

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of

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

GN Docket No. 17-199

**COMMENTS OF PUBLIC KNOWLEDGE; ACCESS HUMBOLDT; ACCESS  
SONOMA; APPALSHOP; BENTON FOUNDATION; BROADBAND ALLIANCE;  
CALIFORNIA CENTER FOR RURAL POLICY; CENTER FOR RURAL  
STRATEGIES; NATIONAL CONSUMER LAW CENTER, ON BEHALF OF ITS LOW-  
INCOME CLIENTS; NATIONAL HISPANIC MEDIA COALITION; AND X-LAB**

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## I. INTRODUCTION

In fulfilling its statutory obligation to inquire into “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion,”<sup>1</sup> the Commission has an opportunity to conduct an honest assessment of the state of American broadband, both its successes and its remaining challenges. Guided by the law, economics, and facts of consumer behavior, the Commission’s inquiry could gather information regarding broadband availability, adoption, pricing, usage plans, and competition to guide informed policymaking. Accomplishing this requires recognizing the differences between different kinds of broadband—between fixed and mobile, for instance, and between different technologies, such as fiber, cable, and LTE. Among other things, such an inquiry would focus on the changing needs of broadband users and assess the suitability of different technologies for future needs.

Unfortunately, the *Notice of Inquiry* falls short of this. While the proposal “to incorporate both fixed and mobile advanced telecommunications services into [the] Section 706 inquiry”<sup>2</sup> is well-considered, the proposal to focus “this Section 706 *Inquiry* on whether *some form of* advanced telecommunications capability, be it fixed *or* mobile, is being deployed to all Americans in a reasonable and timely fashion,”<sup>3</sup> is not. As will be discussed in this comment, an inquiry conducted in this way would disregard both the law and economics while hiding the true

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<sup>1</sup> 47 U.S.C. § 1302(b).

<sup>2</sup> *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, Thirteenth Section 706 Report Notice of Inquiry ¶ 5 (2017) (“*NOI*”).

<sup>3</sup> *NOI* ¶ 9.

state of American broadband, and how it stands compared to other nations. Americans who currently lack access to, or cannot afford broadband—whether fixed or mobile—would be harmed by an inquiry conducted in this way. Rural, lower-income, and minority communities, who often lag behind other communities in terms of their access to, and adoption of affordable, high-speed broadband, would be disparately affected.

Instead of conducting its inquiry in a manner that is likely to lead the industry-friendly conclusion that broadband is being deployed in a reasonable and timely fashion, the Commission instead should recognize important differences between different broadband products and collect, and report, the most granular data possible. No broadband policymaker should be afraid of the facts.

## **II. THE *NOI* IGNORES THE PLAIN LANGUAGE AND CONGRESSIONAL INTENT OF THE BROADBAND DATA IMPROVEMENT ACT**

The Commission begins its annual *Notice of Inquiry* with the correct observation that the Commission must look “to the language of the statute to guide our evaluation of the state of deployment of ‘advanced telecommunications capability’ in the United States today.”<sup>4</sup> One would expect the Commission to follow this observation with a detailed examination of the language and legislative history, particularly the significant changes enacted by Congress in 2008 to address widespread dissatisfaction with the Commission’s handling of its responsibilities until that time.<sup>5</sup> Astoundingly, despite the explicit recognition that the Commission must test its

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<sup>4</sup> NOI ¶ 4.

<sup>5</sup> See Broadband Data Improvement Act, 47 U.S.C. §§ 1301-1305 (2008) (“BDIA”).

proposals against the framework mandated by *Congress*, the *NOI* instead relies for its proposals on industry trade associations.<sup>6</sup>

A proper examination of the statutory framework, informed by the legislative history, makes clear that the proposals advanced in the *NOI* would constitute a step backward from what Congress intended when it passed the BDIA in 2008. As detailed below, Congress passed the BDIA to address the Commission’s repeated failure to conduct a basic survey of adoption and deployment. In particular, those sponsoring the BDIA had harsh words for the failure of the Commission to provide granular information on access, and expressed broad concern over the decline of the United States in broadband rankings relative to other developed countries.

Likewise, the Congressional findings and legislative history make clear what activities Congress intended “advanced telecommunications capability” to support. When seen in this context, the proposals in the *NOI* to equate mobile broadband with fixed broadband to the home – especially at a lower standard of speed and reliability – flatly contradict the framework established by the BDIA. Additionally, proposals to reduce the granularity by expanding the geographic area “served,” tracking only additional deployment, or otherwise attempting to lower the bar in order to make a finding of deployment “in a reasonable and timely fashion” run directly contrary to the direction of Congress and the concerns expressed in the legislative history that the Commission provide the greatest possible granularity in its report.

