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

In the Matter of

Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion

GN Docket No. 19-285

REPLY COMMENTS OF PUBLIC KNOWLEDGE, COMMON CAUSE, AND NEXT CENTURY CITIES

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I. INTRODUCTION & SUMMARY

Public Knowledge, Common Cause, and Next Century Cities submit these Reply Comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) Notice of Inquiry (“NOI”) seeking comment on whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.1 The record in this proceeding supports the fact that broadband is not being deployed to all Americans in a reasonable and timely fashion.

II. THE COMMISSION SHOULD INCREASE THE CURRENT BENCHMARK SPEED FOR BROADBAND TO 100 MBPS DOWNSTREAM.

The record demonstrates that the current benchmark speed of 25 Mbps/3 Mbps is no longer adequate to meet the broadband needs of households today, and that technological innovation and consumer demand for faster broadband warrant the FCC to update its benchmark speed to 100 Mbps downstream.2 USTelecom argued that even though emerging technologies may eventually require more bandwidth, “there is no reason to move away from the 25/3 Mbps

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as the target benchmark today.”3 On the contrary, there are plenty of reasons to increase the benchmark speed. As Open Technology Institute (“OTI”) explained, the Commission should increase the current broadband benchmark because “[t]he trends in the United States show that the average speeds are increasing every year, and have long surpassed the 25 Mbps/3 Mbps scale,”4 and increasing the current benchmark will “reflect the current realities of the marketplace and consumer demand.”5

Industry commenters provided evidence of offering broadband speeds significantly faster than 25/3 Mbps despite calling on the Commission to maintain the current benchmark. WISPA argued in favor of maintaining the current standard, “[g]iven 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[.]”6 Yet, USTelecom explained that broadband at higher speeds is currently widely available, citing that as of mid-2018 wired broadband service at 100/10 Mbps was available to 89 percent of Americans.7 Similarly, Internet Innovation Alliance commented that the Commission should keep the current benchmark speed, but it then explained how “broadband providers are constantly increasing speeds in response to competitive pressures,” and that it expects this trend to continue and accelerate as the nation moves towards 5G wireless broadband.8

Arguing that the Commission should maintain an outdated benchmark speed while also arguing that most broadband providers are providing higher speeds is nonsensical. The federal standard is designed to reflect the widespread utility and set guardrails to ensure that every

4 OTI Comments, at 3.
5 Id. at 14.
7 USTelecom Comments, at 4.
household is positioned to take advantage of advances in technology.\textsuperscript{9} The Commission should use a contemporary and forward-looking approach that accurately reflects the broadband marketplace instead of one that is outdated.

As reliance on broadband services continues to increase, the Commission cannot continue to evaluate broadband nationwide with a benchmark speed that has not been updated in five years and runs the risk of becoming outdated.\textsuperscript{10} CTIA explained that consumers enjoy 90 percent faster download speeds than they did five years ago.\textsuperscript{11} Similarly, ACA Connects commented how its members “often deliver service that vastly exceeds 25/3.”\textsuperscript{12} Yet commonplace applications are quickly outpacing the Commission’s standard for broadband. As Benton Institute rightly stated, the Commission should “set a new benchmark that better represents marketplace realities,” and the reality is that broadband connections in the United States “regularly deliver 100 Mbps downloads and are increasingly capable of reaching 1 Gbps symmetrical speeds.”\textsuperscript{13} If it maintains the current benchmark speed, the Commission bears the risk of adopting policies that do not reflect today’s marketplace realities.

Claims by the wireless industry and assumptions by the Commission that 5G widespread deployments are imminent in 2020 make clear that a 25/3 Mbps standard will not suffice. To keep up with the realities of the marketplace, the Commission must upgrade its definition of broadband. For example, INCOMPAS explained that 1 Gbps is no longer “aspirational” as a benchmark, but rather it represents the reality of speeds being deployed today across the U.S. INCOMPAS noted, “[e]ntry-level service options by major BIAS providers are typically at least 50 Mbps (and usually 100 Mbps) up to 2 Gbps.”\textsuperscript{14} The Fiber Broadband Association also called for the Commission to increase the benchmark speed to at least 100/10 Mbps in order “to reflect

\textsuperscript{10} Next Century Cities Comments, at 4.
\textsuperscript{13} Benton Institute Comments, at 10.
\textsuperscript{14} INCOMPAS Comments, at 6.
current and near term use.” The realities of the marketplace demand the Commission increase its minimum speed definition of broadband.

