

**Before the  
Federal Communications Commission  
Washington, DC 20230**

In the Matter of )  
 )  
Inquiry Concerning Deployment of ) GN Docket No. 20-269  
Advanced Telecommunications Capability )  
to All Americans in a Reasonable and )  
Timely Fashion )

**REPLY COMMENTS OF  
NTCA–THE RURAL BROADBAND ASSOCIATION**

NTCA–The Rural Broadband Association (“NTCA”)<sup>1</sup> hereby submits these reply comments regarding the Notice of Inquiry (“NOI”) issued by the Federal Communications Commission (“Commission”) in the above-captioned proceeding.<sup>2</sup> Like NTCA, the vast majority of commenters support the Commission’s proposal to evaluate fixed and mobile services separately. Many commenters also encouraged the Commission to increase the minimum speed threshold for fixed broadband services above 25/3 Mbps. NTCA agrees that increasing the speed threshold is essential to establishing sound policy regarding the deployment of advanced communications services to all Americans. Although some commenters claimed 5G and satellite services are equivalent to existing broadband and mobile services and should

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<sup>1</sup> NTCA represents approximately 850 independent, community-based telecommunications companies and cooperatives and more than 400 other firms that support or are themselves engaged in the provision of communications services in the most rural portions of America. All NTCA service provider members are full service rural local exchange carriers (“RLECs”) and broadband providers, and many provide fixed and mobile wireless, video and other competitive services in rural America as well.

<sup>2</sup> *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, Sixteenth Broadband Deployment Report Notice of Inquiry*, GN Docket No. 20-269 (Aug. 19, 2020).

therefore be included in the Commission’s report to Congress pursuant to Section 706 of the Telecommunications Act (“Report”), including such services prior to the development and implementation of standardized technical parameters for identifying the capabilities of such services would be a disservice to the Commission’s ongoing efforts to more precisely identify where service is available – and ultimately result in critical policy decisions that rely upon speculative, self-reported data and marketing predictions about the aspirational reach of certain services.

**I. IDENTIFYING MOBILE AND FIXED SERVICES AS INTERCHANGEABLE WOULD BE MISGUIDED.**

Nearly all commenters, including NTCA, supported the Commission’s proposal to evaluate the deployment of fixed and mobile services as complements to, rather than as substitutes for, one another. Common Cause, for example, pointed out that “[t]echnological characteristics [such as data caps], combined with consumer expectations, make fixed and mobile services distinct, complementary products.<sup>3</sup> Similarly, INCOMPAS commented that “with its inherent limitations, mobile is not yet a functional substitute for fixed service. American consumers and businesses rely on both fixed and mobile broadband networks, with each serving specific functions,” while ADTRAN and NRECA noted that mobile services’ monthly usage limits are a significant dividing point between fixed and mobile services.<sup>4</sup>

Despite many commenters’ support for the Commission’s proposal to continue evaluating fixed and mobile services separately, the Free State Foundation (“Free State”) attempted to claim

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<sup>3</sup> *Id.* at ¶¶ 8-9.

<sup>4</sup> Comments of INCOMPAS, GN Docket No. 20-269 (Sep. 18, 2020), p. 7 (“INCOMPAS Comments”); Comments of ADTRAN, Inc., GN Docket No. 20-269 (Sep. 18, 2020), p. 7 (“ADTRAN Comments”); Comments of NRECA, GN Docket No. 20-269 (Sep. 18, 2020), p. 5.

the two are interchangeable for all users and uses.<sup>5</sup> As justification for this claim, Free State referred to “the rapid nationwide deployment of competing 5G networks” and listed several capabilities that are assertedly interchangeable between wireless and fixed broadband services including voice calls, Internet searches, social media, video streaming, and email.<sup>6</sup> Beyond apparently accepting marketing hyperbole associated with relatively urban rollouts of 5G services at face value, however, Free State failed to provide any in-depth analysis or supporting data behind its blanket assertion that fixed and mobile services deliver comparable capabilities with respect to all of these features and applications such that the two types of service can be considered reasonable substitutes.

Similarly, Hughes argued in its comments not only that satellite internet services should be treated as full substitutes for fixed broadband services but also any representations of satellite internet availability should be taken at face value rather than evaluated according to the specific technical parameters of the technologies and the areas purported to be served.<sup>7</sup> Such claims are not only misleading but also harmful to Congressional and Commission policies designed to promote broadband deployment in unserved areas.

Indeed, certain applications and uses identified by Free State – and many others, such as Virtual Private Networks and two-way videoconferencing for telehealth, remote learning, or telework that have taken on increased importance in recent months – require substantial upload

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<sup>5</sup> Comments of The Free State Foundation, GN Docket No. 20-269 (Sep. 18, 2020), p. 4 (“Free State Comments”).

<sup>6</sup> *Id.* at p. 15.

