Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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

COMMENTS OF EDUCATIONSUPERHIGHWAY

Evan Marwell
EducationSuperHighway
6 Presidio Terrace
San Francisco, CA 94118

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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

COMMENTS OF EDUCATIONSUPERHIGHWAY

EducationSuperHighway respectfully submits these comments in response to the Public Notice from the Wireline Competition Bureau requesting comments in the above-referenced proceeding.

INTRODUCTION AND SUMMARY

EducationSuperHighway applauds Congress's action in making $7.17 billion available for K-12 home connectivity and devices through the Emergency Connectivity Fund (ECF). During the pandemic, when student homes have become their classrooms, access to public education hinges on whether a student's home has broadband access. The Commission now has the means to close the homework and remote learning gaps by enabling school districts and other eligible entities to procure home broadband[1] and devices for the 7-14 million students[2] that lack these critical requirements for accessing remote learning.

As highlighted in the title of the Public Notice, the Emergency Connectivity Fund is for educational connections and devices to address the Homework Gap during the pandemic. To fulfill this purpose, EducationSuperHighway urges the Commission to take the following actions to maximize the impact of the Emergency Connectivity Fund in closing the Homework Gap:

1. The Commission should establish that the goal of the Emergency Connectivity Fund is to close the Homework Gap and measure its progress against this goal.[3]

[1] In these comments home broadband connections are inclusive of both wired or wireless Internet connections that are capable of supporting remote learning at a student's home.
[2] 7-14 million students represent the estimated 10-17 million students who lacked home broadband connections at the start of the pandemic less the 3 million students that are estimated to have been connected by school districts and states over the last 12 months. Analysis conducted by EducationSuperHighway, Common Sense Media, Alliance for Education, Funds for Learning; https://digitalbridgek12.org/resources/why-many-students-lack-internet-access/
[3] EducationSuperHighway recognizes that the ECF is also intended to help libraries provide connectivity and devices to their patrons. Our comments are limited to how the Commission should manage the program as it relates to closing the Homework Gap for K-12 students.

2. The Commission should limit the use of the Emergency Connectivity Fund to connecting K-12 students who currently lack home broadband connections[4] or educational devices.
3. The Commission should limit the use of the Emergency Connectivity Fund to purchases made after opening the filing window for the ECF or costs incurred after this date under contracts entered into by school districts and other eligible applicants during the pandemic for home broadband connections.
4. The Commission should cap the amount of allowable reimbursement for educational devices at $500 and should not include mobile phones as eligible connected devices.
5. The Commission should explicitly allow existing bulk purchase programs or sponsored service agreements to qualify for ECF funding.
6. The Commission should require applicants to certify that ECF resources are only being used for students who currently lack home broadband connections or an educational device.
7. The Commission should require applicants to provide estimates of the number of students currently lacking a home broadband connection or an educational device when applying for ECF funds and to report the specific number of students provided a home broadband connection or educational device using ECF funds.
8. The Commission should follow its standard E-rate practices and make all procurement data related to the ECF transparent and publicly available.
9. The Commission should allow applicants to use a variety of technologies and strategies to provide home broadband for students.
10. The Commission should update its Community Use rules to allow the use of E-rate funded facilities and services at all times so long as such use is for an educational purpose and free of charge.

I. THE COMMISSION SHOULD ESTABLISH THAT THE GOAL OF THE EMERGENCY CONNECTIVITY FUND IS TO CLOSE THE HOMEWORK GAP AND MEASURE ITS PROGRESS AGAINST THIS GOAL.

One of the most important actions the Commission took in modernizing the E-rate program was to establish specific goals for K-12 classroom connectivity. These goals: a high-speed connection to every school, Wi-Fi in every classroom, and a minimum of 100 kbps of Internet access per student, gave school districts and other stakeholders a clear standard they needed to achieve in order to enable the use of digital learning in the classroom. These goals also became the standard by which all stakeholders would be measured and the catalyst for 85 governors in all 50 states to join the mission to upgrade America's K-12 broadband infrastructure. In retrospect, establishing specific goals for the E-rate program probably did

[4] For purposes of these comments, students who currently have a home broadband connection that is paid for by their school district or state should be considered as lacking a home broadband connection.

more than anything else to accelerate the incredible effort that has resulted in 99.7% of America's K-12 students having access to digital learning in their classrooms.

The Commission now has the opportunity to leverage its power to set goals to catalyze the closing of the next K-12 digital divide. The pandemic has made it clear that students without home Internet access and a sufficient educational device cannot participate in remote learning during the COVID-19 pandemic and are at a substantial disadvantage relative to their connected peers when it comes to doing homework when attending school in-person. Moreover, the disparities of the Homework Gap are likely only to increase once the pandemic ends. With 70% of teachers assigning digital homework before the pandemic and millions of students and teachers realizing the benefits of digital learning, there is likely to be a dramatic increase in demand for distance learning and digital homework once schools are back in-person.

By establishing that the goal of the Emergency Connectivity Fund is to close the Homework Gap for K-12 students by ensuring every student has a sufficient home broadband connection and educational device to support remote learning, the Commission will once again create clarity for stakeholders on the objective they are trying to achieve. This will catalyze action and focus school districts and other applicants on delivering the result the Commission is trying to achieve. In addition, by collecting appropriate data from applicants on the need for and use of Emergency Connectivity Fund resources, the Commission will be able to measure progress against this goal and create accountability among stakeholders for achieving the goal.

