

As usual, the Commission is gathering updates from its Form 477 deployment data⁴ and setting a benchmark for what type of broadband service constitutes the “advanced telecommunications capability” Congress sought to measure.⁵ However, this approach is flawed in at least three important respects.

First, by looking separately at fixed and mobile broadband, the Commission’s approach lacks technological neutrality, thus perpetuating the outdated, siloed version of the communications industry that has bedeviled the Commission’s work in recent decades. The Commission should right this wrong by evaluating broadband deployment with true technological neutrality. This means looking only at the objective metrics of consumers’ broadband service—such as throughput, latency, price and data caps—rather than at the technologies used to deliver such service.

Second, by defining (and redefining) “advanced telecommunications capability” as a single benchmark, the Commission not only politicizes the Section 706 process, but also renders the historical data less useful. Instead of selecting an arbitrary benchmark that changes every year or two, the Commission should gather deployment data at multiple different benchmarks, analyze the data holistically and keep those benchmarks consistent. This will provide a more comprehensive and accurate report on broadband deployment, both at present and over time.

Finally, by focusing primarily on the present state of broadband deployment and on future steps the Commission could take to promote it, the Commission neglects to critically

⁴ See *id.* ¶¶ 16–22.

⁵ *Id.* ¶¶ 8–11.

examine and evaluate how effective its past efforts were at promoting broadband deployment. The Commission has now sought comment on the efficacy of its past efforts,⁶ and it should follow through by including a rigorous evaluation of those efforts in the forthcoming broadband deployment report, as was suggested last year by the Government Accountability Office.

II. The Commission's Evaluation Should Be Technology Neutral

The nature of broadband service has changed dramatically in the past few decades. Copper wires have increasingly been replaced with optical fiber, allowing incumbent providers to offer gigabit-level broadband speeds. Additionally, faster wireless connections and lower-latency satellite services have enabled new entry and competition in urban markets while also providing vital connections for consumers in rural areas where wireline broadband service is not economically viable. But depending on consumers' situations and preferences, any one of these different communications technologies may best meet their needs. Indeed, the means by which someone obtains broadband access is irrelevant to whether they have adequate service. Whatever objective metrics the Commission adopts, it should proceed on a technology-neutral basis and evaluate only the service itself while being agnostic as to how it is delivered.

Coaxial cable and optical fiber are useful technologies for delivering broadband access, but focusing on them to the exclusion of other technologies would chill innovation in alternative communications technologies because companies will be more likely to stick with those that are blessed (and subsidized) by the FCC. The Commission should encourage

⁶ *Id.* ¶ 23.

the development and deployment of new communications technologies that can reach unserved areas without the need for subsidies. Acknowledging that alternative delivery methods can and do provide useful broadband access is a necessary step in that process.

The Commission should, therefore, be indifferent to whether consumers use wired, fixed-wireless, satellite or mobile technologies for broadband access. Indeed, a recent Pew Research Center study found that 20 percent of adults in the United States—and 28 percent of those aged 18–29—use only a smartphone to access the Internet and do not have a traditional broadband connection.⁷ This is an 8-percent increase since 2016,⁸ and this trend will likely continue going forward as 5G mobile networks and other high-speed, low-latency wireless services come to market.

The Commission should acknowledge this development by recognizing that, in many cases, wireless services are functionally equivalent to wireline. Rather than focusing on individual technologies, the Commission should look only at objective service metrics when determining whether all Americans have access to advanced telecommunications capability. This requires reporting the latency, price and usage restrictions—such as data caps—of all broadband technologies available to consumers, and not dictating the type or speed of Internet access consumers need for adequate service.

⁷ Aaron Smith and Kenneth Olmstead, “Declining Majority of Online Adults Say the Internet Has Been Good for Society,” *Pew Research Center*, Apr. 30, 2018. <http://www.pewinternet.org/2018/04/30/declining-majority-of-online-adults-say-the-internet-has-been-good-for-society>.

⁸ “Internet/Broadband Fact Sheet,” *Pew Research Center*, Feb. 5, 2018. <http://www.pewinternet.org/fact-sheet/internet-broadband>.

III. The Commission Should Analyze the Data Holistically

The Commission should not define “advanced telecommunications capability” as an arbitrary speed threshold in determining the overall state of broadband deployment.⁹ Consumers use broadband in diverse ways, and performance that is satisfactory for one type of use or user may be unsatisfactory for others. It would, therefore, be better for the Commission to analyze and report on a diversity of speeds and other performance metrics. The Government Accountability Office (GAO) recently supported this, finding that a greater variety of data could aid the Commission in creating a useful report, while also noting the “increasing similarity of fixed and mobile services.”¹⁰ Reporting data on various speeds would not only give a more comprehensive snapshot of the current state of broadband deployment, but would also allow for better tracking of broadband deployment trends over time. Moreover, the current method of relying on a particular speed threshold set by the Commission invites abuse for political ends, skewing the data and undermining the usefulness of the report.

