

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

FIFTEENTH BROADBAND DEPLOYMENT REPORT NOTICE OF INQUIRY

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I. INTRODUCTION

1. 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. In order to ensure continued progress toward that goal, the Commission assesses annually
whether advanced services are being deployed in a timely manner. Recently, the Commission has found
that its efforts to remove barriers to broadband investment and promote competition in the
telecommunications marketplace are enabling service providers to extend the reach of broadband
networks to previously unserved areas in all corners of the nation.¹

2. By this Notice of Inquiry, we initiate this annual review and solicit comment and
information to help guide our analysis. We encourage individual consumers, broadband providers,
consumer advocates, policy institutes, governmental entities, and other interested parties to provide
comment as we complete our statutorily-mandated task. The information we gather in this proceeding
will help ensure that our broadband policies are well-informed and backed by sound data analysis as we

¹ Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a
Reasonable and Timely Fashion, GN Docket No. 18-238, 2019 Broadband Deployment Report, FCC 19-44, paras.
1-4, 76 (2019) (2019 Report).

strive to close the digital divide and encourage the deployment of advanced telecommunications capability to all Americans in a reasonable and timely fashion.

II. BACKGROUND

3. Section 706 of the Telecommunications Act of 1996, as amended (1996 Act), requires us to “determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion” and report annually.² In the *2019 Broadband Deployment Report*, we concluded that advanced telecommunications capability was being deployed to all Americans in a reasonable and timely fashion.³ The *2019 Report* showed that the number of Americans lacking access to fixed terrestrial 25 Mbps/3 Mbps service had fallen from 26.1 million to 21.3 million, an 18% decrease, and that the majority of those newly connected Americans were located in rural areas.⁴ At the same time, higher speed services are also being rapidly deployed, with a majority of rural Americans, more than 37 million, having access to 100 Mbps/10 Mbps broadband.⁵ Overall, the number of Americans with access to 250 Mbps/25 Mbps broadband climbed 36% in 2017 to more than 190 million.⁶ The report also showed that broadband investment was up more than \$1.5 billion, while fiber networks passed 5.9 million new homes, the largest single-year increase ever.⁷ The Commission took several steps to facilitate broadband deployment by reducing regulatory barriers to infrastructure deployment, along with a number of other measures to improve the regulatory environment and promote broadband deployment.⁸

4. Thus, the *2019 Report* concluded that, due to the Commission’s policy efforts, “the digital divide has narrowed substantially, and more Americans than ever before have access to high-speed broadband.”⁹ Consistent with the statutory text of section 706 of the Telecommunications Act of 1996,¹⁰ we continued using a progress-based approach to analyze year-over-year deployment of both fixed and mobile broadband services in the *2019 Report*, noting that this approach enables the Commission to determine whether advanced telecommunications capability “is being deployed” in the manner that section 706 requires.¹¹

5. Although we concluded in the *2019 Report* that advanced telecommunications capability was being deployed to all Americans in a reasonable and timely fashion, we also recognized that our work

² 47 U.S.C. § 1302(b). For simplicity in past inquiries, the Commission has sometimes used the term “broadband” to refer to “advanced telecommunications capability.” However, “advanced telecommunications capability” is a statutory term with a definition that is narrower than the term “broadband.” See 47 U.S.C. § 1302(d)(1) (“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.”). As this definition makes clear, while all services providing advanced telecommunications capability are “broadband,” not all broadband services provide advanced telecommunications capability.

³ *2019 Report*, paras. 3, 76.

⁴ *Id.*, para. 2.

⁵ *Id.* at para. 38, fig. 4

⁶ *Id.*, para. 2.

⁷ *Id.*, para. 3.

⁸ *2019 Report*, paras. 52-75; *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, at 1708, para. 96 (2018) (*2018 Report*).

⁹ *2019 Report*, paras. 2, 4.

¹⁰ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (codified at 47 U.S.C. § 1302).

¹¹ *2019 Report*, para. 8.

to close the digital divide was not complete.¹² As already noted, the data demonstrates that over 21 million Americans lack access to fixed terrestrial advanced telecommunications capability of 25 Mbps/3 Mbps or greater, and we recognized that the situation is especially problematic in rural areas, where over 26% lack access, and Tribal Lands, where 32% lack access.¹³ Thus, further deployment of advanced telecommunications capability remains a top priority as we continue our efforts to help deliver the benefits of broadband to all Americans.¹⁴

III. STATUTORY FRAMEWORK FOR BROADBAND DEPLOYMENT INQUIRY

6. Consistent with past *Broadband Deployment Reports*, we propose to take a holistic view of progress in the deployment of advanced telecommunications capability and whether that progress is occurring in a reasonable and timely fashion.¹⁵ Taking such a holistic view of deployment requires not only that we consider one benchmark speed, but rather a range of speeds, provided over both fixed and mobile technologies, to best capture the ways Americans are using advanced telecommunications capabilities. We believe that this approach to evaluating deployment is the most faithful reading of the statute. Below, we propose an evaluative framework for the next Report and seek comment on our proposed methodology.

A. Evaluating Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion

7. *Progress in Deployment.* In the *2019 Report*, we reviewed whether advanced telecommunications capability was being deployed to all Americans in a reasonable and timely fashion by evaluating progress—specifically, comparing deployment of fixed and mobile services as of December 31, 2017, to deployment of those services each year since 2013.¹⁶ In doing so, we reiterated that, by using the language “is being deployed” in section 706, Congress intended that the Commission evaluate the current state of deployment to all Americans; Congress did not ask us to determine whether each and every American is served at this moment.¹⁷ We propose to use this progress-based approach for this next Broadband Deployment Report, and seek comment on doing so.

