appropriately focused on data that identifies the extent of consumer usage and adoption of mobile wireless broadband services. As described in the record and below, available data demonstrates that consumers continue to adopt and utilize mobile wireless broadband services to meet a variety of needs.

Although Public Knowledge argues that the Broadband Data Improvement Act (“BDIA”) mandates the use of “forward-looking metrics” rather than facts based on consumers’ actual usage of broadband services in the marketplace,¹⁰ they fail to point to any actual provision of the statute mandating this approach. While Public Knowledge attempts to root its position in obscure elements of the legislative history of the BDIA, the plain language of the statute defines “advanced telecommunications capability” simply 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.”¹¹ An attempt to set “forward-looking” metrics to answer this question, as Public Knowledge argues, would

¹⁰ Public Knowledge Comments at 12-15.

¹¹ 47 U.S.C. § 1302(d)(1).

encourage arbitrary and subjective metrics to govern the Commission’s Section 706 analysis, thereby substituting the Commission’s judgment for that of American consumers. The Commission, consistent with economic literature, has long acknowledged the wisdom of adopting regulatory policies that reflect and support market forces, as expressed in consumers’ preferences, rather than regulatory fiat.¹²

Further, as CTIA previously noted, factors such as latency, consistency, and usage caps are difficult to measure and irrelevant to an assessment of “deployment.”¹³ Commenters that encourage the Commission to include such criteria in its Section 706 analysis argue in the abstract that these criteria could affect the user experience,¹⁴ but the record does not reflect any concrete or quantified evidence that these factors meaningfully impact consumers’ usage of mobile wireless broadband services. Indeed, even parties that argue for a specific mobile broadband speed benchmark acknowledge that “mobile connectivity is much more complicated and variable than fixed access,”¹⁵ and, as noted below, the record contains many examples of how consumers increasingly utilize mobile wireless broadband services.

¹² See, e.g., *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services et al.*, Notice of Proposed Rulemaking, 30 FCC Rcd 11878, 11889 ¶ 24 & n.56 (2015); *Amendment of Part 27 of the Commission’s Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band et al.*, Report and Order and Second Report and Order, 25 FCC Rcd 11710, 11723 ¶ 28 (2010); *Business Data Services in an Internet Protocol Environment, et al.*, Report and Order, 32 FCC Rcd 3459, 3469 ¶ 19 (2017); cf. Alfred Kahn, *The Economics of Regulation: Principles and Institutions*, Vol. I – Economic Principles at 32 (1970) (the only “major contribution that regulation can make, and it is a modest one – can only be the providing of incentives – or taking care not to remove incentives”).

¹³ CTIA Comments at 17-18 (also noting in part that “there is no evidence that the nominal amount of latency inherent in today’s advanced mobile networks is affecting consumers” as demonstrated by consumers increasing use of such services for a variety of needs); see also Verizon Comments at 13-15; AT&T Comments at 8; Comments of ViaSat, GN Docket No. 17-199, at 2 (filed Sept. 21, 2017); see also generally Comments of CTIA – The Wireless Association, GN Docket No. 15-191, at 7-8 (filed Sept. 15, 2015); Comments of CTIA, GN Docket No. 16-245, at 24-26 (filed Sept. 17, 2016).

¹⁴ New York City Comments at 2; New America Comments at 14.

¹⁵ CSBO Comments at 4.

At a minimum, widely deployed 4G LTE services provide consumers with the capability to originate and receive high-quality voice, data, graphics, and video services, consistent with the statutory standard.¹⁶ As Verizon observes, “Section 706 is concerned with measuring *deployment*, which should be evaluated separate and apart from more subjective and difficult-to-measure criteria.”¹⁷ Thus, the Commission’s inquiry should focus on whether a technology can meet consumer needs, not whether such technology meets a Commission-chosen benchmark.

C. Mobile Broadband Deployment is Reasonable and Timely.

The record is replete with evidence showing that mobile wireless broadband deployment is reasonable and timely as providers invest and compete to offer consumers the mobile wireless broadband products and services they expect and demand.¹⁸ As commenters noted, the Commission’s data demonstrates that more than 99 percent of the U.S. population has access to 4G LTE coverage, a technology only first deployed to limited areas of the U.S. a few years ago, and 95.9 percent have access to three or more providers.¹⁹ To meet explosive consumer demand and competition in the market, mobile broadband providers have invested more than \$26 billion in 2016 alone, and nearly \$489 billion since 1985 to build-out and improve wireless networks.²⁰

¹⁶ AT&T Comments at 8-11; Verizon Comments at 13-14.

¹⁷ Verizon Comments at 15.

¹⁸ See, e.g., AT&T Comments at 11-12 (“[T]he portion of housing units covered by 25 Mbps download speed has increased from 49% to more than 90% since 2010 ... LTE was just beginning to be deployed in 2010 and is now essentially ubiquitous (99.7%).”); USTelecom Comments at 2-13; Verizon Comments at 3-9 (detailing in-depth the “abundant evidence that broadband services – both fixed and wireless – are being deployed widely throughout the United States on a reasonable and timely basis”).