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<sup>6</sup> See, e.g., *NOI* at fn. 46 (citing Letter from Matthew A. Brill, Counsel to NCTA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-245, at 1 (filed March 2, 2017)).

**A. Congress Passed the BDIA to Correct the FCC’s Failure to Provide Adequate Information on Broadband Deployment and Adoption to Guide National Policy**

The FCC conducted its first report under Section 706 in 1998.<sup>7</sup> In that report, the Commission established a definition of advanced telecommunications capability (ATC) as 200 kbps in either direction.<sup>8</sup> The Commission did not adjust this definition for ten years, and even then continued to include deployments of 200 kbps in either direction as a form of ATC and part of the overall finding of reasonable and timely deployment.<sup>9</sup> As a result, although the Commission continued to regularly find deployment in a reasonable and timely manner, nearly all other reports and rankings of the broadband and digital infrastructure showed the United States falling behind other industrial nations at an increasing and alarming rate.<sup>10</sup>

Additionally, the Commission considered an area served based on reports by ISPs that they offered some form of 200 kbps service anywhere within the same zip code.<sup>11</sup> As explained by the Government Accountability Office (GAO) in 2006,<sup>12</sup> the enormous variation in the size of areas covered by a single zip code throughout the United States (and the exclusion of certain

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<sup>7</sup> 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*, CC Docket No. 98-146, Report, 14 FCC Rcd 2398 (1999).

<sup>8</sup> See *Id.* at 2406 ¶ 20.

<sup>9</sup> See S. Rep. No. 110-204, at 2-4 (2007), as reprinted in 2008 U.S.C.C.A.N. 1707, 1707-09 (“BDIA Senate Report”).

<sup>10</sup> *Id.* at 1-2.

<sup>11</sup> *Id.* at 3.

<sup>12</sup> United States Government Accountability Office, *Broadband Deployment Is Extensive Throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, GAO-06-426, 38 (May 2006) (“GAO Broadband Deployment Report”).

areas, such as Native American tribal lands, from zip codes entirely), made it impossible to ascertain actual availability to consumers. As the GAO warned:

these data [on geographic deployment] are not structured in a way that accurately illustrates the extent of deployment to residential users. Without accurate, reliable data to aid in analysis of the existing deployment gaps, it will be difficult to develop policy responses toward gaps in broadband availability. This could hinder our country's attainment of universally available broadband. And as the industry moves quickly to even higher bandwidth broadband technologies, we risk leaving some of the most rural places in America behind.<sup>13</sup>

In response to these concerns, Senator Daniel Inouye introduced S. 1492 in 2007.<sup>14</sup> Inouye's sponsoring statement outlined the deficiencies of the Commission's approach, the reasons these deficiencies caused grave concern, and how Congress intended the FCC to correct these deficiencies. Notably, Inouye stressed that:

1. broadband access had already proved critical to advances in education and economic development;
2. increasingly, other developed nations were surpassing the United States, placing the United States at a disadvantage relative to other nations, to the potential detriment of our economy and general competitiveness; and,
3. without more granular data, designed explicitly to determine where the United States lagged behind other developed nations, neither Congress nor the FCC "to craft policies that will increase the availability of affordable broadband service in all parts of the Nation."<sup>15</sup>

Inouye and other sponsors of the bill would return repeatedly to these themes. It must be the goal of the United States to bring broadband to all Americans. Specifically, it is the policy of the United States to promote broadband capable of providing Americans with access to educational and economic opportunities at least comparable – if not superior – to the residents of other

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<sup>13</sup> *Id.* (cited in BDIA Senate Report at 2).

<sup>14</sup> *See* S. 1492, 114th Cong. (2007).

<sup>15</sup> *See* 153 Cong. Rec. S6849-01, S6860 (2007).

developed nations. To do so, the FCC must produce a highly granular and accurate map of broadband availability (not merely deployment) capable not merely of supporting existing functions, but sufficient to secure America's digital future.

At the hearing on the BDIA, Senator Inouye made it clear in his opening statement that the Section 706 report was not intended to focus on existing deployments or on carriers but to measure the overall availability of broadband to all Americans as compared to other nations:

Broadband matters because broadband communications have become the great economic engine of our time. Broadband deployment drives opportunities for business, education, and healthcare. It provides widespread access to information that can change the way we communicate with one another and improve the quality of our lives.

This is why our discussion today is not about pipes and providers. It is about people; our citizens stand to gain the most from universal broadband adoption. . . . Still, our broadband state is not what it should be. By some measures, Asian and European countries have high-speed connections that are twenty times faster than ours and for just half the cost.