8. In the *2019 Report*, we concluded that both fixed and mobile LTE services provide capabilities that satisfy the statutory definition of advanced telecommunications capability; but that, despite the increasing ubiquity and capabilities of mobile services, there was insufficient evidence in the record to conclude that mobile and fixed broadband services are full substitutes in all cases.¹⁸ Thus, we evaluated the availability of fixed and mobile services holistically over a five-year time period (2013–2017), using the same four categories for determining the proportion of Americans with advanced telecommunications capability available as presented in the *2018 Report*: (1) those with fixed services available; (2) those with mobile LTE services available; (3) those with both fixed terrestrial *and* mobile LTE services available; and (4) those with at least one of either fixed terrestrial *or* mobile LTE services available.¹⁹

¹² *Id.*, paras. 76-79.

¹³ *Id.*, para. 33, fig. 1.

¹⁴ *Id.*, para. 79.

¹⁵ *Id.*, para. 8; *2018 Report*, 33 FCC Rcd at 1663-64, paras. 10-13.

¹⁶ *2019 Report*, paras. 8, 32-39, and Figs. 1-5.

¹⁷ *Id.*, para. 8; *2018 Report*, 33 FCC Rcd at 1663-64, paras. 10-13.

¹⁸ *2019 Report*, para. 11.

¹⁹ The Commission’s holistic approach in the *2018 Report* considered improvements to deployment over time; however, the data for 2012 and 2013 are not directly comparable to the data collected by the Commission since 2014. *2018 Report*, 33 FCC Rcd at 1678, paras. 45-46.

9. We propose maintaining the evaluative framework we used in the *2019 Report*. Specifically, we propose conducting an evaluation of fixed and mobile services using the same four categories as used in the *2019 Report*. We also propose to continue to rely on a five-year time period (2014-2018) in our analysis. To enable the Commission and the public to monitor consumer usage trends and marketplace developments, the *2019 Report* presented deployment figures for five speed metrics for fixed services (specifically, the 25 Mbps/3 Mbps fixed advanced telecommunications capability speed benchmark, 10 Mbps/1 Mbps, 50 Mbps/5 Mbps, 100 Mbps/10 Mbps, and 250 Mbps/25 Mbps), and for two speed metrics for mobile LTE (specifically, 5 Mbps/1 Mbps and 10 Mbps/3 Mbps).²⁰ We propose to use these same metrics for our upcoming Report, and we seek comment on that proposal.

10. Alternatively, have there been changes in marketplace and technological conditions that justify a different evaluative approach? If so, how should we modify our previous conclusion regarding the substitutability of fixed and mobile broadband services? Should mobile broadband be treated as a functional substitute for fixed wireline broadband? If so, how would we adjust our evaluative approach to account for such a conclusion? Given that the Commission has previously determined that we should employ a benchmark speed for mobile services, what should that benchmark be? Should the deployment of 5G wireless services affect our analysis?

11. *Defining Advanced Telecommunications Capability*. In the *2019 Report*, we found that the current speed benchmark of 25 Mbps/3 Mbps was the appropriate measure to assess whether fixed services provide advanced telecommunications capability.²¹ We noted that the record lacked a compelling justification for raising the benchmark, and that a consistent benchmark better enables the Commission and the public to track deployment progress over time.²² We propose to maintain the 25 Mbps/3 Mbps benchmark for fixed services, and we seek comment on this proposal.

12. We also found in the *2019 Report* that the inherent variability of mobile services, as well as certain data limitations, continue to make the use of a single mobile speed benchmark unworkable.²³ Consequently, we found that use of various data points is still the best method to assess the extent to which American consumers have mobile advanced telecommunications capability available.²⁴ We presented, as a starting point, LTE coverage data based on the FCC Form 477²⁵ minimum advertised speeds of 5 Mbps/1 Mbps.²⁶ Consistent with the findings of the *2018 Report*, we determined in the *2019 Report* that 4G LTE is the best proxy for what is “advanced” in today’s mobile services market,²⁷ but we did not establish 5 Mbps/1 Mbps as the advanced telecommunications capability benchmark for mobile services. Instead, we supplemented our assessment of relevant FCC Form 477 data with Ookla’s

²⁰ *2019 Report*, paras. 14, 16.

²¹ *Id.*, para. 12.

²² *Id.*, para. 12.

²³ *Id.*, para. 16.

²⁴ *Id.*, para. 16.

²⁵ FCC Form 477 collects information about broadband connections to end-user locations, wired and wireless local telephone services, and interconnected Voice over Internet Protocol (VoIP) services in the 50 states, the District of Columbia, and the Territories and possessions. See 47 U.S.C. § 153(58). Data obtained from this form is used to describe the deployment of broadband infrastructure and competition to provide local telecommunications services. Fixed providers file lists of census blocks in which they can or do offer service to at least one location, with additional information about the service. Mobile providers file maps of their coverage areas for each broadband technology (e.g., EV-DO, HSPA, LTE). See <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>.

²⁶ *2019 Report*, para. 16.

²⁷ *Id.*, para. 16.

consumer speed test data at a median speed of 10 Mbps/3 Mbps or higher at a county level.²⁸ We believe this approach accounts for certain limitations in the current FCC Form 477 mobile data,²⁹ while helping us better understand the extent to which American consumers today are receiving speeds higher than 5 Mbps/1 Mbps. Overall, retaining this methodology allows consistent metrics by which we can evaluate whether mobile advanced telecommunications capability is improving for American consumers.³⁰ We seek comment on whether to take a similar approach when evaluating mobile speeds in the next Report.

B. Schools and Classrooms

13. Section 706 also requires an evaluation of the availability of advanced telecommunications capability in elementary and secondary schools and classrooms.³¹ In the *2019 Report*, we continued to measure the availability of advanced telecommunications capability in schools and classrooms by using our short-term goal of 100 Mbps per 1,000 students and staff and our long-term goal of 1 Gbps per 1,000 students and staff.³² We propose to continue using these goals for the upcoming report and seek comment on doing so.