III. THE COMMISSION’S CURRENT METHODOLOGY IS FLAWED AND OVERSTATES DEPLOYMENT.

The Commission should not continue to rely only on Form 477 data when evaluating the status of the nation’s broadband. Form 477 data is too incomplete and inaccurate for the Commission to do so. In fact, last week, Commission staff discovered that “the Mobility Fund-II coverage maps submitted by Verizon, U.S. Cellular, and T-Mobile likely overstated each provider’s actual coverage and did not reflect on-the-ground performance in many instances. Only 62.3% of staff drive tests achieved at least the minimum download speed predicted by the coverage maps—with U.S. Cellular achieving that speed in only 45.0% of such tests, T-Mobile in 63.2% of tests, and Verizon in 64.3% of tests. Similarly, staff stationary tests showed that each provider achieved sufficient download speeds meeting the minimum cell edge probability in fewer than half of all test locations (20 of 42 locations).” As a result, the Commission’s Rural Broadband Auctions Task Force recommended that the Commission “analyze and verify the technical mapping data submitted in the most recent Form 477 filings of Verizon, U.S. Cellular, and T-Mobile to determine whether they meet the Form 477 requirements.” The Commission acknowledged that “Form 477 currently affords providers significant discretion in determining the extent of their mobile broadband coverage.” Although the Commission continued to explain that “this discretion does not encompass reporting inaccurate mobile coverage,” inaccurate reporting nevertheless occurs and will continue to occur if the Commission does not reform its current data collection process.

15 Fiber Broadband Association Comments, at 4.
17 Id.
18 Id.
19 Id. at 3.
This recent wireless example helps support Benton Institute’s claim that “Form 477 method is vulnerable to errors in the data carriers report.”20 As another example provided by Benton Institute of inaccurate reporting, “the Center for Rural Pennsylvania concluded that although the Commission’s broadband maps ‘show 100% availability across the entire state of Pennsylvania of broadband speeds that exceed 25 Mbps,’ the Center’s data ‘showed that there were zero counties in Pennsylvania where at least 50% of the populace received’ 25/3 Mbps service. In other words, no Pennsylvania county had the broadband coverage that the Commission said was enjoyed by every Pennsylvania county.”21

As part of reforming its data collection process, the Commission should require providers to submit more granular data on Form 477 as well as enable a robust challenge process.22 The Commission is aware that its reliance on Form 477 data collection overstates the number of households with broadband coverage and even cited a recent report from George Ford estimating a 3 percent overstatement.23 Given that the Form 477 process will likely not be updated by the time next year’s 706 Report is underway, it would be misleading and harmful for the Commission to rely solely on Form 477 data to report on nationwide coverage. As OTI explained, “continuing to issue reports based on flawed data would skew the Commission’s findings under Section 706 and perpetuate a consistently inaccurate view of the digital divide.”24 This result would run contrary to the Commission’s goal of closing the digital divide by understating the scope of the divide, likely leading to insufficient and ineffective policies to solve the problem.25

To the contrary, NCTA argued that the Commission should continue to rely on Form 477 data even if there will be overreporting, and that “there is no evidence to suggest that the degree

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20 Benton Institute Comments, at 3.
21 Id. at 5.
23 See NOI, at ¶ 17.
24 OTI Comments, at 11.
25 See NOI, at ¶ 25 (“The next Report will examine our actions to spur broadband deployment and close the digital divide since issuing the 2019 Report. We seek comment on the ongoing effects of these efforts in spurring broadband deployment, as well as any additional efforts we might undertake.”).
to which coverage has been overstated has changed in any meaningful way over time.”

However, the Commission should not justify using an inaccurate process just because that process has been inaccurate for a long time. On the contrary, this is a compelling reason for the Commission to update its Form 477 process and why it cannot solely rely on this data for the upcoming report. There is also evidence that the Commission’s maps have grown less accurate over time. According to a report published by the Center for Rural Pennsylvania, “since 2014, the discrepancy between ISPs’ self-reported broadband availability in the FCC’s broadband maps and the speed test results collected via the M-Lab platform has grown substantially in rural areas, but not in urban areas; this may indicate a systematic and growing overstatement of broadband service availability in rural communities.” The report explains how “it appears that official broadband maps are becoming less accurate over time - particularly those for rural areas - and that the methodology used by the FCC not only overstates broadband speeds and availability, but are showing results that are less and less accurate year-after-year.”