This is unacceptable. We must do better.<sup>16</sup>

The Senate Report echoes and expounds upon this same framework. It notes significant criticism that the FCC's methodology at the time overstated the availability of broadband, and failed to provide an understanding of the technical capabilities available to all Americans. Of particular relevance here, the Senate Report again recited the decline of broadband capabilities as compared to other developed countries. The Report explicitly noted that the FCC should continue to revise the standard for broadband upward, based on projected future needs from emerging patterns of business use and behavior and with reference to speeds and prices available

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<sup>16</sup> *Consumer Benefits of Broadband Service: Hearing Before the S. Comm. On Commerce, Science and Transportation*, 110th Cong. (2008) (statement of Daniel K. Inouye, Chairman, Commerce, Science and Transportation Committee).



in other countries.<sup>17</sup> On introduction of S. 1492 on the floor of the House, the same themes were again stressed: frustration with the lack of data granularity, the need for forward looking metrics to ensure that all Americans have access to ever better and more affordable broadband, and concern that other developed countries were deploying superior infrastructure and more affordable services.<sup>18</sup>

**B. The Congressional Findings and Other Provisions of the BDIA Reflect This History and Provide the Framework for the Commission’s Report**

The language of the BDIA reflects these overarching concerns, and is thus intended to be read *in pari materia* with the modified Section 706 (now codified at 47 U.S.C. § 1302). Notably, in addition to findings on the essential nature of broadband and the need for “continued progress” in deployment and adoption of broadband as “vital” to ensuring “our Nation remains competitive,” as well as fostering job growth and economic development,<sup>19</sup> the statute explicitly instructs the Commission to supplement its report with international comparisons, consumer demographic information for unserved areas, and “periodic surveys” of consumer uses of broadband and the technologies used to deliver broadband.<sup>20</sup>

In short, as the Commission has recognized since 2008, Congress has directed the FCC to conduct its annual broadband deployment report with particular ends in mind and with recourse to a specific framework. This framework looks not merely to whether consumers have access to some form of broadband that supports existing uses. This circular reasoning – we measure the

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<sup>17</sup> See BDIA Senate Report at 1-5.

<sup>18</sup> See 154 Cong. Rec. H10618-02 (2008) (the House passed S. 1492 as passed by the Senate. As a consequence, there is no House Report or Conference Report).

<sup>19</sup> See BDIA Section 2 (codified at 47 U.S.C. §1301).

<sup>20</sup> See BDIA Section 3 (codified at 47 U.S.C. §1302).

adequacy of deployment based on existing uses, which are the product of existing deployment, therefore deployment is always timely, since consumers are always using it – was *precisely* what Congress found utterly inadequate and intended to correct with passage of the BDIA. Instead, as explained clearly in both the legislative history and the plain language of the statute, Congress intended that all Americans should have broadband capacity comparable not merely to each other, but comparable and competitive with that offered anywhere else in the world.

Tellingly, despite the Commission’s initial statement acknowledging that the statute governs the framework of the Report, the Commission nowhere conducts any analysis of the legislative history or the plain language of the BDIA – or compares the proposed changes in the Report to these statutory directives. Instead, the Commission appears to regard this as an academic exercise in which it is free to substitute its own considerations of what the goals of the public policy *should be*. In doing so, the Commission proposes, in the name of “rigorous economics,” to walk away from granularity, reject the metrics and methodology required by Congress, and adopt measures designed to “solve” the problem of rural deployment by lowering the standard for broadband and reducing the granularity of geographic data. Specifically, the proposals in the *NOI* to consider mobile access at a standard below that of wireline broadband, and proposals to discontinue use of census block information, violate the framework Congress imposed on the Commission and run contrary to the entire purpose of producing the Broadband Report.

**C. Proposals To Consider Mobile Broadband An Adequate Substitute When It Does Not Meet The Same Standard As Fixed Broadband Violates The BDIA Framework**

The *NOI* seeks comment on how to evaluate the evolution of mobile services and, specifically, “whether *some form* of advanced telecommunications capability, be it fixed *or*

mobile, is being deployed in a timely fashion. Would such an inquiry best follow the statutory instruction to evaluate the deployment of advanced telecommunications capability ‘without regard to any transmission media or technology?’”<sup>21</sup> In light of the framework imposed by the BDIA, the answer to this question is clearly “no.”

As discussed at considerable length in Part A, *supra*, Congress intended the report to provide granular information on the nature of broadband deployment to all Americans, and ensure that all Americans have access to comparable broadband services.<sup>22</sup> The *NOI* recognizes that wireless networks, while valuable and offering a multitude of services, cannot match the speed and reliability of wireline networks.<sup>23</sup> The Commission’s proposal would obscure precisely what Congress has commanded the Commission to make plain – what broadband capacity is available where, and to whom. Treating those with mobile connections that the Commission itself acknowledges are incapable of functioning at the same level of performance as fixed broadband connections as having equivalent access so that the Commission might designate the population “served” makes the report less granular and less useful to the point of being actively deceptive.

