

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC**

In the Matter of )  
 )  
Establishing Emergency Connectivity Fund to ) WC Docket No. 21-93  
Close the Homework Gap )

**COMMENTS OF THE FIBER BROADBAND ASSOCIATION**

The Fiber Broadband Association (“FBA”)<sup>1</sup> hereby submits comments in response to the Public Notice issued by the Wireline Competition Bureau (“Bureau”) of the Federal Communications Commission (“Commission”) regarding the implementation of the Emergency Connectivity Fund (“ECF”) established as part of the recently enacted America Rescue Plan Act of 2021 (“American Rescue Plan”) to help schools and libraries provide devices and connectivity to students, school staff, and library patrons during the pandemic.<sup>2</sup> Among the issues raised in the Public Notice, the Bureau seeks comment on whether the Commission should impose a minimum service standard (“MSS”) for services to be considered eligible advanced telecommunications and information services to receive ECF support.<sup>3</sup> FBA offers comments on

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<sup>1</sup> FBA is a not for profit trade association with more than 250 members, including telecommunications, computing, networking, system integration, engineering, construction, and content-provider companies, as well as traditional service providers, utilities, and municipalities. Its mission is to accelerate deployment of all-fiber access networks by demonstrating how fiber-enabled applications and solutions create value for service providers and their customers, promote economic development, and enhance quality of life. A complete list of FBA members can be found on the organization’s website: <https://www.fiberbroadband.org/>.

<sup>2</sup> *Wireline Competition Bureau Seeks Comment on Emergency Connectivity Fund for Educational Connections and Devices to Address the Homework Gap During the Pandemic*, WC Docket No. 21-93, Public Notice, DA 21-317 (rel. March 16, 2021) (“Public Notice”); American Rescue Plan Act of 2021, Public Law No: 117-2, 117th Cong., tit. VII, § 7402 (2021).

<sup>3</sup> Public Notice at 7-8.

this one issue. As discussed herein, to meet the needs of students, school staff, and library patrons, the Commission should set an MSS of 100 Mbps download and 100 Mbps upload (“100 Mbps symmetrical”) for ECF supported services.

The onset of the COVID-19 pandemic turned the education system on its head and created new challenges for unemployed and underemployed individuals. The greatest burden has been borne by the millions of American families on the wrong side of the Digital Divide. Before the pandemic, lack of broadband access hindered the ability of children in these households to do homework and parents to search for jobs, but closed schools and libraries rendered these tasks virtually impossible. While the negative effects of the Digital Divide were known before, the pandemic brought additional clarity to the problem and highlighted not only how lack of broadband access leaves students and families behind, but how insufficient broadband performance can do so as well. It became evident that robust broadband performance is needed in every American household.

The Commission should set an MSS of 100 Mbps symmetrical to permit students to engage in the full scope of educational activities from home. At a basic level, students need sufficient performance to engage in classroom activities, including the ability to access video conference services and online learning tutorials and modules without delay or interruption. But effective learning also involves an extensive amount of online activities that are a natural outgrowth of classroom activities, including accessing shared documents and other collaboration with peers, conducting research and reading online sources, watching educational videos, video chatting and messaging classmates about schoolwork, and a variety of administrative tasks, such as checking grades, submitting homework, looking up class information, and communicating

with teachers.<sup>4</sup> These activities are not optional, but essential to increased student performance. Even before the onset of the pandemic, statistics showed that students with higher-speed home broadband connections are more likely to seek help from their teachers and peers, have higher overall grade point averages, and score considerably higher on standardized tests than students with no home access or slower-speed home access.<sup>5</sup> Prior to the pandemic, students without adequate broadband service at home could access broadband services at their schools or local libraries to conduct some of these activities. The consequences for these students were magnified during the pandemic when they needed to conduct all of these online activities from home.

An MSS of 100 Mbps symmetrical is also essential for the online activities of school staff and library patrons. Whereas school staff without adequate internet connections at home may have used internet connections at their schools to conduct research, prepare lessons for their students, and administer student and parent activities, they were forced by the pandemic to engage in all of these activities at home while also needing to teach and meet with students via video conference and administer online educational courses. These activities are not possible for educators with inadequate home access. For library patrons, prior to the pandemic, they may have relied on library broadband services to access government services and search for jobs and then engaged in related activities, such as job interviews, in person. During the pandemic, without adequate home broadband connectivity, they were left without options for all of these activities.