USTelecom supported the Commission’s continued use of Form 477 as it “agrees with the Commission that Form 477 deployment data for fixed technologies is currently the most reliable and comprehensive dataset with which to assess availability of fixed services;” and ADTRAN argued a similar perspective. However, Form 477 is characterized as the most reliable and comprehensive dataset because it is the only current dataset that the Commission uses to analyze broadband deployment. Moreover, Colville Confederated Tribes (“CCT”) expressed that Form 477 is “far from comprehensive.”

28 Id. at 75.
29 USTelecom Comments, at 12.
Form 477 has the potential to be much stronger if the Commission required ISPs to submit more granular data, such as actual speeds provided and pricing information. CCT rightly stated that new granular data collection methods “will bridge the gap between reporting and reality so that big carriers will not be able to over-report deployment in the future.”\(^{31}\) Notably, every commenter in this proceeding that discussed Form 477, including the Commission itself, recognized that Form 477 data is flawed.\(^{32}\) As a result, the Commission must figure out other ways to supplant its analysis.

While the Commission did use OOKLA consumer speed test data, it should be weary that, according to CCT, this speed test “does not measure true network performance and only shows you how fast you can move small files between sites. This is not what people do when they go onto the Internet.”\(^{33}\) CTIA also supported the Commission using other resources to evaluate the state of broadband. As it explained, “the Commission should take a holistic view of deployment progress that looks beyond just speeds and coverage data to other data that reflect the consumer mobile experience today” and to evolve its collection of data “to more closely reflect consumers’ experiences.”\(^{34}\)

IV. MOBILE BROADBAND SERVICE IS NOT A SIMILAR FUNCTIONALITY OR SUBSTITUTE TO FIXED BROADBAND.

The majority of commenters in this proceeding that commented on the substitutability of mobile and fixed broadband agreed that mobile broadband service should continue to be treated as a separate, complementary service to fixed broadband, rather than as a substitute.\(^{35}\) As WISPA

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\(^{31}\) CCT, at 6.

\(^{32}\) See NOI, at ¶ 17; ACA Connects Comments, at 7; ADTRAN Comments, at 9; Benton Comments, at 3; CTIA Comments, at 17; CTT Comments, at 6; NCTA Comments, at 4; Next Century Cities Comments, at 6; OTI Comments, at 11; USTelecom Comments, at 12-13; WISPA Comments, at 6.


\(^{34}\) CTIA Comments, at 17.

\(^{35}\) See ADTRAN Comments at 6; Benton Institute Comments, at 9; CCT Comments at 3; INCOMPAS Comments, at 5; Next Century Cities Comments, at 9; Comments of NTCA—The Rural Broadband Association, In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capacity to All Americans in a Reasonable and Timely Fashion, GN
put it, “[t]hese 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.”  

If mobile broadband was to be considered as a substitute for fixed broadband, it would not explain the fact that, as Next Century City highlighted, “the vast majority of households that have mobile internet access concurrently subscribe to a fixed access service provider.”  

The two services play different roles, as evidenced by the fact that “the vast majority of data usage travels over Wi-Fi or local fixed connections rather than on a mobile network.”  

In addition, as NTCA explains, slowdowns or breaks in mobile network service can cause severe delays or reductions in quality, which is not just an inconvenience, “but can mean a loss of revenue for a business or a loss of productivity for a student.”  

In its comments, Free State Foundation encouraged the Commission to conduct a more incisive analysis of fixed/mobile broadband substitution due to the claim that “[t]echnological differences between mobile and fixed wireless, while significant, are less pronounced than in the past due to network convergence.”  

The Commission should not overlook this concession that the differences between both services are “significant,” and many commenters have pointed out just how significant the differences are in these two services. As INCOMPAS explained, fixed and mobile broadband are distinct networks due to the inherent limitations of mobile.  

For example, “there is a distinct difference between the speeds and connectivity available to consumers of mobile service (with average speeds of 38.06 Mbps) and fixed (with average download 129.65 Mbps), and most Americans and businesses require access to a fixed broadband service because mobile is not a sufficient substitute.”

Docket 19-285 (Nov. 22, 2019) (“NTCA Comments”), at 1-2; OTI Comments, at 1; WISPA Comments, at 2.  

WISPA Comments, at 2.  

Next Century Cities Comments, at 2.  

Id. at 3.  

NTCA Comments, at 5.  


INCOMPAS Comments, at 5.  