The current difficulties experienced by thousands of rural Verizon customers illustrates how the Commission’s proposal actively undermines the entire purpose of the Broadband Report – to provide federal and state lawmakers accurate information to guide policy. In some rural areas, Verizon relies heavily on roaming. Because this drives up the expense of unlimited plans,

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<sup>21</sup> *NOI* at ¶9 (citing 47 U.S.C. §1302(d)(1)) (emphasis in the original).

<sup>22</sup> *See also* 47 U.S.C. §254(b)(3).

<sup>23</sup> *See NOI* at ¶18.

Verizon has notified thousands of rural customers in at least 13 states that it will terminate their mobile broadband service entirely.<sup>24</sup> Many of these customers lack comparable alternatives, potentially leaving them with no broadband provider.<sup>25</sup> Even those who remain unaffected will curb their broadband usage to avoid losing their own service. Yet the Commission would report to Congress that these rural residents have access to broadband, making no distinction between these limited and uncertain connections and unlimited gigabit fiber offerings.

To be clear, the question here is not whether Verizon is or is not justified in terminating the customer accounts. Rather, Congress has charged the FCC to report on broadband deployment so that Congress (and the states) can have accurate data about the nature of deployed infrastructure and available services so that Congress can decide whether or not to address the disparity between rural customers reliant on Verizon and others with access to more reliable, higher capacity fixed offerings. Rather than providing the detail and granularity Congress demanded by passing the BDIA, the Commission's proposal would so obscure relevant information as to constitute an affirmative hindrance to the formulation of good policy.

By contrast, the Commission's proposal to provide demographic information breaking down who has access to both fixed and mobile broadband, to fixed only, and to mobile only, serves the purpose of the statute and generally complies with the framework established by the

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<sup>24</sup> See Cherlynn Low, "Verizon Cut Off Marks an Uncertain Future for Rural Customers," Engadget (Sept. 19, 2017), <https://www.engadget.com/2017/09/18/verizon-disconnection-rural-internet/>.

<sup>25</sup> See Kaleigh Rogers, "Verizon Abandoning 8,500 Rural Customers Is Proof That Wireless Is Not Broadband," Motherboard (Sept. 19, 2017), [https://motherboard.vice.com/en\\_us/article/8x8gyx/verizon-abandoning-8500-rural-customers-is-proof-that-wireless-is-not-broadband](https://motherboard.vice.com/en_us/article/8x8gyx/verizon-abandoning-8500-rural-customers-is-proof-that-wireless-is-not-broadband).

BDIA. This is the kind of granular information that assists decision makers in evaluating whether existing deployments continue to encourage job growth and maintain our national competitiveness. Provided the Commission makes it clear that mobile broadband access of lesser speed and quality is not “advanced telecommunications capability,” the inclusion of these additional details is entirely appropriate.

**D. The *NOI* Makes No Effort to Evaluate its Benchmark Proposals Under the BDIA Framework**

The *NOI* makes no effort to evaluate any of the proposed changes in geographic benchmark or speed under the BDIA framework. The *NOI* cites criticism by industry trade associations that past analysis lacks “clarity” and “economic rigor,”<sup>26</sup> but these critiques have universally failed to address the fundamental purposes of the Broadband Report to (a) provide a comprehensive picture of broadband deployment throughout the United States – including insuring that previously deployed infrastructure is continually upgraded so that Americans do not fall behind; and, (b) maintaining the competitiveness of the United States with respect to other countries. The latter in particular requires not merely comparison with other countries to determine their existing and future plans for broadband infrastructure. It requires the Commission use data as to existing uses to project future growth and future needs. Accordingly, as the legislative history stresses and as Congress made explicit in the Congressional findings of

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<sup>26</sup> *NOI* at ¶26.

the BDIA, the standard for what constitutes broadband must continue to progress and steadily rise.<sup>27</sup>

For this reason, several of the proposed changes to the Commission’s analysis, however sound they may be in other economic contexts, run contrary to the purpose of the Broadband Report and actually impede the collection and analysis of broadband data as Congress intended. Specifically, proposals which look exclusively to the current uses of technology to define the appropriate level of “broadband,” proposals which obscure the granularity of information on a geographic basis by shifting away from census blocks (or even more precise information, such as address level), proposals which ignore industrial policy in other developed countries, or proposals which look only to new deployments and fail to measure whether previously deployed infrastructure or available services remain adequate, run contrary to the plain language of the statute and the intent of Congress and should be rejected. By contrast, proposals which increase detail and granularity (such as collection of address level information and price information), proposals which set the appropriate level of broadband service with reference to our remaining competitive with other developed countries, and projections with regard to future use based on existing consumer habits and industry trends, are consistent with the BDIA.

