



EXECUTIVE SUMMARY

Internet Association (“IA”) is encouraged to see that Congress allocated \$7.171 billion to the Federal Communications Commission (“the Commission”) for an Emergency Connectivity Fund (“the Fund”) to be distributed to eligible schools and libraries for the purchase of “eligible equipment” and “advanced telecommunications and information services” for use by students, school staff, and library patrons at locations *other than* the school or library.¹ The COVID-19 public health emergency made it abundantly clear that students lacking broad access or the necessary tools to participate in virtual learning are disadvantaged and a part of the extremely concerning “homework gap” that exists in America. Reflecting on these circumstances, IA would recommend the Commission take a broad and forward-looking approach when it comes to interpreting the term “eligible equipment” and “eligible services” to ensure that the greatest number of students, teachers, school staff, and library patrons are benefited by the Fund.

The Commission should take a flexible and technology neutral approach to “equipment” and “services” that may qualify for funding. The terms “eligible equipment and services” should include any services that support advanced internet connectivity, including cloud computing services. The Commission should recognize that the technology and devices that are used for educational purposes are always evolving and should define eligibility accordingly. Additionally, cloud services that

¹ American Rescue Plan Act, 2021, H.R. 1319, 117th Cong., tit. VII, § 7402(a)(1)-(2) (2021).



support broadband internet are becoming increasingly important to remote and online learning. Thousands of educational institutions across the U.S. are using cloud services to lower IT costs, enhance remote learning platforms, perform analytics for educational initiatives, manage student and school staff data, and even prepare students for STEM careers. Given the urgency and importance of online learning during and even after the pandemic, the manner in which remote or hybrid teaching methods are conducted will undoubtedly impact the future of education, and the Commission should consider cloud computing services to be eligible for the Fund.

Finally, the Commission should not adopt rules that would penalize or disincentivize those who have already allocated resources to address the homework gap but reward those who failed to act. It is important to set a dependable process to support schools and libraries that swiftly act in the best interest of their students and patrons.



TABLE OF CONTENTS

I. THE COMMISSION SHOULD TAKE A FORWARD-LOOKING VIEW OF WHAT IS DEEMED ELIGIBLE EQUIPMENT AND ELIGIBLE SERVICES FOR THE EMERGENCY CONNECTIVITY FUND (“THE FUND”).THE COMMISSION SHOULD TAKE A FORWARD-LOOKING VIEW OF WHAT IS DEEMED ELIGIBLE EQUIPMENT AND ELIGIBLE SERVICES FOR THE EMERGENCY CONNECTIVITY FUND (“THE FUND”)..... 6

II. THE COMMISSION SHOULD PROVIDE ADDITIONAL FLEXIBLE GUIDANCE REGARDING CERTAIN CONNECTED DEVICES THAT SHOULD QUALIFY FOR REIMBURSEMENT..... 8

III. THE COMMISSION SHOULD SUPPORT ANY SERVICE THAT PROVIDES OR IMPROVES INTERNET CONNECTIVITY, INCLUDING CLOUD COMPUTING..... 9

IV. THE COMMISSION SHOULD INCLUDE EQUIPMENT AND SERVICES NECESSARY TO DELIVER THESE SERVICES AMONG THOSE CONSIDERED AS ELIGIBLE..... 10

V. THE COMMISSION SHOULD NOT EXCLUDE SELF-CONSTRUCTED OR DARK FIBER NETWORKS SO LONG AS THEY SUPPORT NECESSARY BROADBAND SPEEDS..... 11

VI. THE COMMISSION SHOULD MAINTAIN A LEVEL OF SERVICE STANDARDS FOR ELIGIBILITY THAT WILL ENSURE STUDENTS GET THE HELP REQUIRED..... 11

VII. THE COMMISSION SHOULD ENSURE ANY LIMITATIONS IMPOSED ON WI-FI HOTSPOTS ACCOUNT FOR WHERE STUDENTS LEARN..... 12

VIII. THE COMMISSION SHOULD REIMBURSE PURCHASES MADE BY SCHOOLS AND LIBRARIES SINCE JANUARY 27, 2020 TO INCENTIVIZE PROACTIVE MEASURES..... 14

IX. CONCLUSION..... 15



**Before the
Federal Communications Commission
Washington, D.C. 20554**

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

**COMMENTS OF INTERNET ASSOCIATION ON THE USE
OF THE EMERGENCY CONNECTIVITY FUND
TO CLOSE THE HOMEWORK GAP**

Internet Association (“IA”) appreciates the opportunity to provide comment on the Federal Communications Commission’s (“FCC”) Wireline Competition Bureau’s (“The Bureau”) *Public Notice*, “Emergency Connectivity Fund For Educational Connections and Devices to Address the Homework Gap During the Pandemic”.²