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<sup>4</sup> Hampton, K., Fernandez, L., Robertson, C. T., Bauer, J. M., *Broadband and Student Performance Gaps*, Quello Center, at 24 (2020), [https://quello.msu.edu/wp-content/uploads/2020/03/Broadband\\_Gap\\_Quello\\_Report\\_MSU.pdf](https://quello.msu.edu/wp-content/uploads/2020/03/Broadband_Gap_Quello_Report_MSU.pdf).

<sup>5</sup> *Id.* at 32.

While the above-described activities warrant an MSS of 100 Mbps symmetrical broadband under the ECF for a single student, school staff member, or library patron, this level of performance is all the more essential for households that have multiple such users.<sup>6</sup> Each additional user of a broadband network significantly increases performance needs, even when those uses are limited to the activities described above.<sup>7</sup> A 2020 report by Common Sense Media assessing remote learning needs during the pandemic found that homes with multiple students need download speeds of 200 Mbps to “ensure a robust and uninterrupted learning experience and allow for more synchronous distance learning programming.”<sup>8</sup> The Commission has also recognized that higher performance broadband is necessary to support interactive multiparty video communications and other high bandwidth online activities by multiple users or on multiple devices, simultaneously, within a household.<sup>9</sup>

Households with a single student are more likely than not to have at least one other student, school staff member, or library patron that is in need of, would independently qualify

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<sup>6</sup> If the Commission permits these connections to be used by other household members who are not students, school staff, or library patrons, performance needs increase even more.

<sup>7</sup> The Bureau acknowledged as much in the Public Notice, at 8 (“Recognizing that some households have more than one student, school staff member, or library patron, and that video conferencing applications commonly used for remote learning place heavy demands on speed and use large amounts of data, what level of service and data thresholds are needed to accommodate multiple users?”); *see also* Chandra, S., Fazlullah, A., Hill, H., Lynch, J., McBride, L., Weiss, D., and Wu, M., *Connect all students: How states and school districts can close the digital divide*, Common Sense Media, at 21. (2020), [https://d2e111jq13me73.cloudfront.net/sites/default/files/uploads/common\\_sense\\_media\\_partner\\_report\\_final.pdf](https://d2e111jq13me73.cloudfront.net/sites/default/files/uploads/common_sense_media_partner_report_final.pdf) (“Common Sense Report”).

<sup>8</sup> *Id.*

<sup>9</sup> *See Household Broadband Guide*, FCC, <https://www.fcc.gov/consumers/guides/household-broadband-guide> (last updated Feb. 5, 2020).

for, and can be expected to use services supported by the ECF benefit. For example, in 2020, the average number of biological children under the age of 18 in households with children was nearly two, and this number increases when accounting for other dependents.<sup>10</sup> Additionally, students that are in a household without a broadband connection are more likely to have a parent or guardian that typically accesses broadband service at a library. If the Commission sets an MSS of, for example, 25/3 Mbps on the basis that such performance is sufficient for a single student, school staff member, or library patron, it risks stranding the millions of households with more than one qualifying individual without the performance they need to participate in essential online activities.

The reality of student remote learning needs was quickly realized by Hamilton County Schools (HCS) in Tennessee and EPB of Chattanooga at the beginning of the pandemic. In July 2020, they teamed up to establish HCS EdConnect, a program designed to bridge the digital divide by providing access to symmetrical 100 Mbps broadband with no data caps to more than 28,000 unserved or underserved lower income families in Chattanooga and surrounding communities.<sup>11</sup> The program leverages and extends EPB’s existing fiber network to deliver this performance to these households, giving them enough broadband capacity and data to participate in video-based learning and other high bandwidth educational applications.<sup>12</sup> Through a combination of funding from the Coronavirus Aid, Relief, and Economic Security (“CARES”)

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<sup>10</sup> *Average number of own children under 18 in families with children in the United States from 1960 to 2020*, Statista (Jan. 26, 2021), <https://www.statista.com/statistics/718084/average-number-of-own-children-per-family/>.