**E. Proposals to Set Broadband Metrics Based Exclusively on Current Consumer Use Patterns Violate the Plain Language of the Statute**

The *NOI* asks how to evaluate the “interplay between deployment of higher-speed services and customer uptake rates.”<sup>28</sup> In particular, the *NOI* asks: “For example, if consumers

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<sup>27</sup> See 47 U.S.C. §1301(b); see also 47 U.S.C. §254(c)(1) (defining universal service as “an evolving level of telecommunications services”) (emphasis added).

who have choices of service offering speeds of 15 or 25 Mbps largely choose 15 Mbps service, should that influence our determination of what constitutes advanced telecommunications capability?”<sup>29</sup> Alternatively, the Commission asks whether it is “more consistent with the statute to identify advanced telecommunications capability independent of consumer demand,”<sup>30</sup> or whether it is “more consistent with the statutory definition of ‘advanced’ telecommunications capability to adopt a benchmark based on vanguard services being deployed.”<sup>31</sup> A reading of the statute, in light of the legislative history described above, shows that the answer lies in balancing observations with regard to existing consumer behavior and the emergence of “vanguard services,” further informed by the explicit industrial policies and deployments in other developed countries.

Section 3 of the BDIA illustrates this balance by requiring the FCC to explicitly incorporate analysis of “75 communities in at least 25 countries” as part of its analysis.<sup>32</sup> Additionally, it instructs the FCC to conduct consumer surveys “for the purpose of evaluating, on a statistically significant basis, the national characteristics of the use of broadband service capability.” These do not determine the appropriate metric, but they inform the Commission’s analysis – which must in all cases be guided by the statutory purposes listed in Section 1301 of continuing to spur economic development and maintain U.S. competitiveness.

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<sup>28</sup> *NOI* at ¶24.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* at 28.

<sup>32</sup> Codified at 47 U.S.C. §1303(b)(1).

Because of these forward-looking requirements, pure reliance on existing use patterns to set the measure of appropriate download speeds undermines the value of the Report in setting national policy – particularly with regard to international competitiveness and drivers of new services. Consumer use patterns respond to many variables – such as price and quality of service. If higher speeds are available, and consumers are not adopting them, it is incumbent on the Commission to use the broadband report to understand *why* consumers do not adopt higher speeds. That is why Section 1303 requires the Commission to conduct consumer surveys that include things such as pricing information.

What critics of the use of forward looking metrics have consistently – in some cases one might even suggest willfully – failed to understand is that Congress intended the Broadband Report as an instrument of industrial policy. Its purpose is to provide accurate information so that policy makers can determine what appropriate action to take to *stimulate* the deployment and adoption of ever increasing levels of broadband to drive the creation of new jobs and to keep pace with international rivals in the global digital economy.

True, Congress (and the Commission) have recognized that deployment and adoption must not fly too far ahead of development and demand. No one proposes that we should set the appropriate metric without reference to existing uses. But to allow the current set of consumer use patterns to *define* the appropriate metric, as critics argue, is to rationalize the very stasis that Congress found intolerable when it passed the BDIA. For the ten years between the FCC’s first Broadband Report and implementation of the BDIA by the Commission in 2009, the FCC followed the path of “economic rigor” urged by industry trade associations and think-tank economists. Congress found this result utterly unsuited to the needs of policy makers and



profoundly detrimental to the formulation of necessary policy. The Commission should not now return to a path that Congress has so soundly rejected.

**F. Proposals to Move From Census Block Level Analysis To Less Granular Measures, Or Which Do Not Include Analysis of Areas Already Served, Are Contrary To The Statute And Leave Vulnerable Populations Behind**

The legislative history of the BDIA stresses repeatedly the need for granularity, particularly with regard to geographic analysis. As discussed above, the legislative history is replete with criticism of the FCC’s use of overly large geographic areas and considering an area “served” if broadband is reportedly available in any portion of the service area. Time and again, the drafters of the BDIA stressed the goal of ensuring deployment to all Americans depends on having precise, granular data.

Indeed, as events in recent years have shown, whether a single home has access to fixed broadband at adequate speed has huge impact on the value of the property.<sup>33</sup> This applies on a house-by-house basis, with buyers increasingly unwilling to even consider properties that do not have access to high-speed broadband.<sup>34</sup> As Congress intended, the surveys and studies validating these conclusions increasingly rely on the accuracy and granularity of the Broadband Map –

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<sup>33</sup> See Molnar, Gabor and Savage, Scott and Sicker, Douglas, *The Impact of High-Speed Broadband Availability on Real Estate Values: Evidence from United States Property Markets*, TPRC 41: The 41st Research Conference on Communication, Information and Internet Policy (Aug. 15, 2013), SSRN: <https://ssrn.com/abstract=2241926> or <http://dx.doi.org/10.2139/ssrn.2241926>; see also Ken Picard, “How Does Broadband Access Affect Real Property Values,” Vermont Seven Days, (June 13, 2016) (discussing impact of broadband availability on Vermont real estate market), <https://www.sevendaysvt.com/vermont/how-does-broadband-access-affect-real-estate-property-values/Content?oid=3418087>.