IA is the only trade association that exclusively represents global internet companies on matters of public policy.³ IA’s mission is to foster innovation, promote economic growth, and empower people through the free and open internet. IA believes the increased internet access creates unprecedented opportunities for students of all ages throughout the learning process. As the voice of the world’s leading internet

² *Wireline Competition Bureau Seeks Comment on Emergency Connectivity Fund for Educational Connections and Devices to Address the Homework Gap During the Pandemic*, Public Notice, WC Docket No. 21-93, (WCB Mar. 16, 2021), <https://docs.fcc.gov/public/attachments/DA-21-317A1.pdf> (hereinafter “Using the Emergency Connectivity Fund to Close The Homework Gap”).

³ IA represents the interests of companies including: Airbnb; Amazon; Ancestry; Discord; DoorDash; Dropbox; eBay; Etsy; Eventbrite; Expedia Group; Facebook; Google; Groupon; Grubhub; Handy; IAC; Indeed; Intuit; LinkedIn; Lyft; Match Group; Microsoft; Notarize; PayPal; Pinterest; Postmates; Quicken Loans; Rackspace; Rakuten; Reddit; Snap Inc.; Spotify; Stripe; SurveyMonkey; Thumbtack; TripAdvisor; Turo; Twitter; Uber Technologies, Inc.; Upwork; Vrbo; Zillow Group; and, ZipRecruiter. IA’s current member list is available at: <https://internetassociation.org/our-members/>.



companies, many of our members contribute to closing the digital divide as well as the homework gap, supporting efforts that seek to provide equal opportunity and broadband access for all students in the modern, remote-first, digital era.⁴

The COVID-19 public health emergency as well as general advances in technology have drastically changed the way students are able to learn and educators are able to teach. For example, tutors, teachers, professors, and instructors have adapted their lesson plans and are now utilizing virtual educational resources to deliver information; however, those resources are dependent upon reliable internet connectivity and support for multiple devices. As a result of today’s new normal, solely providing support for increased connectivity in a classroom or library setting and focused on a limited universe of fixed devices no longer meets the needs of students. To a significant extent, this change is likely to be permanent, lasting even after the COVID-19 pandemic has receded. Therefore, it is imperative that the FCC address new ways of learning and teaching and ensure that funds from the American Rescue Plan Act of 2021 support students today and in the future.

While the American Community Survey of 2019 shows that 86.4 percent of American households have a broadband internet subscription⁵, it is important to note that, just like “schooling is not learning”, a “subscription is not access” to the internet. A Pew Research Center survey found that 17 percent of students lacked a *reliable* internet connection or computer to access the internet. Additionally, 35 percent —

⁴ COVID-19 Response: Bridging the Digital Gap in Education, Internet Association, <https://covid19.internetassociation.org/industry/response/education/> (last visited Feb. 16, 2021).

⁵ See U.S. Census Bureau, American Community Survey 2019, Table ID R2801 (December 10, 2020), <https://www.census.gov/acs/www/data/data-tables-and-tools/ranking-tables/>



more than one out of three students — ended up resorting to using their cellphone to complete their homework.⁶ Even more alarming, however, is the way this gap manifests across racial demographics. As the National Conference of State Legislatures (NCSL) recognized: “Black, Hispanic, and low-income students are more likely to try to complete schoolwork on a cell phone rather than a desktop or laptop computer.”⁷ Considering the fact that virtual campuses are here to stay, these numbers are unacceptable, and it is all of our responsibilities to do more.

It is important that the FCC recognize the educational challenge of this moment, where a large part of the student population will live with a full or hybrid virtual learning experience, and the Commission needs to do its part to help provide access to all students.⁸

I. THE COMMISSION SHOULD TAKE A FORWARD-LOOKING VIEW OF WHAT IS DEEMED ELIGIBLE EQUIPMENT AND ELIGIBLE SERVICES FOR THE EMERGENCY CONNECTIVITY FUND (“THE FUND”).

The Commission should recognize that the technology and devices that are used for educational purposes are always evolving and should define eligibility accordingly.