C. Tribal Lands

14. Both the *2018 Report* and the *2019 Report* also demonstrated that deployment of advanced telecommunications capability on many Tribal lands continues to lag deployment in other, non-Tribal areas.³³ Tribal lands often face significant obstacles to broadband deployment. Tribal lands are located disproportionately in rural areas, and both rural Tribal areas tend to be less densely populated than rural non-Tribal areas.³⁴ The remote and often isolated nature of these areas, combined with often-challenging terrain and lower incomes, increases the cost of network deployment and entry and reduces

²⁸ *Id.*, para. 16. The Commission obtains speed data through a contractual arrangement with Ookla Speedtest (Ookla), which collects Internet speed and performance data through consumer-initiated tests. Data collected by Ookla include test results for download speed, upload speed, and latency, as well as other information, such as the location of the test and operating system of the handset. Every day, over ten million unique tests are actively initiated by Ookla users, with a total of more than 20 billion tests taken with Speedtest since Ookla's founding in 2006. Ookla Speedtest, <http://www.speedtest.net/about> (last visited July 1, 2019). Ookla's mobile speed measurements are derived from customer tests run by Ookla Speedtest mobile apps that measure the performance of mobile connections. Ookla Speedtest Mobile Apps, <http://www.speedtest.net/mobile/>.

²⁹ We recently adopted a *Report and Order* establishing a new, granular data collection to more precisely target Universal Service support where it is needed, and made several changes to improve the existing Form 477 data collection, while seeking comment on collecting more accurate and reliable mobile broadband data. *See Establishing the Digital Opportunity Data Collection*, WC Docket Nos. 19-195, 11-10, Report and Order and Second Further Notice of Proposed Rulemaking, FCC 19-79, (Aug. 6, 2019) (*Data Collection Order*).

³⁰ *2019 Report*, para. 16; *see also 2018 Report*, 33 FCC Rcd at 1674, n.97 (“We believe that by reporting these two metrics, we are able to evaluate the extent to which, in the context of the mobile environment, mobile services are providing consumers with ‘high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications.’ 47 U.S.C. § 1302(d)(1).”).

³¹ 47 U.S.C. § 1302(b).

³² *2019 Report*, paras. 21, 50-51. The Commission adopted these goals in 2014. *See Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8885, para. 34 (2014).

³³ *2019 Report*, paras. 22, 44-46, Figs. 10 and 11; *2018 Report*, 33 FCC Rcd at 1681-86, paras. 50-57.

³⁴ FCC, *Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018*, at 2, submitted to the Senate Committee on Commerce, Science, and Transportation; House of Representatives Committee on Energy and Commerce (rel. May 1, 2019) (*Tribal Broadband Report*): <https://docs.fcc.gov/public/attachments/DOC-357269A1.pdf>.

the profitability of providing service.³⁵ The Commission has long recognized the need to promote and encourage the availability of broadband on Tribal lands.³⁶ Tribal lands experience lower rates of both fixed and mobile broadband deployment as compared to non-Tribal areas of the United States, particularly in rural Tribal areas compared to rural non-Tribal areas.³⁷ For example, while 92% of housing units on urban Tribal lands are covered by a fixed terrestrial provider of 25 Mbps/3 Mbps broadband service—just six points behind their non-Tribal urban counterparts—only 46.6% of housing units on rural Tribal lands have that service available, a nearly 27-point gap compared to non-Tribal rural areas.³⁸ Mobile LTE coverage on Tribal lands also lags: While 99.8% of the population living on non-Tribal areas are covered by mobile LTE service, only 96% of the population living on Tribal lands are covered with such service.³⁹

15. While deployment to Tribal lands has been increasing in recent years, additional work is required. We recently proposed and sought comment on several ways to address unserved Tribal areas identified in the *Tribal Broadband Report*.⁴⁰ We seek comment on whether deployment on Tribal lands still lags compared to deployment in non-Tribal areas. We also seek comment on additional considerations, such as difficulties involving rights-of-way, that could be preventing deployment that might otherwise occur.⁴¹

IV. DATA SOURCES AND ANALYSIS

16. *Deployment Data for Fixed Services.* We found in the *2019 Report* that, despite its limitations, our FCC Form 477 deployment data for fixed technologies are currently the most reliable and comprehensive dataset with which to assess availability of fixed services.⁴² We continue to believe that

³⁵ *Connect America Fund et al.*, WC Docket No. 10-90, et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17818-19, para. 479 (2011) (*USF/ICC Transformation Order*), *aff'd sub nom. In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014); *see also Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, Order and Order on Reconsideration, and Further Notice of Proposed Rulemaking, 31 FCC Rcd 3087 (2016) (*Rate-of-Return Reform Order*).

³⁶ *See, e.g., Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8967-8970, paras. 243-49 (2014); *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Report and Order, 33 FCC Rcd 6574 (2018); *Bridging the Digital Divide for Low-Income Consumers et al.*, WC Docket No. 17-287 et al., Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FCC Rcd 10475 (2017).

³⁷ *Tribal Broadband Report* at 1.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *See Rural Digital Opportunity Fund*, WC Dockets No. 19-126, 10-90, Notice of Proposed Rulemaking, FCC 19-77 (Aug. 2, 2019) (proposing to create a Rural Digital Opportunity Fund to target support to areas that lack access to 25 Mbps/3 Mbps broadband service, including Tribal Areas and seeking comment on using a Tribal broadband factor to increase the support available on Tribal lands and including a Tribal bidding credit to incentivize parties in the Rural Digital Opportunity Fund auction to bid on and serve Tribal census blocks); *see also Tribal Broadband Report* at 19; RAY BAUM'S Act of 2018 § 508(b), 132 Stat. at 1096.