Id. at 8-9.
While speeds are one consideration, Benton Institute pointed to other differences between mobile and fixed broadband, including latency, network architecture, usage limits, and pricing.\(^\text{43}\) ADTRAN echoed similar concerns by explaining that “in light of capacity constraints, pricing policies and usage limitations, current mobile broadband services are not a perfect ‘functional substitute’ for fixed, wireline broadband.”\(^\text{44}\) CCT highlighted that the reality for many rural Americans, including tribal lands, is that many areas do not even have access to cellular coverage, and those that do experience significant differences in the costs and data caps of each service.\(^\text{45}\)

In an effort to support its argument that mobile is a substitute for fixed broadband, CTIA noted the fact that “roughly one-in-four lower-income adults are ‘smartphone only’ internet users,” and that “the share of lower-income Americans who rely on their smartphone for going online has roughly doubled since 2013, rising from 12 percent to 26 percent in 2019.”\(^\text{46}\) Yet this statistic strengthens the argument that low-income Americans are not always choosing to be mobile-only because they see it as an equivalent to fixed, but rather the cost of subscribing to both services is often prohibitive.\(^\text{47}\) The record is clear. Mobile and fixed broadband continue to be complementary services and are not substitutes for each other.

V. THE COMMISSION SHOULD RETURN TO ITS PREVIOUS INTERPRETATION OF ITS CONGRESSIONAL MANDATE TO REPORT ON THE STATUS OF BROADBAND DEPLOYMENT.

The Commission’s two prior Broadband Deployment Reports departed significantly from nearly a decade of precedent since the Broadband Data Improvement Act (“BDIA”)\(^\text{48}\) by concluding that broadband is being deployed to the U.S. in a timely and reasonable manner. CTIA argued that “[w]ere it Congress’s intent to seek Commission input on whether deployment

\(^{43}\) Benton Institute Comments, at 9.
\(^{44}\) ADTRAN Comments, at 6.
\(^{45}\) CCT Comments, at 3.
\(^{46}\) CTIA Comments, at 20.
to all Americans has been achieved, Congress easily could have easily done so.”

But Congress did do precisely that, and congressional reports show that it was Congress’ intent to look at current broadband deployment rather than come to its conclusion based on the progress from the prior year. Calculating broadband progress from year-to-year makes sense and is a good idea, but the determination of whether progress has been made was never intended to be the conclusion or the finding of the 706 Report. If it was, it does not explain why for nearly a decade after BDIA was enacted the FCC looked at the number of Americans with access to broadband for its 706 Report before switching to the year-over-year improvement standard in 2018.

Millions of Americans without broadband access will continue to be left behind if the Commission claims that broadband is being served in a reasonably and timely fashion when reality shows otherwise. ADTRAN attempted to justify the Commission’s progress-based approach by claiming that the report “ought not simply be asking . . . “are we there yet?” – with “there” being the goal of 100% coverage. Rather, ADTRAN explained, the Commission should be assessing whether progress towards the goal of universal broadband availability is occurring at a constant, accelerating or slowing pace.”

But why isn’t the Commission also asking “are we there yet?” ADTRAN is correct that “there” is the goal of 100% coverage, but it is incorrect in comparing this question to a child. That is exactly what the Commission should be aiming for and should be making a finding on an annual basis.

WISPA also urged the Commission to continue using a progress-based approach that

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49 CTIA Comments, at 5.
51 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, 2016 Broadband Deployment Report, GN Docket No. 15-191 (rel. Jan 29, 2016), at ¶¶ 119-120 (finding that advanced telecommunications capability was not being deployed in a reasonable and timely fashion because “although deployment has increased . . . we are not satisfied that approximately 34 million Americans lack service, nearly the population of Canada.”).
52 ADTRAN Comments, at 4-5.
53 Id.
measures the availability of advanced services in an incremental process “rather than by setting artificial a priori goals that may be more aspirational than realistic.” But the Commission’s new progress-based approach is aspirational by painting a rosy picture that broadband is adequately being served nationwide rather than explaining the truth. In reality, millions of Americans are not connected to broadband. The Commission used to find this was cause for concern and a call to action, but now interprets this fact to mean that broadband is being deployed timely and reasonably. As Benton Institute stated, “[c]oupled with the Commission’s continued reliance on FCC Form 477, the Commission’s ‘progress-based approach’ misrepresents the true reach of broadband in the U.S.” CCT justifiably expressed concern that the progress-based approach and how this methodology “harms tribal lands in remote locations with overreporting . . . it clearly does not work.”