Indeed, by manipulating the metrics, the Commission could define consumers as either having or not having access to broadband without any actual changes taking place. For example, recent research has shown that changing the threshold from 25/3 Mbps to 24/2 Mbps would find almost 1.5 million additional people have access to broadband.¹¹ Moving the standard in the other direction would produce similarly odd results, perhaps

⁹ Tom Struble, “Take the Politics Out of Broadband Progress Reports,” *Morning Consult*, Sept. 21, 2017. <https://morningconsult.com/opinions/take-politics-out-of-broadband>.

¹⁰ “Broadband: Additional Stakeholder Input Could Inform FCC Actions to Promote Competition,” Government Accountability Office, 17-742, p. 24. <https://goo.gl/QBsdbD>.

¹¹ Will Rinehart, “A Look at Rural Broadband Economics,” *American Action Forum*, Aug. 14, 2018. <https://www.americanactionforum.org/research/a-look-at-rural-broadband-economics>.

misleading both consumers and lawmakers about the current state of broadband deployment. Basing the Section 706 report on a single speed benchmark provides ample room for the Commission to justify policy actions it has already taken or plans to implement, but it limits the consistency and usefulness of the reports.

Here again, the diverse ways in which consumers use broadband is important to the Commission's analysis. Some consumers mostly use their broadband connection to receive emails, gather news or check their favorite social media feeds. Others engage in extensive online-multiplayer gaming, live-video streaming and VoIP calls. A single, speed-based threshold conceals the vast differences in how broadband is used and, therefore, skews the Commission's data toward a conclusion that does not comport with the facts on the ground. Whether someone has broadband access should be assessed from the user's perspective, rather than from its raw potential. A 100 Mbps connection will be able to support more data-intensive applications than a 25 Mbps one, but if the applications a consumer wishes to use require only 20 Mbps, the additional capabilities are essentially irrelevant.

To arbitrarily increase broadband speed thresholds without regard to the speeds actually necessary to meet consumer demand is not costless. It risks creating an impression that faster speeds are more important than they really are. For example, if the Commission creates the impression that a 100 Mbps connection is required for adequate broadband, this will cause providers to overinvest in network improvements, the costs of which are not warranted by the benefits. This will result in higher prices to consumers and, therefore, decrease the overall number of people with access to broadband.

The Commission already maintains a variety of speed standards for broadband. For example, Universal Service Fund programs subsidize broadband using a 10/1 Mbps

definition. This practice implies a recognition that different individuals in different areas of the country have different demands and expectations for what constitutes adequate broadband. The Commission should employ that understanding in this proceeding and provide a holistic view of broadband deployment data at a variety of speed thresholds, and keep those thresholds consistent over time, rather than fixating on a particular number that changes year after year. This will provide a more comprehensive and accurate report on broadband deployment, both at present and over time.

IV. The Commission Should Retrospectively Evaluate the Effect of Its Policies

The GAO report also found that the FCC has failed to analyze how effective its previous efforts have been at promoting broadband deployment.¹² Such a review would be an important addition to the Section 706 report, as it would allow the Commission to learn from past successes and failures. This would allow the Commission to rescind policies that were unsuccessful—rather than allowing them to accumulate over time—and to expand upon policies that were successful. The Commission should be careful to judge policies by their results, not their intentions, and to measure outcomes (in the form of enhanced deployment), not just outputs (in the form of regulations or subsidies).

There are significant difficulties in assessing the economic impact of nationwide policies, but the Commission’s newly established Office of Economics and Analytics should be able to provide the econometric expertise necessary to conduct the counterfactual analysis necessary to draw valid inferences from data. Commendably, the Commission has

¹² “Broadband: Additional Stakeholder Input Could Inform FCC Actions to Promote Competition,” *supra* note 10, p. 22. <https://goo.gl/QBsdbD>.

sought comment on the efficacy of its previous effort to promote broadband deployment.¹³ But going through the motions of seeking comment and reciting recent steps the Commission has taken to promote deployment is different than rigorously evaluating the Commission's prior efforts. Recent deployment reports were disappointing in that respect,¹⁴ but with a newfound dedication to economics and analytics, the Commission is finally ready to transform the annual Section 706 report into a true evaluation of the broadband market and the Commission's efforts to promote it.

V. Conclusion

We encourage the Commission to take these recommendations into consideration when issuing its next Section 706 report.

Respectfully submitted,

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¹³ NOI ¶ 23.

¹⁴ See, e.g., Inquiry Concerning 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 Progress Report*, GN Docket No. 15-191, ¶¶ 125-39 (Jan. 29, 2016) <https://goo.gl/ezZkHn>; Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, *2018 Broadband Deployment Report*, GN Docket No. 17-199, ¶¶ 79-93 (Feb. 2, 2018) <https://goo.gl/tVRHP8>.