⁴¹ Challenges to deployment on Tribal lands include rugged terrain, complex permitting processes governing access to Tribal lands, jurisdictional issues involving states and sovereign Tribal governments, and lack of the necessary infrastructure. *See, e.g., Tribal Broadband Report* at 3; *Connect America Fund et al.*, WC Docket No. 10-90, et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17818-19, para. 479 (2011) (*USF/ICC Transformation Order*), *aff'd sub nom. In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014); *see also Connect America Fund et al.*, WC Docket No. 10-90, et al., Report and Order, Order and Order on Reconsideration, and Further Notice of Proposed Rulemaking, 31 FCC Rcd 3087 (2016) (*Rate-of-Return Reform Order*).

⁴² *2019 Report*, para. 25. *See also 2018 Report*, 31 FCC Rcd at 1677, para. 43. We based our analysis of deployment of fixed services in the *2019 Report* on data collected by the State Broadband Initiative (SBI) for 2013,

(continued....)

these data are the most reliable and comprehensive currently available. We therefore propose to use the FCC Form 477 data to evaluate deployment of fixed broadband services and we seek comment on this proposal.

17. Given that the FCC Form 477 data report fixed broadband service at the census block level, we acknowledged in the *2019 Report* that our FCC Form 477 deployment data for fixed services may overstate the deployment of services throughout an area.⁴³ Consistent with the *2019 Report* as well as submissions to the Commission in other dockets,⁴⁴ we recognize the limitations of the FCC Form 477 data, and we consider the shortcomings and challenges of the dataset when those data are used to inform our funding and policy decisions.⁴⁵ For example, it has recently been estimated that the Form 477 may overstate broadband coverage by approximately 3%.⁴⁶ We seek comment on the accuracy of such an estimate, potential data sources to quantify such an estimate, and how that estimate should affect the conclusions we draw regarding the state of deployment.

18. In an effort to improve the quality of the data to which the FCC has access, we recently adopted a new data collection, distinct from the Form 477 collection, in which all providers, beginning with fixed service providers, will be required to submit broadband coverage polygons of the areas where they make fixed broadband service available to end users.⁴⁷ The new collection will better enable the Commission to discharge its Universal Service Fund responsibilities, and will operate for the time being in parallel with the current Form 477 collection.⁴⁸ In addition, we adopted a number of changes to improve the existing Form 477 data collection⁴⁹ and sought comment on additional potential reforms,⁵⁰ including whether to sunset the Form 477 broadband collection at some point after the new data collection has been established.⁵¹ Even with our adoption of the new data collection, the Commission will need to continue to rely for now on the current Form 477 collection to conduct its annual inquiry under section

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and FCC Form 477 deployment data for 2014 through 2017. The SBI data were collected semi-annually through state-led efforts and maintained by the National Telecommunications and Information Administration (NTIA) for the National Broadband Map, in collaboration with the Commission. *2019 Report*, para. 25 and n.89. *See also 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*, GN Docket No. 11-121, Eighth Broadband Progress Report, 27 FCC Rcd 10342, 10364-65, para. 28 (2012).

⁴³ *2019 Report*, paras. 22, 26, 28; *2018 Report*, 33 FCC Rcd at 1677-78, 1681, paras. 43, 45, 51 & ns.128, 132, 148.

⁴⁴ *2019 Report*, paras. 24-26; *see also* Letter from Thomas Jones, Counsel for Granite Telecommunications, LLC, et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, (filed Apr. 24, 2019) (citing USTelecom's Senate testimony that "Form 477 data is unreliable and overstates the extent to which broadband . . . is available" and that "'one-served-all served' reporting is simply not a reliable approach to accurately understand broadband availability").

⁴⁵ Though staff examine FCC Form 477 data for quality and consistency, the data may understate or overstate deployment of services to the extent that broadband providers fail to report data or misreport data. *See* Federal Communications Commission, *Explanation of Broadband Deployment Data* (Dec. 12, 2018), <https://www.fcc.gov/general/explanation-broadband-deployment-data> (describing quality and consistency checks performed on providers' submitted data and explaining any adjustments made to the Form 477 data as filed).

⁴⁶ Dr. George S. Ford, *Quantifying the Overstatement in Broadband Availability from the Form 477 Data: An Econometric Approach*, at 6 (2019), <http://www.phoenix-center.org/perspectives/Perspective19-03Final.pdf>.

⁴⁷ *Data Collection Order*, para. 12.

⁴⁸ *Id.*, paras. 10-11.

⁴⁹ *Id.*, paras. 35-75.

⁵⁰ *Id.*, paras.112-134.

⁵¹ *Id.*, para. 135.

706. This is because, among other reasons, we granted providers six months after the new mapping platform becomes available to submit the new maps.⁵² Moreover, we believe that continuing to rely on Form 477 deployment data for now will best enable us to assess the level of deployment by providing a consistent unit of measurement. As the Commission has found, the Form 477 data remains the most thorough and accurate data available for this analysis.⁵³ Commenters who object to the use of such data for the purposes of this Inquiry should also provide recommendations for alternative datasets or supplements to the FCC Form 477 data that could be used to help guide our analysis. We remind commenters, however, that this Inquiry is not a rulemaking, and therefore cannot be used to undertake changes to the Form 477 or any other Commission data collection. Any recommendations for additional changes to the FCC Form 477 should be submitted in the *Modernizing the FCC Form 477 Data Program* docket, WC Docket 11-10.⁵⁴

19. We next propose to present deployment estimates for satellite broadband as we did in the *2019 Report*, providing deployment estimates for fixed terrestrial services in the report's tables and providing deployment estimates for all fixed services, including satellite, separately in an appendix.⁵⁵ As we noted in the *2019 Report*, while satellite signal coverage may enable operators to offer services to wide swaths of the country, overall satellite capacity may limit both the speed of service and the number of consumers that can actually subscribe to satellite service at any one time.⁵⁶ As we did in the *Fourteenth Notice of Inquiry*,⁵⁷ we seek comment on this treatment of satellite service, including how we should take into account any possible limitations, such as satellite capacity, in assessing the geographic scope of reported satellite coverage.