<sup>7</sup> Comments of Hughes Network Systems, LLC (“Hughes”), GN Docket No. 20-269 (Sep. 18, 2020), p. 4 (“Hughes Comments”).

and download capabilities alike and quickly consume far greater amounts of data than many mobile or satellite services currently allow.<sup>8</sup> Furthermore, many of these services must often be accessible to multiple household members simultaneously – the U.S. Census Bureau estimates there are an average of 2.63 people per household<sup>9</sup> - due to many adults and children working and attending school via the internet from their homes. With each additional user, more bandwidth is needed to accommodate simultaneous uses.<sup>10</sup> By contrast, mobile wireless providers generally acknowledge that the performance of their networks can vary depending upon “the type of device, the programs running on the device, your location, and how many other customers are attempting to use the same spectrum resources (including both mobile broadband internet access and other non-broadband internet access services that share the network...).”<sup>11</sup> Accordingly, suggesting that a mobile wireless or satellite connection could substitute for a fixed connection in meeting the needs of even one individual working from home is not only inaccurate but also detrimental to Commission policies designed to encourage deployment and effective use of broadband.

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<sup>8</sup> See, e.g., “How Much Data Does Streaming Video Use?,” by Dan Price, MakeUseOf, Dec. 13, 2019, available at <https://www.makeuseof.com/tag/how-much-data-does-streaming-video-use/>.

<sup>9</sup> The U.S. Census Bureau estimates an average of 2.63 people per household from 2014-2018. See The U.S. Census Bureau QuickFacts, Families and Living Arrangements, available at <https://www.census.gov/quickfacts/fact/table/US/HCN010212> (last visited Sep. 29, 2020).

<sup>10</sup> See, e.g., Federal Communications Commission, Household Broadband Guide, available at <https://www.fcc.gov/consumers/guides/household-broadband-guide> (last visited Oct. 2, 2020).

<sup>11</sup> See, e.g., “Important Information About Verizon Wireless Broadband Internet Access Services,” available at [https://www.verizon.com/support/broadband-services/?adobe\\_mc=MCMID%3D39659485699721300923225068743116944816%7CMCORGID%3D843F02BE53271A1A0A490D4C%2540AdobeOrg%7CTS%3D1601410830&mboxSession=327ec44d0e2045f094c46a378e8e05c7](https://www.verizon.com/support/broadband-services/?adobe_mc=MCMID%3D39659485699721300923225068743116944816%7CMCORGID%3D843F02BE53271A1A0A490D4C%2540AdobeOrg%7CTS%3D1601410830&mboxSession=327ec44d0e2045f094c46a378e8e05c7) (last visited Sep. 29, 2020).

## II. THE COMMISSION SHOULD UPDATE THE 25/3 Mbps STANDARD FOR FIXED SERVICES TO REFLECT CURRENT NEEDS.

Numerous commenters recommended the Commission use a higher speed benchmark (in terms of both upload and download) for determining whether fixed services are capable of providing advanced telecommunications services, in lieu of the 25/3 Mbps standard the Commission has used for the past five years.<sup>12</sup> As Common Cause noted, a 25/3 Mbps connection may not only be insufficient to support current needs but, more importantly, would also lead to the Commission funding networks that do not have the ability to meet Americans' needs for remote work, telehealth or even video streaming.<sup>13</sup> Indeed, the Commission's own Household Broadband Guide classifies two users or devices simultaneously using the same internet connection for "basic" functions (such as checking email) and more than one high-demand application (such as video conferencing or telecommuting) as necessitating speeds anywhere from 12 Mbps to over 25 Mbps, while adding just one more user or device would necessitate an internet connection exceeding 25 Mbps.<sup>14</sup>

NTCA likewise supports an increase in the speed target that the Commission will use to evaluate whether broadband access is being sufficiently advanced. To be clear, this is ***not*** to say that any area lacking access to higher speed service (such as 100/20 Mbps) should be considered "unserved." Rather, a higher threshold with upload and download speeds well in excess of 25/3

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<sup>12</sup> See Comments of Common Cause *et al*, GN Docket No. 20-269 (Sep. 18, 2020) ("Common Cause Comments"). See also Comments of Broadband Connects America *et al*, GN Docket No. 20-269 (Sep. 18, 2020); Comments of Benton Institute for Broadband and Society *et al*, GN Docket No. 20-269 (Sep. 18, 2020); Comments of Fiber Broadband Ass'n, GN Docket No. 20-269 (Sep. 18, 2020); INCOMPAS Comments.

<sup>13</sup> Common Cause Comments at pp. 6-7.

<sup>14</sup> FCC Household Broadband Guide, n. 10, *supra*.

Mbps should become the *aspirational* threshold for measuring progress in the advancement of sufficient broadband, as well as the minimum standard for what providers should be required to deploy when receiving universal service support going forward under new awards. Meanwhile, as a separate matter, the Commission can and should for now continue using a 25/3 Mbps service benchmark to target funds to areas most in need of funding for future deployment, but again with the requirement then to deploy much higher speed networks in those areas once identified as unserved. Put another way, the Commission should stop using the same speed threshold for determining *both* what is unserved *and* what a broadband goal should ultimately be; a lower speed threshold such as 25/3 Mbps can certainly be used to direct funds to areas most in need of deployment, but following such identification, recipients of such funds under future awards should be expected to deliver upload and download speeds much greater than this minimum threshold to more locations.