<sup>34</sup> See Ryan Knutson, “How Fast Internet Affects Home Prices,” Wall St. J. (June 30, 2015), <https://www.wsj.com/articles/SB11064341213388534269604581077972897822358>.

allowing state and federal policy makers to evaluate the need for action to ensure genuinely universal deployment.

In particular, USTA’s proposal that the Commission focus on “the progress of actual deployment” and disregard “what percentage of the population has access to broadband” runs precisely to the contrary of Congress’ emphasis that the Broadband Report and Map be used as tools to ensure that no American is left behind as technology advances. Previously deployed infrastructure can degrade, or become inadequate to increasing demand, and one purpose of the broadband report post-BDIA is to monitor to ensure that no Americans are left behind as demand and services increase.

Recent events in Cleveland and Detroit provide vivid evidence of precisely this point. In 2016, using the 2016 broadband map and 2016 broadband report, the National Digital Inclusion Alliance (NDIA) discovered that AT&T had failed to upgrade its DSL infrastructure in certain low-income neighborhoods with predominantly African American populations. This stood in marked contrast to AT&T’s upgrades of DSL and deployment of gigabit services in more affluent neighborhoods.<sup>35</sup> Under USTA’s “one and done” proposal to measure only new deployment, it would have been impossible for NDIA to establish the clear pattern that certain vulnerable populations were, as Congress feared would be the case, being systemically left behind as broadband service improved overall.

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<sup>35</sup> See John Eggerton, *Broadband Redlining Complaint Filed Against AT&T at FCC*, Multichannel News (Aug. 24, 2017), <http://www.multichannel.com/news/fcc/broadband-redlining-complaint-filed-against-att-fcc/414800>.

### **III. THE COMMISSION’S PROPOSED BROADBAND BENCHMARKS JEOPARDIZE AMERICA’S COMPETITIVE POSITION IN THE INTERNATIONAL BROADBAND MARKET**

While other developed nations race to take a leadership position in the global broadband marketplace, the FCC is poised to stop U.S. progress in its tracks by lowering the standards to measure broadband connectivity. The Commission must stay true to its statutory obligation to ensure that America is the global leader in broadband deployment. This means setting aspirational speed benchmarks for both fixed and mobile services.

Congress has directed the FCC to compare domestic broadband service capability with international markets as part of its annual report on broadband deployment.<sup>36</sup> This legal obligation was born out of concern on Capitol Hill that the United States was falling behind as a global player in the broadband market.<sup>37</sup> Spurred on by these apprehensions, Congress passed the BDIA in 2008 to ensure that America was a worldwide leader in broadband connectivity.<sup>38</sup> Four years later, President Obama reaffirmed this policy objective, noting that, “broadband access is essential to the Nation’s global competitiveness in the 21st century, driving job creation, promoting innovation, and expanding markets for American businesses.”<sup>39</sup> American leadership

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<sup>36</sup> See 47 U.S.C. § 1303(b)(1).

<sup>37</sup> See BDIA Senate Report at 1-2 (finding that the United States had fallen from fourth to fifteenth in per capita broadband use and was ranked twenty-first in connectivity relative to per capita income).

<sup>38</sup> See Broadband Data Improvement Act, 47 U.S.C. §§ 1301-1305 (2008).

<sup>39</sup> Exec. Order No. 13616, 77 Fed. Reg. 36903, (June 20, 2012).

in broadband deployment is more important now than ever given the indispensable role of high-speed broadband to modern business and commerce.<sup>40</sup>

Despite these exigencies, the Commission appears to have lost sight of the broadband policy that animates its statutory obligation under the BDIA. The 706 Report's broadband benchmarks must ensure that America continues to progress in the deployment and adoption of broadband service.<sup>41</sup> Troublingly, however, the current 25 Mbps download, 3 Mbps upload ("25 Mbps/3 Mbps") speed benchmark for fixed broadband service and the *NOI*'s proposed 10 Mbps download, 1 Mbps upload ("10 Mbps/1 Mbps") mobile speed benchmark<sup>42</sup> fall short of international broadband targets.