⁶ See Pew Research Center, “Nearly one-in-five teens can’t always finish their homework because of the digital divide”, (October 26, 2018), <https://www.pewresearch.org/fact-tank/2018/10/26/nearly-one-in-five-teens-cant-always-finish-their-homework-because-of-the-digital-divide/>

⁷ See NCSL “Public Education’s Response to the Coronavirus (COVID-19) Pandemic”, (January 14, 2021), <https://www.ncsl.org/research/education/public-education-response-to-coronavirus-covid-19.aspx>

⁸ See Education Tables, Table 2. Coronavirus Pandemic Impact on How Children Received Education for the 2020-2021 School Year, by Select Characteristics, U.S. Census Bureau (January 27, 2021), in which only 9.6 percent of the 51.5M households in the American public education system indicated “[t]he coronavirus pandemic did not affect how children in this household received education”, <https://www.census.gov/data/tables/2021/demo/hhp/hhp22.html>.



IA would encourage the Commission to avoid a prescriptive list of “eligible equipment” and “eligible services” that would likely become obsolete soon after it is published, and instead, it should take a flexible and technology neutral approach to “equipment” and “services” that may qualify for funding. Any close or novel questions about “eligible equipment” and “eligible services” can be resolved through the application review process, based on concrete facts. Doing so would ensure that in addition to established mobile solutions like Wi-Fi hotspots and wireless towers, newer technologies like evolving cloud computing services are appropriately eligible for funding. Indeed, cloud computing services have played a quiet, but essential role in supporting virtual classroom operations and can continue to do so by enhancing the reliability and scalability of network systems for even more students and teachers across the country.

Even prior to the COVID-19 pandemic, cloud service providers (“CSPs”) have enhanced Americans’ access to advanced telecommunications and information services for students, educators, and library patrons. For example, CSPs have provided high scalable cloud services and reliable infrastructure capacity to meet the growing needs for remote learning for educational organizations. Additionally, some IA members have national and global initiatives to provide learning resources for building cloud computing skills, many of which have enabled students, educators, and library patrons across the U.S. – including those in low-technology schools – to have remote access to educational content. Encouraging and incentivizing these types of innovative efforts will be one of the most cost-effective ways in which the Commission can



address the homework gap through the Fund.

II. THE COMMISSION SHOULD PROVIDE ADDITIONAL FLEXIBLE GUIDANCE REGARDING CERTAIN CONNECTED DEVICES THAT SHOULD QUALIFY FOR REIMBURSEMENT.

The Commission should issue guidance that extends flexibility to Fund recipients as to the types of devices that are eligible for reimbursement. Because the funding period ends on “the first June 30 that occurs one year after the end of the declared emergency”⁹, the Commission should recognize that a wide array of innovative technology will be available during this period that will benefit educational institutions. The Commission should consider this wide array of technology when promulgating rules and guidance relating to connected devices as well as the amount of time it takes for investments in such technology to come to fruition.

For example, educational agencies could benefit from enhanced cloud solutions, smart devices, and Internet of Things (“IoT”) devices that are developed, or are in the process of being developed, by innovative providers during the funding period. Examples include devices that assist teachers as they migrate to a more digital teaching experience, including those that require access to an indeterminate amount of computing power and those that offer streaming services. The ability for providers of these products to be somewhat reimbursed for the hardware, software, and audio/visual equipment that goes along with such platforms and methods of delivering educational material will be essential to their success for educational institutions at all

⁹ H.R. 1319, tit. VII, § 7402(d)(5)(B); see also 47 U.S.C. § 247d.



technology levels. Making sure that technology adapts to the way students learn and teachers provide instruction will help the United States remain a leader in education, and using the Fund to further this goal will provide aid to so many students and teachers and help to close the homework gap.

III. THE COMMISSION SHOULD SUPPORT ANY SERVICE THAT PROVIDES OR IMPROVES INTERNET CONNECTIVITY, INCLUDING CLOUD COMPUTING.

The Commission should broadly interpret the term “eligible equipment” and “eligible services” to include any services that support advanced internet connectivity, including cloud computing services. The Commission should rely on 47 U.S.C. 254(h)(2), which requires it to adopt competitively neutral rules to enhance access to broadband for schools and libraries, but does not require the Commission to prescribe specific equipment and services. The Commission should ensure that schools, libraries, and consortia continue to receive the E-Rate supported services that best meet their needs for connectivity, which will often involve cloud computing solutions, especially for those rural and less privileged students.