### **III. INCLUDING 5G AND SATELLITE DEPLOYMENTS WITHOUT CONSIDERING THE SPECTRUM USED AND AREAS PURPORTED TO BE SERVED WOULD BE A DISSERVICE TO COMMISSION EFFORTS TO ACCURATELY IDENTIFY AREAS SERVED.**

The Commission noted in the NOI that the *2020 Broadband Deployment Report* “possibly overstate[s] the deployment of fixed and mobile services” due to “limitations of the FCC Form 477 data.”<sup>15</sup> These “limitations” are exactly what drove the Commission and Congress to establish a new broadband reporting mechanism that requires service providers to “provide granular and detailed coverage data” that support representations of their services’

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<sup>15</sup> NOI at ¶ 17.

availability.<sup>16</sup> The Commission is still in the midst of implementing the reporting requirements that should lead to the development of better data. Without such data, however, the Commission will continue to be forced for the time being to rely on overstated representations of broadband service availability – to the general detriment not only of Commission policies intended to ensure all Americans have access to high-speed internet but also to the specific detriment of the residents and businesses of communities that are represented as being served but in fact are not.

Despite all of the Commission’s efforts to improve the accuracy of broadband deployment representations and the ongoing work to implement these decisions, Free State and Hughes argued in their comments that the Commission should include 5G and satellite deployment representations in the Report, even as technical information to validate deployment claims leveraging these technologies remain very much under development. Hughes, for instance, claimed that “[b]ecause satellite broadband is being deployed in a ‘reasonable and timely’ fashion, the Commission’s report should reflect this....”<sup>17</sup> As ADTRAN commented, however, “while the footprints of the satellite services provide near ubiquitous coverage for much of the country, capacity constraints limit the actual number of broadband service customers that could be served.”<sup>18</sup> Accordingly, if the Commission were to rely solely on satellite

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<sup>16</sup> *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, FCC 20-94 (rel. Jul. 17, 2020), ¶ 1.

<sup>17</sup> Hughes Comments at p. 4.

<sup>18</sup> ADTRAN Comments at p. 10.

deployment claims, every American in every corner of the country would have high-speed internet service – a claim the Commission itself has found to be untrue.<sup>19</sup>

Similarly, Free State argued in its comments, “Given 5G networks' potential to deliver average speeds at least ten times faster than LTE networks, deliver peak speeds exceeding LTE perhaps by up to 100 times, and deliver fixed residential broadband services, the functional equivalencies between 5G and wireline broadband are too great to deny the reality of effective substitutability.”<sup>20</sup> The key word is potential. At least according to providers’ marketing claims and limited test-runs, 5G networks have the *potential* to deliver fast speeds, but as numerous reports and statements by 5G providers themselves have demonstrated, those speeds are available under limited circumstances at best – and even where available, the speeds vary significantly based on the spectrum used to deploy the 5G service, the number and proximity of cells capable of transmitting 5G, the distance from the cells to the fiber that will be necessary to carry the information transmitted by the 5G service, and even the terrain of the locations served. Currently, reports indicate that 5G speeds are not any faster than 4G speeds.<sup>21</sup> The Commission should therefore complete and implement its work in the mapping proceeding and adopt specific technical standards for reporting 5G and satellite coverage before adding services leveraging these technologies to the determination of whether and to what degree broadband access is being sufficiently advanced.

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<sup>19</sup> See, e.g., *In the Matter of Barrier Communications Corp. d/b/a BarrierFree*, Notice of Apparent Liability for Forfeiture, File No.: EB-IHD-19-00029003, FCC 20-123 (Sep. 2, 2020).

<sup>20</sup> Free State Comments at pp. 15-16.

<sup>21</sup> See, e.g., “The 5G lie: The network of the future is still slow,” by Geoffrey A. Fowler, *Washington Post* (Sep. 8, 2020), available at <https://www.washingtonpost.com/technology/2020/09/08/5g-speed/> (last visited Sep. 16, 2020).



Thus, while the Commission may ultimately require service providers to report data that will generate maps that more accurately reflect the coverage capabilities of satellite-based and 5G services, until the Commission has taken those steps and requires the providers of such services to demonstrate *how* they will deliver the speeds they assert pursuant to proven technical standards, any notion of including such services in the Report is premature, at best.

#### **IV. CONCLUSION**

The Commission should continue to recognize that fixed and mobile services are complementary to one another as opposed to interchangeable as demonstrated by this year's rapid switch to remote schooling, telework and telehealth – applications that at best would be extremely difficult and costly to perform using mobile services alone. The Commission should also increase the aspirational speed used to define fixed broadband as advanced communications services to reflect consumers' needs and as recognized by the Commission in other instances. Finally, including satellite and 5G deployments in the Report prior to the development and implementation of technical standards to ensure the accurate reporting of such coverage would undermine the Commission's and Congress' goal of promoting broadband deployment to all Americans.

Respectfully submitted,

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