Last year, the Broadband Commission's 2016 State of Broadband Report found that broadband is best understood to be nationwide high-speed internet connectivity with a minimum speed of 25 Mbps.<sup>43</sup> Also in 2016, the European Union Commission ("EC") instituted an action plan to transform the E.U. into a "Gigabit Society" by 2025.<sup>44</sup> This initiative built upon the 2010 Digital Agenda for Europe's broadband objective to give every European access to 30 Mbps

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<sup>40</sup> See Broadband Commission for Sustainable Development, *The State of Broadband 2016: Broadband Catalyzing Sustainable Development* 8 (2016) ("A large body of economic evidence has amassed for the role of affordable and effective broadband connectivity as a vital enabler of economic growth."), <http://www.broadbandcommission.org/Documents/reports/bb-annualreport2016.pdf> ("2016 Broadband Commission Report").

<sup>41</sup> See 47 U.S.C. § 1301(2).

<sup>42</sup> See *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, *Thirteenth Section 706 Report Notice of Inquiry* ¶ 19 (2017) ("Thirteenth 706 Report NOI").

<sup>43</sup> See 2016 Broadband Commission Report at 45.

<sup>44</sup> See European Commission, *Broadband Europe*, <https://ec.europa.eu/digital-single-market/en/policies/broadband-europe>.

connectivity by 2020.<sup>45</sup> Austria is rapidly deploying broadband to meet its goal of connecting 99% of homes with 100 Mbps service.<sup>46</sup> By 2016, half of Austria's population had access to 100 Mbps broadband.<sup>47</sup>

Instead of setting the broadband service bar high to compete with these aspirational global targets, the FCC actually plans to *lower* the bar by adopting a mobile broadband benchmark below the current 25 Mbps/3 Mbps speed.<sup>48</sup> The Commission makes these plans at a time in which the U.S. occupies a woefully low position in the international market. In the first two quarters of 2017, America ranked 65th in the world for mobile upload speeds, directly behind large and sparsely populated Mongolia.<sup>49</sup> The U.S. does not fare much better with fixed broadband, ranking 15th in the world for download speed and 24th in the world for upload speed.<sup>50</sup> Implementing the Commission's proposed framework will not merely hinder, but will harm, America's already tenuous competitive position in the global broadband marketplace.

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<sup>45</sup> See *Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions: Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society*, at 3 (Sept. 14, 2016), <https://ec.europa.eu/digital-single-market/en/news/communication-connectivity-competitive-digital-single-market-towards-european-gigabit-society>.

<sup>46</sup> See 2016 Broadband Commission Report at 28.

<sup>47</sup> *Id.*

<sup>48</sup> See Thirteenth 706 Report NOI ¶ 18.

<sup>49</sup> See *2017 United States Mobile and Fixed Speedtest Report* (Sept. 7, 2017), <http://www.speedtest.net/reports/united-states/#mobile>.

<sup>50</sup> *Id.*

#### IV. MOBILE AND FIXED BROADBAND ARE DISTINCT PRODUCT MARKETS

Because consumers who can afford both mobile and fixed connections typically purchase both, they should be seen as complementary, not substitute products, that the Commission measures separately.

The NOI proposes that the FCC’s analysis of broadband markets be “well-informed and backed by sound data analysis,” and that “economic rigor” should inform broadband policies.<sup>51</sup> In applying these guidelines, the Commission should not follow the proposal to “focus[] this Section 706 Inquiry on whether some form of advanced telecommunications capability, be it fixed or mobile, is being deployed to all Americans in a reasonable and timely fashion.”<sup>52</sup> The economics-driven market analysis demonstrates unambiguously that fixed and mobile broadband are distinct products that do not substitute for each other. While they are both “advanced telecommunications capacity” and within the scope of this inquiry, grouping them together for the purpose of analyzing deployment would be like analyzing a market composed of chocolate and peanut butter, because they are both foods. The surface similarities between different forms of advanced telecommunications capacity cannot be the basis of an inquiry marked by economic rigor. The fact is that, like chocolate and peanut butter, fixed and mobile broadband are products that many people enjoy together.

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<sup>51</sup> See *NOI* at ¶¶ 3, 26.

<sup>52</sup> *Id.* at ¶ 9.

Analyzing likely consumer behavior in response to hypothetical price increases is how the Department of Justice determines a product market, and the presence of market power.<sup>53</sup> As the Supreme Court put it, “In considering what is the relevant market for determining the control of price and competition, no more definite rule can be declared than that commodities reasonably interchangeable by consumers for the same purposes make up that ‘part of the trade or commerce,’ monopolization of which may be illegal.”<sup>54</sup> If a company can reduce its sales by raising prices, yet increase its profit, it is likely to possess some degree of market power. If a customer responds to a price increase in one product by switching to another, that is evidence<sup>55</sup> that the two products are part of the same product market, and that the hypothetical price-raising firm may not have market power.