Cloud services that support broadband internet are becoming increasingly important to remote and online learning. Thousands of educational institutions across the U.S. are using cloud services to lower IT costs, enhance remote learning platforms, perform analytics for educational initiatives, manage student and school staff data, and even prepare students for STEM careers. Given the urgency and importance of online learning during and even after the pandemic, the manner in which remote or hybrid



teaching methods are conducted will undoubtedly impact the future of education, the Commission should consider including cloud computing services to be eligible for the Fund.

IV. THE COMMISSION SHOULD INCLUDE EQUIPMENT AND SERVICES NECESSARY TO DELIVER THESE SERVICES AMONG THOSE CONSIDERED AS ELIGIBLE.

The Commission should include the equipment necessary to deliver high-quality internet service to end users among those eligible for the Fund. High quality broadband connections may require a wide array of equipment and services, including modems, routers, and cloud service solutions to establish dedicated network connections. High quality broadband connections are critical to both students and educators, especially during the pandemic where many members of a household simultaneously access the internet. Access to reliable connectivity equates to a strong foundation for educational services, one long-since recognized by the federal government itself.¹⁰

Building and delivering modern educational services, especially those offered on a consumption basis and those offered through an as-a-service model, necessitates accounting for the changes to the modern business model. Failing to allow those who are delivering purely educational services from accessing and obtaining all the support necessary to develop and deliver innovative educational services will serve as a major barrier to the intended outcome of the Fund. Accounting for modern technology and the modern delivery of educational services requires accounting for the way in which

¹⁰ See U.S. Department of Education, Office of Educational Technology, <https://tech.ed.gov/connectivity/> (last access March 28, 2021)



those products and services are developed.

V. THE COMMISSION SHOULD NOT EXCLUDE SELF-CONSTRUCTED OR DARK FIBER NETWORKS SO LONG AS THEY SUPPORT NECESSARY BROADBAND SPEEDS.

The Commission should not exclude dark fiber and self-constructed networks from being eligible for resources from the Fund, so long as these services support greater internet bandwidth speeds. This is especially true for those schools that use such mesh networks to not only ensure access throughout their campus but also as a learning tool. Schools should aim to have higher internet speeds to support their applications and allow them to utilize innovative technologies like cloud computing to more effectively support remote and virtual learning.

Ensuring that broadband connectivity at a minimum level of 25 megabytes per second (mbps) for download speeds and 3 mbps upload speeds are supported, regardless of the manner in which they are implemented, will ensure the Fund supports equitable access and the equipment that will help deliver such access to all students. Additionally, ensuring that these numbers are increased as technology itself advances will make sure students are never stuck in the trap of legacy IT again.

VI. THE COMMISSION SHOULD MAINTAIN A LEVEL OF SERVICE STANDARDS FOR ELIGIBILITY THAT WILL ENSURE STUDENTS GET THE HELP REQUIRED.

The Commission should impose minimum service standards to address the connectivity gap, using both wired and mobile services, so that schools are able to



procure only the most effective services that support internet connectivity with E-Rate funding. While almost all schools and libraries have some sort of access to the internet, not all schools, especially rural schools, can afford the cost of high-speed broadband connections. To address the broadband connection issues faced by public schools, the FCC adopted two E-Rate modernization orders in 2014 and established the performance goals adequate to support the broadband connection.¹¹

These standards are important not just for the evaluation of projects being reviewed for funding, but also for the purposes of maintaining a certain level of quality in the services used to educate our students. While a variety of different approaches and curriculums are understandably used across the nation, there will always be a bare minimum -- and we, as a nation, must do better than that.¹² As a result, the Commission must support an iterative and always improving service standard when it comes to education.

VII. THE COMMISSION SHOULD ENSURE ANY LIMITATIONS IMPOSED ON WI-FI HOTSPOTS ACCOUNT FOR WHERE STUDENTS LEARN.

The Commission should clarify that schools can use funded Wi-Fi hotspots to connect students for educational purposes in their own homes. As the Commission has recognized, the Act does not define the specific locations where students, school staff,

¹¹ See *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870 (2014); *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538 (2014).

¹² See *Andrew F. v. Douglas County School Dist. RE-1*, 137 S. Ct. 988 (March 22, 2017), in which the court found “a student offered an educational program providing ‘merely more than de minimis’ progress from year to year can hardly be said to have been offered an education at all.”



and library patrons can use eligible equipment and services. Rather, the Act explicitly allows eligible equipment and services “for use by (1) in the case of a school, students and staff of the school at locations that include locations other than the school; and (2) in the case of a library, patrons of the library at locations that include locations other than the library.”¹³ During the COVID-19 pandemic, with so many students and teachers working from home, the Commission should promulgate rules to support broadband and wireless services necessary to serve students where they are learning and teachers where they are educating.