20. *Deployment Data for Mobile Services.* In the *2019 Report*, we reported deployment estimates based upon SBI data for 2013, and FCC Form 477 deployment data for 2014 through 2017.⁵⁸ For 2014 through 2017, we presented results in the *2019 Report* from two sets of estimates to measure mobile broadband deployment. First, the report analyzed FCC Form 477 mobile LTE deployment data with a minimum advertised speed of 5 Mbps/1 Mbps using the centroid methodology as has previously

⁵² *Id.*, para. 16.

⁵³ *2019 Report*, para. 25; *2018 Report*, 31 FCC Rcd at 1677, para. 43.

⁵⁴ Comments regarding the new Digital Opportunity Data Collection should be submitted in WC Docket No. 19-195.

⁵⁵ See *2019 Report*, paras. 32-39 and Figs. 1-5. As of year-end 2017, 93.5% of the overall population had coverage of fixed terrestrial broadband at speeds of 25 Mbps/3 Mbps—the Commission's current benchmark for fixed advanced telecommunications capability—up from 91.9% in 2016, including 98.3% of Americans in urban areas and 73.6% of Americans in rural areas. *Id.* at para. 33 and Fig. 1. If satellite service is included in this estimate, fixed 25 Mbps/3 Mbps service is deployed to nearly every American as of December 2017. *Id.*, para. 34.

⁵⁶ *Id.*, para. 28, n.98. For example, satellite providers may submit broadband coverage availability based on their relatively large beam coverage areas, but their ability to serve a significant number of consumers in those areas likely will be constrained by the overall capacity of the satellite.

⁵⁷ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, Fourteenth Broadband Deployment Notice of Inquiry, 33 FCC Rcd 8386, 8392, para. 17 (2018).

⁵⁸ *2019 Report*, para. 29. Because we propose to report data from 2014–2018 and the last year-end SBI dataset was for 2013, we believe it is not necessary to rely on SBI data for the upcoming report. The final SBI dataset includes data for June 2014, but the Commission has historically relied upon year end data in conducting its analysis. In the context of mobile services, the SBI data differ from the FCC Form 477 data in that: (1) the SBI data were collected by predetermined speed tiers that do not match up with the current FCC Form 477 deployment data collection; (2) the SBI data do not specify the type of mobile technology, while the Form 477 data are collected by technology and spectrum band; and (3) the SBI data for mobile services are for a *maximum* advertised speed, whereas the current FCC Form 477 deployment data for mobile services are for a *minimum* advertised speed.

been done by the Commission.⁵⁹ Similar to the analysis of fixed services, the *2019 Report* considered a given census block to be covered if there was at least one service provider serving the centroid of that census block that reported 5 Mbps/1 Mbps as the minimum advertised speed based on their submitted Form 477 data.⁶⁰ As previously noted, we recently adopted a number of changes to improve the existing Form 477 data collection⁶¹ and sought comment on additional potential reforms,⁶² including how to incorporate mobile broadband coverage data into the new data collection and whether to sunset the Form 477 broadband data collection at some point after the Commission and USAC establish the new data collection.⁶³ However, the Commission will need to continue to rely on the Form 477 collection in the interim to conduct its annual inquiry under section 706 for the reasons stated above.⁶⁴ Commenters who object to the use of such data for the purposes of this Inquiry should also provide recommendations for alternative datasets or supplements to the FCC Form 477 data that could be used to help guide our analysis.

21. In addition, we supplemented this analysis in the *2019 Report* by analyzing Ookla consumer speed test data,⁶⁵ primarily because Ookla data provided the greatest number of observations of actual speeds that customers receive.⁶⁶ The analysis of Ookla data considered only those counties with a sufficient number of Ookla speed test observations in each time frame covered by the *2019 Report*.⁶⁷ Although we did not have reliable on-the-ground speed data for every county in the United States, the Ookla data covered approximately 93% of the population of the United States.⁶⁸ We propose to use the same methodologies used in the *2019 Report* for the next Broadband Deployment Report and seek comment on this proposal. We also seek comment on whether other sources for these data exist.

⁵⁹ *2019 Report*, para. 29.

⁶⁰ *Id.*

⁶¹ *Data Collection Order*, paras. 35-75.

⁶² *Id.*, paras. 112-134.

⁶³ *Id.*, para. 135.

⁶⁴ *See supra* para. 17.

⁶⁵ As noted above, the data collected by the Ookla Speedtest mobile app include test results for download speed, upload speed, and latency, as well as other information, such as the location of the test and operating system of the handset. The results presented in the *2019 Report* were based on tests that were executed in the second half of the year for 2014, 2015, 2016, and 2017 on the smartphone's cellular connection, and using LTE technology. Test data was excluded if it had missing GPS location data or if the reported download or upload speed was less than zero or greater than 100 Mbps. Multiple tests by a single phone in the same locality and in the same day were averaged (using the median). *2019 Report*, para. 30 and n.106.

⁶⁶ *2019 Report*, para. 30.

⁶⁷ *Id.*, para. 30. The *2019 Report* considered a county to have a sufficient sample size if there were at least 300 total observations after cleaning the data as described above. We excluded any county with less than 300 observations during the second half of 2014, the second half of 2015, the second half of 2016, or the second half of 2017. The Commission viewed the 300-observation requirement as a conservative estimate, and it was based on a general mean and median sample size analysis. *Id.*, para. 30 and n.106. The Commission's process permitted it to evaluate actual median upload and download speeds at the county level, in each year of the four-year time periods, for counties in which approximately 93 percent of the U.S. population live (not including the U.S. Territories). If a census block had LTE coverage of at least 5 Mbps/1 Mbps based on the Form 477 minimum advertised speeds, the Commission assigned the median upload and download speeds that the Commission calculated for the census block's county. This allowed the Commission to evaluate the mobile broadband speeds for each census block within the United States. *Id.*

⁶⁸ *Id.*, para. 30 and n.108.