In the case of mobile and fixed broadband, however, it is not even necessary to do a detailed product market analysis or pricing simulation because the evidence shows that people can afford to typically purchase both products. It is not possible for a customer to “switch” to a product she already has, and if two products were truly “interchangeable,” no one would buy both.

The *NOI* cites Pew for the proposition that “13 percent of Americans across all demographic groups are relying solely on smartphones for home internet access.” The most recent version of Pew’s data show that, overall, 88% of Americans use the internet. Of these, 73% of adult Americans are home broadband users, and 77% own smartphones, while only 12%

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<sup>53</sup> U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, § 1.1 (2010), <https://www.justice.gov/atr/11-product-market-definition>.

<sup>54</sup> United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377, 395 (1956).

<sup>55</sup> *NOI* ¶ 9.

of Americans have smartphones, but no home broadband.<sup>56</sup> While examples of people going smartphone-only can be found across all demographic groups Pew's data show that 1) most Americans of all demographic groups use both smartphones and home internet access, and that 2) those who are smartphone-only are disproportionately nonwhite, younger, and lower-income.<sup>57</sup> In fact, in contrast to 12% of adult Americans overall, about 20% of Americans in households with incomes under \$30,000 are smartphone-only (while about 30% of adults in this groups are smartphone-only). Finally, in contrast to the 73% of adult Americans who are home broadband users, only 53% of American adults in households with under \$30,000 income have home broadband.

In addition to showing that affordability remains a barrier (as well as, perhaps, availability in lower-income areas), these data show that those who can afford to buy both fixed and mobile forms of advanced telecommunications capacity generally do—with those who are forced to choose between the two for economic reasons preferring mobility.

Surveys of consumer attitudes generally show the same result. Users typically see fixed and mobile as complementary ways to get online, and have clear views about which service is better suited to which particular task. Additionally, 63% of respondents to one survey reported themselves as “not likely at all” to cancel home broadband and go mobile-only.<sup>58</sup>

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<sup>56</sup> Pew Research Internet and Broadband Fact Sheet, <http://www.pewinternet.org/fact-sheet/internet-broadband/>; Pew Research Mobile Broadband Fact Sheet, <http://www.pewinternet.org/fact-sheet/mobile>.

<sup>57</sup> Pew Research Internet and Broadband Fact Sheet.

<sup>58</sup> John Horrigan, Smartphones and Broadband 8, [https://www.publicknowledge.org/assets/uploads/blog/Smartphones\\_and\\_Broadband.pdf](https://www.publicknowledge.org/assets/uploads/blog/Smartphones_and_Broadband.pdf).



International analyses typically view these as separate products as well—for example, the *Study on National Broadband Plans in the EU-28*<sup>59</sup> states that [f]ew mobile technologies can be considered a substitute for fixed technologies,<sup>59</sup> and the OECD tracks these separately, as well.<sup>60</sup>

Overall, this demonstrates that fixed and mobile broadband are not substitutes for each other. The “different technical characteristics and limitations”<sup>61</sup> between fixed and mobile broadband the Commission notes are not just details; they are sufficient to segment advanced telecommunications capacity into at least two separate product markets. They serve different roles in people’s lives, have different utility to different groups and, most likely, different deployment, availability, and affordability characteristics. By taking an empirical, economics-driven approach to studying advanced telecommunications capacity, the Commission can gather and analyze useful data to inform its policymaking. By contrast, lumping these different technologies together on the basis of surface similarities is likely to paint too rosy a picture of the state of broadband availability and deployment and could prevent the Commission or Congress from enacting the policies necessary to ensure that the United States keeps up with its international peers in terms of broadband.

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<sup>59</sup> European Commission, *Study on National Broadband Plans in the EU-28* (2014), <https://ec.europa.eu/digital-single-market/en/news/study-national-broadband-plans-eu-28-connectivity-targets-and-measures>

<sup>60</sup> OECD, *Broadband Statistics Update*, <http://www.oecd.org/internet/broadband/broadband-statistics-update.htm>.

<sup>61</sup> See *NOI* at ¶10.

**V. CONCLUSION**

For the reasons described above, the Commission should conduct its inquiry in a way consistent with the law and cognizant of the differences between different kinds of broadband.

Respectfully submitted,

PUBLIC KNOWLEDGE  
ACCESS HUMBOLDT  
ACCESS SONOMA  
APPALSHOP  
BENTON FOUNDATION  
BROADBAND ALLIANCE  
CALIFORNIA CENTER FOR RURAL POLICY  
CENTER FOR RURAL STRATEGIES  
NATIONAL CONSUMER LAW CENTER,  
ON BEHALF OF ITS LOW-INCOME CLIENTS  
NATIONAL HISPANIC MEDIA COALITION  
X-LAB

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