¹⁹ The Commission’s most recent Mobile Wireless Competition Report shows that 99.8 percent of the U.S. population has access to LTE coverage from one or more service provider. Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Twentieth Report, FCC 17-126, WT Docket No. 17-69, at Chart III.D.4 (rel. Sept. 27, 2017). See also, Verizon Comments at 4; Comments of the Free State Foundation, GN Docket No., 17-199, at 2, 5-7 (filed Sept. 21, 2017) (“Free State Comments”).

²⁰ Verizon Comments at 4.

As impressive as these figures are, CTIA’s initial comments noted that investment might have been even greater – and the expansion of coverage even broader – but for the chilling effect of the 2015 *Title II Order*.²¹

Commenters that criticize the quality of mobile broadband services ignore the substantial progress that is being made to deploy mobile wireless broadband services.²² As noted above, mobile broadband deployment is expanding, with 4G LTE networks reaching more Americans year-over-year.²³ And as CTIA and other commenters observe, consumers use mobile broadband extensively and for a wide variety of purposes, while receiving more value for more services as prices for mobile broadband service continue to decline.²⁴ Concerns raised regarding data caps fail to acknowledge the market developments that have brought about the re-emergence of unlimited plans from nationwide, rural, and regional carriers.²⁵ To focus on the parameters of specific plans would be to ignore how quickly the market is changing to meet ever-evolving consumer demand. Similarly, other limitations – such as those placed on tethering – are also waning as the capabilities of devices and networks expand.²⁶ Indeed, these issues are

²¹ See, e.g., Comments of CTIA, GN Docket No. 17-108, at 25-26 (filed July 17, 2017) (noting that, among other data points and per a range of studies: (1) wireless capital investment per subscriber declined by 33 percent from 2014 to 2016; (2) capital expenditures by major ISPs declined by 8 percent from the first half of 2014 to the first half of 2015; and (3) between 2011 and 2015 the U.S. lost between \$150 and \$200 billion as a result of threatened or actual Title II reclassification); see also Reply Comments of CTIA, GN Docket No. 17-108 (filed Aug. 30, 2017); see also AT&T Comments at 11-13; USTelecom Comments at 4 n.13; Verizon Comments at 2 n.2.

²² New America Comments at 5-20; Public Knowledge Comments at 8-11; INCOMPAS Comments at 7-11.

²³ Free State Comments at 1-2, 5-7.

²⁴ CTIA Comments at 12; AT&T Comments at 5; and INCOMPAS Comments at 7.

²⁵ AT&T Comments at 5; Verizon Comments at 7 (“As one analyst commented, the introduction of unlimited plans is “reshaping the wireless competitive landscape.”); CTIA comments at 11.

²⁶ Indeed, carriers have even begun to compete on the expansiveness of their tethering offerings. See, e.g., T-Mobile, *T-Mobile ONE Ups Verizon’s New Unlimited Offer, as Studies Find Big Red’s Network Advantage Gone* (Feb. 13, 2017), <https://newsroom.t-mobile.com/news-and-blogs/tmobile-one-ups->

prime examples of how an “are we there yet” analysis in this proceeding would preclude recognition of substantial progress. Moreover, mobile broadband is poised to offer even higher speeds and capacities as 5G becomes a reality.²⁷

While CTIA shares the Commissions’ goals of closing the digital divide and the Commission has appropriately focused on those issues in other proceedings, well-known deployment challenges, particularly in rural areas, do not mandate a negative finding in this proceeding.²⁸ As Commissioner Rosenworcel noted last year, there are real challenges in serving rural areas: “Financing, constructing, and operating these facilities in remote areas is not easy. Tough terrain, trying weather, and limited populations make deployment harder than in more populated locales.”²⁹ These challenges demand solutions that are tailored to addressing the unique issues of deploying broadband to rural areas.³⁰ As USTelecom observes, “deployment in

[verizon.htm](#) (“Customers will get HD quality video streaming and up to 10GB of high-speed Mobile Hotspot data per month, so they can ‘tether’ a laptop or other device to access the Internet. And, after the included 10GB of high-speed data, customers still get unlimited 3G data through the end of the month.”); Verizon, *The New Verizon Plan*, <https://www.verizonwireless.com/support/new-verizon-plan-unlimited-faqs/#whats-changed> (last visited Oct. 3, 2017) (explaining that customers “now have an allowance of 15 GB (previously 10 GB) of 4G LTE data” for mobile tethering, before reducing to an unlimited amount of 3G tethering).

²⁷ See Verizon Comments at 6 (“In fact, Verizon is rolling out pre-commercial 5g service to pilot customers in 11 markets in 2017 - with 8 markets up and running...AT&T, T-Mobile, Sprint, and U.S. Cellular continue to move forward on 5G market testing and trials.”)

²⁸ *But see* Benton Comments at 3-6; New America Comments at 4, 17-20; *cf.* New York City Comments at 2-3.