22. *Calculation of Americans with Advanced Telecommunications Services Available.* We propose to use the same methodology as we used in the *2019 Report* to calculate where advanced telecommunications capability is deployed. Our analysis began with determining whether there is at least one provider of services in each census block with the capability to provide advanced telecommunications services.⁶⁹ The *2019 Report* used FCC staff estimates of the U.S. population to calculate the number of Americans with fixed advanced telecommunications capability available by summing the population of all of the census blocks with at least one provider of services, whether the calculation is considering fixed terrestrial services, all fixed services, mobile LTE services, a combination of fixed terrestrial and mobile LTE services, or a combination of fixed terrestrial or mobile LTE services.⁷⁰ We seek comment on this proposal.

23. *Deployment Data for Schools.* To evaluate developments in the deployment of advanced telecommunications capability to America's elementary and secondary public schools, we relied upon publicly available data from EducationSuperHighway's *2018 State of the States Report* and the Consortium for School Networking's (CoSN) *2018-2019 Annual Infrastructure Survey Report*.⁷¹ We propose to rely on the next iterations of these sources for the next Report, and seek comment on this proposal. We also seek comment on any alternative data sources available for us to evaluate deployment of advanced telecommunications capability in America's schools as required by section 706.

24. *Deployment Data for Tribal Lands.* In the *2019 Report*, we found that, as of December 31, 2017: (i) 25 Mbps/3 Mbps fixed terrestrial service was deployed to 67.9% of Americans on Tribal lands; (ii) mobile LTE with a minimum advertised speed of 5 Mbps/1 Mbps was deployed to 97% of Americans on Tribal lands; and (iii) 67.6% of Americans on Tribal lands were covered by both of these services.⁷² The deployment figures for Tribal lands examined deployment in the census blocks that have been identified as federally-recognized Tribal lands for the 2010 Census.⁷³ We seek comment on whether there are other sources of information that we could use to examine deployment on Tribal lands. Furthermore, for purposes of presentation of the data, our analysis of federally-recognized Tribal lands groups these areas into four groups.⁷⁴ We seek comment on whether we should summarize the deployment data on a more disaggregated basis, and whether there are other more informative categories that could be used to present this data.

25. *Disaster Affected Areas.* The *2018 Report's* deployment figures for the United States as a whole excluded data from the U.S. Territories, because the 2016 data did not account for damage to infrastructure caused by hurricanes in 2017, and thus may have significantly overstated deployment in Puerto Rico and the U.S. Virgin Islands.⁷⁵ In the *2019 Report*, we found reporting separately on the

⁶⁹ *Id.*, para. 25.

⁷⁰ *Id.*, para. 26. The census block population estimates are based upon the 2010 U.S. Census Data that the Commission staff has updated to account for population growth. Staff have updated the 2010 census block population estimates based upon annual U.S. Census mid-year county (or county-equivalent) level population and housing unit estimates for the fifty states, the District of Columbia, and Puerto Rico. Staff use these data in conjunction with U.S. Census Bureau Tiger data to indicate new roads, i.e., new housing development, to distribute population amongst the census blocks comprising each county (or county-equivalent). *2019 Report*, para. 26 and n.95; FCC, Staff Block Estimates, <https://www.fcc.gov/reports-research/data/staff-block-estimates>.

⁷¹ *Id.*, para. 51.

⁷² *Id.*, para. 46 and Fig. 11.

⁷³ *Id.*, para 44, n.133, and Appx. 7.

⁷⁴ These groups include: (1) Joint Use Areas; (2) legal, federally-recognized American Indian area consisting of reservation and associated off-reservation trust land; (3) legal, federally-recognized American Indian area consisting of reservation only; and (4) legal, federally-recognized American Indian area consisting of off-reservation trust land only. *Id.*, para. 32 and ns. 114-117.

⁷⁵ *2018 Report*, 33 FCC Rcd 1660, at 1677-78, para. 44.

progress of disaster-affected areas to be the most viable approach to assess our efforts and those of service providers to improve and restore broadband networks in such areas.⁷⁶ We remain uncertain as to the current deployment of broadband services in these areas given the damage to infrastructure in Puerto Rico and the U.S. Virgin Islands from Hurricanes Maria and Irma in 2017. We seek comment on whether we should continue to report deployment in the U.S. Territories separately from the remainder of the United States in order to assess the status of recovery in these disaster-affected areas, or if we should instead include the U.S. Territories in our broader national deployment figures. Are there other methods to track broadband deployment progress in disaster-affected areas that we should consider?

V. COMMISSION EFFORTS TO CLOSE THE DIGITAL DIVIDE

26. We described in the *2019 Report* the many actions the Commission has taken to encourage deployment of advanced telecommunications capability and close the digital divide.⁷⁷ These actions were central to our finding in the *2019 Report* that the Commission's policy efforts are now encouraging the deployment on a reasonable and timely basis of advanced telecommunications capability.⁷⁸ 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. We also seek comment on the effectiveness of USF funding in driving the deployment of advanced telecommunications capability. Has the Commission been effective in its efforts to increase deployment by targeting USF funding to unserved areas in order to extend the reach of networks to all Americans? What more could or should we do to expand access to spectrum to support or supplement wireless and satellite broadband services?

VI. PROCEDURAL MATTERS

27. *Ex Parte Rules.* This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.⁷⁹ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed

⁷⁶ *2019 Report*, para. 23.

⁷⁷ *See id.*, paras. 52-75.

⁷⁸ *Id.*, para. 76.