VI. THE COMMISSION SHOULD CONTINUE TO INCLUDE BROADBAND DEPLOYMENT MEASUREMENTS FOR PUERTO RICO AND OTHER US TERRITORIES IN ITS ANNUAL BROADBAND DEPLOYMENT PROGRESS REPORT AND EVALUATE DISASTER RECOVERY IN ORDER TO ENSURE THE DISASTER STRICKEN AREAS ARE NOT LEFT BEHIND.

Reporting separately on U.S. Territories runs directly contrary to the Commission’s congressional mandate to report on all of the United States (including its territories) as well as the agency’s obligation to promote universal service. Furthermore, residents of U.S. Territories are U.S. citizens, and the FCC has an obligation to report on broadband deployment in those areas. Excluding the residents of U.S. Territories from the Report is misleading as it dramatically

54 WISPA Comments, at 6.
55 Benton Institute Comments, at 2.
56 CCT Comments, at 1-2.
57 See 47 U.S.C. § 1302 (“The Commission. . . shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans. . . ) (emphasis added); see also NOI, at 2 (“The Commission’s top goal is closing the digital divide and bringing the economic, educational, healthcare, social, and civic benefits of connectivity to all Americans seeking broadband access.”) (emphasis added).
58 47 U.S.C. § 151 (“For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination. . . there is created a commission to be known as the ‘Federal Communications Commission’”); see also FCC’s Website, Universal Service (“Universal service is a cornerstone of the law that established the FCC”), https://www.fcc.gov/general/universal-service.
understates the number of Americans without access to broadband. The record in this proceeding is silent and includes no evidence why U.S. Territories should not be included in the Commission’s Report. In fact, CCT is the only other commenter that discussed this issue and it agrees that the Commission “should include data from every state and territory.” CCT goes on to explain that “[b]y not including such data the FCC decisions are not transparent and based upon accurate data in order to make it appear as if over all deployment is consistently moving forward. Disasters happen, and the re-deployment of those networks is just as important as new deployments to un-served areas.”

VII. THE COMMISSION’S RECENT ACTIONS HAVE WIDENE THE DIGITAL DIVIDE INSTEAD OF NARROWING IT.

We support and appreciate recent actions that the Commission has taken with regard to spectrum, but the Commission still has a long way to go to close the digital divide. Many of the Commission’s recent actions have been ineffectual or even counterproductive and widened the gap, particularly for rural, low-income, and other marginalized communities. As ITTA explained, even using the Commission’s overstated measure of broadband deployment, over 21 million Americans still lack broadband access, and so the Commission must “continue to arduously pursue actions to foster broadband deployment.” The United States also continues to fall significantly behind other countries in broadband penetration rates. For example, China has an 86% penetration rate for fiber internet connections compared to only 25% for the U.S.

Before shifting its focus to “winning the race to 5G,” the Commission must focus on closing the digital divide and ensure that all Americans have access to broadband. This is especially true

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59 CCT Comments, at 13.
60 Id.
because 5G wireless networks are unlikely to be deployed anytime soon in currently unserved or underserved areas.64

There is widespread agreement that rural, tribal lands are being left behind. According to CCT, [t]he only infrastructure that has been put into play over the last decade has been provided by CCT itself.”65 This is unacceptable. Much more work needs to be done. As NCTA expressed, “In determining how to fill the remaining gaps, we agree with Commissioner Starks that it is important to understand why some areas are still unserved and what role the Commission’s policies have played to date.”66 The Commission should take a second look at some of the policies it has enacted and plans to enact, including the elimination of copper retirement safeguards, the proposed universal service fund cap, and pending proposals to weaken the Lifeline program.67 If the Commission’s number one priority is truly to close the digital divide,68 then its policies must comprehensively reflect this goal.

VIII. CONCLUSION

For the reasons described above, the record supports the notion that the Commission should increase the benchmark broadband speed to 100 Mbps downstream; rely not only on Form 477 data when evaluating the status of the nation’s broadband; continue to find mobile and fixed broadband as distinct services; return to its previous interpretation of how to report on the status of broadband deployment, rather than a progress-based approach; include U.S. Territories in its annual report; and ensure that its actions help close the digital divide.

65 CCT Comments, at 6.
66 NCTA Comments, at 7.
68 See FCC’s Website, Bridging The Digital Divide For All Americans (quoting Chairman Pai: “Since my first day as Chairman of the FCC, my number one priority has been closing the digital divide and bringing the benefits of the Internet age to all Americans.”), https://www.fcc.gov/about-fcc/fcc-initiatives/bridging-digital-divide-all-americans.