²⁹ Jessica Rosenworcel, Commissioner, FCC, Statement: Bringing the Connected Future to All Americans, at 5 (Jan. 3, 2017), https://apps.fcc.gov/edocs_public/attachmatch/DOC-342844A1.pdf

³⁰ See, e.g., *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, 1490 (2015) (Dissenting Statement of Commissioner O’Rielly) (acknowledging the differences in baseline preexisting deployment in urban vs. rural areas, while noting that “[s]everal years into its universal service reforms, 20 percent of rural Americans still do not have access to even 4/1 service that was the goal,” in part because “providers quickly confront a significant cost curve as they edge out into more rural areas”); *Connect America Fund et al.*, Report and

some areas will progress at a significantly faster pace than others.... [I]t may take years to achieve deployment of the highest speed broadband in other areas due to rough terrain or other environmental conditions, or a lack of demand.”³¹ This emphasizes that the appropriate approach of the Commission’s Section 706 inquiry is to analyze progress towards the goal of ensuring that all Americans can access advanced telecommunications capabilities. As noted above, the record demonstrates that mobile wireless broadband has been deployed on a reasonable and timely basis.

III. APPROPRIATE REGULATORY POLICIES CAN HELP ENSURE THAT MOBILE BROADBAND DEPLOYMENT REMAINS REASONABLE AND TIMELY.

As Commissioners O’Rielly and Carr recently noted, although an ever-increasing number of consumers have access to mobile wireless services across the country, there is still more work to be done to promote investment and innovation to benefit all consumers.³² Despite the fact

Order, 30 FCC Rcd 15644, 15745 (2014) (Approving in Part and Dissenting in Part Statement of Commissioner Ajit Pai). (criticizing the Commission for insufficiently calculating the cost of rural incremental improvements by ignoring the fact that “rais[ing] the speed benchmark . . . roughly doubles the expected costs of deployment” to rural areas”); *cf.* Press Conference, Michael O’Rielly, Commissioner, FCC (Sept. 26, 2017), <https://www.fcc.gov/news-events/events/2017/09/september-2017-open-commission-meeting> (by “tilting the playing field” in the CAF Phase II Auction, “in terms of our weights for fiber,” the FCC ignores its duty to “face the issue of . . . the considerable number of Americans that are underserved. . . . If I can buy four feet of fiber, or I can serve 100,000 people with satellite,” the calculations are different. “We are not going to be able to take fiber to everybody’s home.”).

³¹ USTelecom Comments at 14.

³² *Implementation of Section 6002(b)(of the Omnibus Budget Reconciliation Act of 1993 et al.*, Twentieth Report, FCC 17-126, WT Docket No. 17-69, at 92-93 (rel. Sept. 27, 2017) (Statement of Commissioner O’Rielly) (noting that, while “the Commission rightfully concludes that the mobile sector is competitive . . . I am dismayed that some have expressed concerns that the FCC would no longer have any impetus to promote further wireless network expansion or broadband deployment, if it finds that mobile services are competitive or, in the context of the annual section 706 report, that broadband is being deployed in a reasonable and timely manner. Just because a report finds there is competition or that industry participants are doing a good job does not mean we all get to go home.”); *id.* at 94 (Statement of Commissioner Carr) (noting that, while “wireless prices are falling,” “[s]peeds are increasing,” and “[n]etwork coverage and capacity are expanding . . . this is not to say that there is no additional progress to be made,” and “the FCC has to do its part. That means driving down the regulatory costs associated with

that, by any rational benchmark, the deployment of mobile broadband has been and continues to be reasonable and timely, the Commission can still act to ensure that further wireless capabilities are reasonably and timely deployed by implementing regulatory policies that create incentives for, and remove obstacles to, deployment.³³ As the record demonstrates, the Commission should:

- (1) Make more spectrum available for broadband;³⁴
- (2) Eliminate unwarranted delays in infrastructure deployment;³⁵
- (3) Remove the burdens of anachronistic Title II regulation from the broadband marketplace;³⁶ and
- (4) Provide timely and sufficient universal service support to ensure that broadband reaches areas where it is not otherwise economic.³⁷

By focusing on achieving targeted, balanced regulatory policies, the Commission can help further ensure that reasonable and timely deployment of mobile wireless broadband continues.

IV. CONCLUSION.

Ultimately, the record assembled in this proceeding is clear: Mobile wireless broadband is being reasonably and timely deployed. To ensure that progress continues, the Commission should pursue regulatory policies that create incentives for and remove barriers to further deployment.

deploying fiber, small cells, and other network infrastructure. And it means finding ways to streamline and expedite the deployment process.”).

³³ See generally CTIA Comments at 20-26.

³⁴ Verizon Comments at 18-19.

³⁵ AT&T Comments at 14; Free State Comments at 14-15; NTCA Comments at 19-23; Verizon Comments at 19-20.

³⁶ Verizon Comments at 22.

³⁷ AT&T Comments at 14; USTelecom Comments at 24; NTCA Comments at 14; Verizon Comments at 21-22.

Respectfully submitted,

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