⁷⁹ 47 CFR § 1.1200(a). Although the Rules do not generally require *ex parte* presentations to be treated as "permit but disclose" in Notice of Inquiry proceedings, *see* 47 CFR § 1.1204(b)(1), we exercise our discretion in this instance, and find that the public interest is served by making *ex parte* presentations available to the public, in order to encourage a robust record. *See* 47 CFR § 1.1200(a). In past section 706 inquiries, we have treated *ex parte* presentations similarly. *See, e.g., Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 33 FCC Rcd 8386, 8397, para. 27 (2018); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 32 FCC Rcd 7029, 7046, para. 56 (2017); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 31 FCC Rcd 9140, 9174, para. 86 (2016).

consistent with Rule 1.1206(b), 47 CFR § 1.1206(b). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

28. *Comment Filing Procedures.* Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by paper. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Electronic Filers: Comments may be filed electronically by accessing ECFS at <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. Paper filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail.
 - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD, 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington, DC 20554.

29. *Availability of Documents.* Comments, reply comments, and *ex parte* submissions will be publicly available online via ECFS.⁸⁰ These documents will also be available for public inspection during regular business hours in the FCC Reference Information Center, which is located in Room CY-A257 at FCC Headquarters, 445 12th Street, SW, Washington, DC 20554. The Reference Information Center is open to the public Monday through Thursday from 8:00 a.m. to 4:30 p.m. and Friday from 8:00 a.m. to 11:30 a.m.

30. *People with Disabilities.* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

31. *Contact Person.* For further information about this proceeding, please contact Alex Johns, FCC Wireline Competition Bureau, Competition Policy Division, 445 12th Street, S.W., Washington, D.C. 20554, (202) 418-1167, Alexis.Johns@fcc.gov.

VII. ORDERING CLAUSE

32. Accordingly, IT IS ORDERED, that pursuant to section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. § 1302, this Notice of Inquiry IS ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

⁸⁰ Documents will generally be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 19-285.

Today, we initiate our annual review of the status of broadband deployment in the United States. Since I became Chairman in January 2017, the Commission's top priority has been to close the digital divide, and the evidence demonstrates that we are moving in the right direction. Our last *Broadband Deployment Report*, for example, showed that the number of Americans without access to 25/3 Mbps service fell by more than 18% in 2017. In 2018, fiber was deployed to more American homes than any year before. And broadband investment increased in 2017 and 2018, after falling in 2015 and 2016.

But of course, our work is not yet done. That's why we're continuing to reform our universal service programs to promote additional rural broadband deployment. Earlier this year, for example, we proposed, over the partial dissents of two Commissioners, to establish the Rural Digital Opportunity Fund, which could connect 4 million or more unserved rural homes and businesses to high-speed broadband. And that's why we're continuing to modernize our regulations to strengthen the business case for companies to expand and improve their broadband networks. Our goal is simple: to provide digital opportunity to every American who wants it.

As we advance toward that goal, our policies must be based on facts—not assertions that fall apart when subjected to even a bit of scrutiny. Take, for example, one of my dissenting colleague's assertion that "Internet inequality is deepening." This is as catchy as it is divorced from reality. The fact of the matter is that fewer Americans than ever before lack access to high-speed broadband networks. And the gap between urban and rural access dropped from 29.9% to 24.7%, according to our most recent *Broadband Deployment Report*.

Additionally, both of my dissenting colleagues are critical of our proposal to continue to use data taken from our Form 477 in our next *Broadband Deployment Report*. I agree that this data has shortcomings; that's why the Commission two months ago voted, over their partial dissents, to adopt the new Digital Opportunity Data Collection, which will collect more precise and granular data from broadband service providers and incorporate public feedback on the accuracy of that data.

To be sure, I wish that we could just snap our fingers and implement this new data collection immediately. But that's not the way the real world works. Given the legal requirements of the Paperwork Reduction Act and the practical steps that must be taken to commence the Digital Opportunity Data Collection, it is simply impossible to get this data collection off the ground and completed before the legal deadline for our next *Broadband Deployment Report*. Indeed, my dissenting colleagues offer no suggestions at all for how this could possibly get done (if they do have any, I'm all ears). Therefore, we are proposing to continue to use Form 477 data for the time being, especially since it allows for an apples-to-apples comparison that will allow us to more easily measure progress from last year's *Report*. To the extent that stakeholders suggest alternative data sources, this *Notice of Inquiry* expressly invites them to submit them (notably, my dissenting colleagues do not offer any).

In short, today's item is just the beginning of the process of fulfilling our statutory duty to report on the state of broadband deployment in the United States. It will help us build the record we will use for that analysis. I look forward to reviewing the record that develops and conducting our analysis based on the best data that the record supports, including any specific improvements on our proposals that commenters or my fellow Commissioners recommend.

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

Re: *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 19-285.

I fully support this Notice of Inquiry, which we undertake pursuant to the Commission's obligation under Section 706 of the 1996 Telecommunications Act. While I similarly voted to approve the previous two years' Broadband Deployment Reports, my statements expressed some disappointment over the Commission's reluctance to acknowledge the substitutability of mobile and fixed broadband among increasing numbers of consumers,¹ and our continued reliance on a technologically anachronistic evaluation framework. I expressed hope that future inquiries would recognize marketplace and technological reality and examine broadband markets in a more neutral and comprehensive manner.

Therefore, I thank Chairman Pai for agreeing to modify the circulated version of this item to address some of my concerns. While the draft still maintains an agnostic position with respect to the substitutability of fixed and mobile broadband, it appropriately opens the door to a more forward-thinking evaluative approach and has my support.

¹ Monica Anderson, *Mobile Technology and Home Broadband 2019*, Pew Research Center (June 13, 2019), <https://www.pewinternet.org/2019/06/13/mobile-technology-and-home-broadband-2019/>.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL,
DISSENTING**

Re: *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 19-285.

Broadband is more than a technology—it's a platform for opportunity. No matter who you are or where you live in this country, you need access to advanced communications to have a fair shot at 21st century success.

That is why the annual Broadband Deployment Report from the Federal Communications Commission is so important. It's also required by law. Under the Telecommunications Act, each year the FCC must evaluate whether or not broadband is being deployed to all Americans in a reasonable and timely fashion.