During the COVID-19 pandemic, several requests have been made across the country¹⁴ that convey the critical need for the FCC to allow funding for services and equipment to be used “off-campus” to provide additional support for effective remote learning and future unforeseen disasters. Changes focused on meeting students where they learn would allow some states to provide up to 60 percent of students with access to sufficient internet connectivity if they live within two to three miles of their school.¹⁵ Additionally, the changes would allow other schools to extend their existing broadband connectivity to create hotspots to reach their student population or allow for resources received from the Commission to contribute to innovative mobile internet connectivity solutions, including Private LTE networks, permitting students to have internet in their

¹³ §§ 7402(a)(1)-(2).

¹⁴ See Letter from Lyell Walker, State E-Rate Coordinator, Florida Department of Management Services, to Ajit Pai, Chairman, FCC, WC Docket No. 02-6, at 1 (filed Mar. 12, 2020); Letter from John Kraman, Chief Information Officer, Mississippi Department of Education, to Ajit Pai, Chairman, FCC, WC Docket No. 02-6, at 1 (filed Mar. 24, 2020); Letter from Matt Schmit, Director, Illinois Office of Broadband, to Ajit Pai, Chairman, FCC, WC Docket Nos. 13-184 et al., at 1 (filed July 2, 2020); Letter from Nevada State Board of Education to Ajit Pai, Chairman, FCC, at 2-3 (filed July 30, 2020) (Nevada Petition).

¹⁵ Nevada Petition at 2-3.



homes.¹⁶

VIII. THE COMMISSION SHOULD REIMBURSE PURCHASES MADE BY SCHOOLS AND LIBRARIES SINCE JANUARY 27, 2020 TO INCENTIVIZE PROACTIVE MEASURES.

The Commission should retroactively reimburse for purchase of eligible equipment and services made by eligible schools and libraries. Since the outbreak of COVID-19, many schools and libraries have been proactively seeking and purchasing network equipment and services to address the needs of students, school staff, and library patrons. The Commission should not adopt rules that would penalize or disincentivize those who have already allocated resources to address the homework gap but reward those who failed to act. Rather, the Commission should adopt rules that both promote proactivity and ensure a safety net exists for those unable to do what they would have had they access to the appropriate level or resources.

With January 30, 2020 representing the date that the Centers for Disease Control confirmed the “person-to-person spread” of COVID-19 in the United States¹⁷, it was January 27, 2020 when the World Health Organization (WHO) confirmed the same outside of Wuhan, China.¹⁸ As a result, any organization that took the necessary measures to prepare should be rewarded. Similarly, any organization who didn’t -

¹⁶ *Using School Bus Wi-Fi to Support Distance Learning*, School Transportation News, (May 1, 2020), <https://stnonline.com/partner-updates/using-school-bus-wifi-to-support-distance-learning/>.

¹⁷ See Centers for Disease Control, *CDC Confirms Person-to-Person Spread of New Coronavirus in the United States*, (January 30, 2020), <https://www.cdc.gov/media/releases/2020/p0130-coronavirus-spread.html>

¹⁸ See World Health Organization, *Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV*, (January 27, 2020) <https://www.who.int/news-room/articles-detail/updated-who-advice-for-international-traffic-in-relation-to-the-outbreak-of-the-novel-coronavirus-2019-ncov>



either because they couldn't or weren't aware of the gravity - should be incentivized to better prepare in the future. Using the Fund to reimburse eligible expenses from the currently accepted start of the global pandemic will ensure that occurs.

IX. CONCLUSION

In conclusion, the Commission should make the most effective use of the Emergency Connectivity Fund to help close the digital divide and close the homework gap. An expansive view of what is considered "eligible" for funding should include all necessary devices, equipment, and services to deliver effective educational content and material to students wherever they are located and on whatever device they have to access the internet. The educational benefits that will come from supporting all the necessary equipment and services to deliver a modern curriculum, including those being developed will ensure students receive a top quality education that will shape the rest of their lives. Retroactively applying these benefits to the start of COVID-19 pandemic will positively impact the most educational agencies and student learning experiences to ensure that modern technology is adopted as a part of the United States' educational experience and not only available to select individuals.

Respectfully submitted,

/s/ Alexandra McLeod
Alexandra McLeod
Legal & Policy Counsel

Omid Ghaffari-Tabrizi
Director, Cloud Policy