<sup>11</sup> *Hamilton County and Chattanooga use Smart City Infrastructure*, Hamilton County Schools (July 29, 2020), [https://www.hcde.org/newsroom/hamilton\\_county\\_uses\\_smart\\_city\\_infrastructure](https://www.hcde.org/newsroom/hamilton_county_uses_smart_city_infrastructure).

<sup>12</sup> *Id.*

Act, funding commitments from HCS and EPB, and philanthropic donations, HCS EdConnect is slated to offer these services completely free of charge for the next 10 years.<sup>13</sup> HCS EdConnect not only serves as a model for the Commission as it works to establish the ECF, it justifies the use of a 100 Mbps symmetrical MSS for ensuring that students are receiving the speeds necessary to fully participate in remote learning.

The need for robust upload and download speeds by students, school staff, and library patrons accessing the Internet from home is consistent with broader broadband growth trends. FBA has previously detailed the significant and growing broadband needs of a typical American household,<sup>14</sup> and the evidence identified there are backed more recent evidence. Recently, AT&T Communications LLC CEO Jeffery Scott McElfresh noted that “demand for broadband is strong and growing,” and identified two trends:

The first trend, demand for uplink capacity is growing at a faster pace than downlink. . . . User-generated content is on a faster growth pace from applications such as video conferencing. The second trend, while both mobile and fixed broadband usage is growing, we’re actually seeing an increased dependence on the fixed network as it provides the performance and capacity customer applications require. And while this trend has been recently influenced by COVID-19, as employees work from home and students learn from home, it’s a trend that we expect will continue.<sup>15</sup>

McElfresh added that AT&T expects demand for broadband to increase more than five times in the next five years with a majority of customers expected to consume up to 4.6 terabytes of data monthly.<sup>16</sup> This consumption is being driven by increasing numbers of connected devices in

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<sup>13</sup> Common Sense Report at 23.

<sup>14</sup> See Comments of the Fiber Broadband Association, GN Docket No. 20-269, 9-18 (Sept. 18, 2020).

<sup>15</sup> Edited Transcript: AT&T Inc Analyst & Investor Day at 4 (Mar. 12, 2021), <https://investors.att.com/~media/Files/A/ATT-IR/financial-reports/quarterly-earnings/2020/q4-2020/final-at-and-t-investor-and-analyst-day-3-12-21.pdf>.

<sup>16</sup> *Id.*

homes and increasing bandwidth needs resulting from the rise in use of streaming services, the introduction of 4K streaming, the prevalence of video conferencing, and many other high bandwidth applications, such as augmented reality, virtual reality, and gaming. McElfresh placed particular emphasis on upstream demand, noting that the delta with downstream demand is expected to be cut in half.<sup>17</sup>

Other broadband providers have recognized the need for increasing performance tied to remote education and work. At the outset of the pandemic, Charter Communications launched its Remote Education Offer, which included free access to broadband service at speeds up to 100 or 200 Mbps (depending on the market) for households with K-12 students, college students, and educators.<sup>18</sup> Similarly, to help low-income households obtain and maintain broadband service, Verizon began offering a 200 Mbps symmetrical fiber service with no data cap to Lifeline-qualifying households for under \$20 per month.<sup>19</sup>

Even as the pandemic subsides, the need for robust home broadband service for students and educators will remain. The Benton Institute for Broadband and Society notes that “demand for online education, both at the K-12 and higher education levels, will be greater after the current crisis than before.”<sup>20</sup> Students, families, and educators have learned to incorporate remote learning and educators will continue to use the technologies they adopted, “recognizing that digital technologies can be powerful complements to in-person learning.”<sup>21</sup>

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<sup>17</sup> *Id.*

<sup>18</sup> Comments of NCTA – The Internet & Television Association, WC Docket No. 21-31, at 3 (Feb. 16, 2021).

<sup>19</sup> Comments of Verizon, WC Docket No. 21-31, at 2 (Feb. 16, 2021).

<sup>20</sup> Sallet, Jonathan, *Broadband for America Now*, Benton Institute for Broadband & Society, at 11 (Oct. 2020).

<sup>21</sup> *Id.*

In light of the critical need for robust broadband services by students, school staff, and library patrons as a result of the COVID-19 pandemic, FBA urges the Commission to adopt an MSS of 100 Mbps symmetrical for the ECF.

Respectfully Submitted,

A handwritten signature in black ink that reads "Gary Bolton". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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