Earlier this year, the FCC answered this question in the affirmative. The agency concluded that broadband was being deployed nationwide in a reasonable and timely way. In other words, the agency clapped its hands and pronounced our broadband job done.

I believe the FCC got this wrong. The evidence is all around us. Too many Americans lack access to high-speed service at home. Too many communities across the country are struggling to secure the broadband they need for economic revitalization and growth. Too many rural households and tribal areas fear that they may be forever consigned to the wrong side of the digital divide. In too many urban areas, redlining has led to broadband deserts. Plus, too many students across the country fall into the homework gap because they lack the internet access needed for nightly schoolwork.

As a result, governors, mayors, and legislators across the country are working overtime to extend high-speed service to those outside its reach. Likewise, every week brings new concerns from Members of Congress who in hearing after hearing have chided this agency for its inability to deliver the promise of broadband to communities they represent.

This inquiry was an opportunity to fix what we got wrong in our last assessment. It was an opportunity to get it right—and reexamine whether or not broadband is available to all Americans. We need an honest accounting. This inquiry was the perfect place to do it. But what we adopt here comes up short.

At the outset, we know that the data that informed our last assessment is seriously flawed. After correcting for a massive data fumble, the FCC tallied up broadband and determined that there are only 21 million people nationwide without broadband. But these numbers derive from a methodology with a grave limitation. If a service provider claims that they serve a single customer in a census block, then we assume service throughout. The resulting data systematically overstates service across the country and has been the subject of endless criticism from consumers, carriers, and Congress. As a result, the agency kicked off a new granular data initiative to better understand and map the broadband gaps across the country. But there is no evidence we will use updated numbers here, just a head-in-the-sand commitment to using the same methodology we did last time and a refusal to ask hard questions about what we can do now to ensure our next count is more accurate. *Under these circumstances, how can anyone trust what we conclude?*

Just as importantly, this inquiry misses the mark when it proposes to keep in place the current broadband standard. The future belongs to the bold. History demonstrates that when we set audacious goals, we can do big things. It is time for broadband goals that reflect not just where we are but where we are going. It has been nearly five years since the FCC updated its broadband standard to 25 megabits per second. But new technology comes at us fast. In fact, three years ago this country's largest broadband provider began rolling out gigabit service to just shy of 60 million homes and businesses—a process it completed. This agency needs to keep up. It's time for the FCC to adopt a standard of 100 megabits per second. I regret we are so unambitious that we do not even consider this here.

Moreover, we need to revamp our thinking about upload speeds. At present, our standard is 3 megabits per second. But this asymmetrical approach is dated. We need to recognize that with extraordinary changes in data processing and cloud storage, upload speeds should be rethought. Download speeds are all about consumption, but upload speeds provide us with opportunities for production. From precision agriculture to video development to interactive data operations—the way we use broadband to create is changing. This is exciting, but our failure to even ask such questions here does not bode well.

Finally, this inquiry fails to explore broadband adoption and its contributing factors, including price, digital literacy, and relevance. If the FCC is serious about conducting a full inquiry into broadband availability nationwide, it should do more to seek comment on these topics.

I hope as this inquiry unfolds the FCC will be open to these ideas. I hope that we can use the record that develops to build a bolder vision for our broadband future. But I fear that the foundation laid by this inquiry is insufficient and the outcome is preordained. I dissent.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS
DISSENTING**

Re: *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 19-285.

Internet inequality is deepening in the U.S. with millions of Americans unable to access an affordable, high-quality broadband connection. Ensuring that all Americans have access to high quality, affordable broadband is the Commission's most important task. And, to track this task, the Communications Act charges the Commission to report on the progress of broadband deployment every year by conducting an inquiry "concerning the availability of advanced telecommunications capability to all Americans..."¹ The law directs the FCC to "determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."² This statutory directive is clear, but the direction we take today with regard to the Broadband Report is far from it.

Instead of conducting an inquiry to determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion, the majority has, for the past two years, conducted an inquiry that compares broadband provider's deployment in one year against their deployments in prior year to measure "progress" in broadband deployment. Today's *Notice of Inquiry* tees up the same test, and I don't agree. This method of measuring progress tells us nothing about broadband deployment in areas where carriers haven't deployed and have no plans to do so. It does little to help us to understand the deepening state of internet inequality in the U.S. and it does nothing to prepare us to address the problem.

Worse yet, this *Notice of Inquiry* proposes to continue to use the Commission's flawed form 477 data. The *Notice of Inquiry* acknowledges the flaws as follows: "Though staff examine FCC Form 477 data for quality and consistency, the data may understate or overstate deployment of services to the extent that broadband providers fail to report data or misreport data,"³ —as did the last report,⁴ and the last *Notice of Inquiry*,⁵ and the prior report.⁶ This is the same flawed data that, against my objection, we are using to target an additional \$16 billion in Universal Service support over the upcoming decade.⁷ Good decisions require good data, and we have to do better than this. The Commission can't just acknowledge and disclaim the problem. We have to fix it.

Therefore, I respectfully dissent. However, I thank the staff of the Bureaus that prepared this NOI for their work and I appreciate their efforts.

¹ 47 U.S.C. § 1302(b).

² *Id.*

³ *Notice of Inquiry*, n.45

⁴ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, 2019 Broadband Deployment Report, FCC 19-44, n.85 (2019) (*2019 Report*).

⁵ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, Fourteenth Broadband Deployment Report Notice of Inquiry, 33 FCC Rcd 8386, 8392, para. 16 (2018).

⁶ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, 1678, n.132 (2018).

⁷ *Rural Digital Opportunity Fund*, WC Docket No. 19-126, Notice of Proposed Rulemaking, 34 FCC Rcd 6842-43, (2019). (Statement of Commissioner Geoffrey Starks Approving in Part and Dissenting in Part).