II. THE COMMISSION SHOULD LIMIT THE USE OF THE EMERGENCY CONNECTIVITY FUND TO CONNECTING K-12 STUDENTS WHO CURRENTLY LACK HOME BROADBAND CONNECTIONS OR EDUCATIONAL DEVICES.

To meet the Emergency Connectivity Fund's goal of closing the Homework Gap, the Commission must limit the use of ECF resources to connecting K-12 students who currently lack home broadband connections or educational devices. Despite the significant amount of resources Congress authorized for the ECF, the math shows that there is not enough funding to completely close the Homework Gap if applicants are allowed to use ECF funds to pay for home broadband connections or educational devices for students who already have these resources. A study by Common Sense Media and the Boston Consulting Group estimated in January 2021 that "[c]losing the divide requires $6 to $11 billion for the first year and $4 to $8 billion annually thereafter to address affordability and adoption gaps, as well as additional investment in universal broadband infrastructure."[5]

[5] Ali, T., Chandra, S., Cherukumilli, S., Fazlullah, A., Galicia, E., Hill, H., McAlpine, N., McBride, L., Vaduganathan, N., Weiss, D., Wu, M. (2021). Looking back, looking forward: What it will take to permanently close the K–12 digital divide. San Francisco, CA: Common Sense Media.

Even allowing for the progress that has been made by school districts and other applicants in providing educational devices to students using other sources of funding and market pricing for minimally sufficient home Internet connections, the math suggests that ECF resources will be insufficient even if used solely to connect students who currently lack home broadband or educational devices.[6]

	Estimated Total Need	Estimated Cost	Total Cost
Educational Devices	8.2 million[7]	$500 / device	$4.1 billion
Home Broadband Connection (*one year of service*)	10-15 million students[8]	$20/month[9]	$2.4-3.6 billion per year
Total			$6.5-7.7 billion

As seen in the table above, closing the Homework Gap for just one year will require all the resources in the ECF. Consequently, to achieve the ECF's objectives, the Commission must limit the use of ECF funds to students that applicants certify are lacking these resources.

III. THE COMMISSION SHOULD LIMIT THE USE OF THE EMERGENCY CONNECTIVITY FUND TO PURCHASES MADE AFTER OPENING THE FILING WINDOW FOR THE EMERGENCY CONNECTIVITY FUND.

Given that the ECF lacks sufficient resources to fully close the Homework Gap while also helping libraries provide devices and connectivity to their patrons, the Commission must resist calls to allow ECF funds to be used to reimburse previous purchases by applicants. States have provided schools with as much as $1.8 billion in funding specifically for educational devices and home connectivity since the start of the pandemic,[10] while schools have also had access to $67 billion in ESSER I & II funding that was allowed to be used for these same purposes. Estimating the cost of connecting 3 million students since the start of the pandemic

[6] These numbers also do not include the demand from libraries for ECF resources.
[7] Boston Consulting Group & Common Sense Media estimated 9 million of the 15 million students (60%) without Internet access at the start of the pandemic also lacked an educational device. We assume 60% of the estimated 3 million students connected during the pandemic now have devices. According to BCG, a total of 10 million students lacked devices at the start of the pandemic.
[8] Source: Boston Consulting Group & Common Sense Media. Assumes that all students provided home broadband or mobile hotspots during the pandemic will require school districts or other applicants to continue paying for those connections.
[9] EducationSuperHighway estimate of average cost to provide a minimum 25/3 Mbps wired or LTE connection with no data caps and no up-front modem or wireless hotspot cost.
[10] SHLB "CARES Act Funding Research," https://www.shlb.org/policy/research/CARES-Act

suggests that schools have spent at least $1.25 billion on devices and home connectivity to close the Homework Gap.[11] While these efforts are to be commended, if the Commission allows ECF funds to be used to reimburse these previous expenditures, it will significantly reduce the ability of the ECF to close the Homework Gap for all students. Moreover, because most of these expenditures were made using other government funding sources, schools are not being penalized for taking action to connect their students. Thus, if the Commission wants to maximize the ECF's impact on the Homework Gap, it is critical that applicants only be allowed to use the ECF for prospective purchases made after the Commission opens the filing window for the ECF.

However, the Commission should allow applicants to use the ECF to pay for the costs incurred after the opening of the filing window for home broadband services that were procured prior to the opening of the filing window. For example, if a school district entered into a one year contract on January 1, 2021, for a $20 per month home broadband service and the Commission opens the ECF filing window on July 1, 2021, the applicant should be able to apply for $120 of reimbursement for the eligible service ($20 per month * 6 months). This reimbursement should be allowed whether the applicant has prepaid for the service or pays for the service in the future.

IV. THE COMMISSION SHOULD CAP THE AMOUNT OF ALLOWABLE REIMBURSEMENT FOR EDUCATIONAL DEVICES AT $500 AND SHOULD NOT INCLUDE MOBILE PHONES AS ELIGIBLE CONNECTED DEVICES.

With up to 8.2 million students still requiring an educational device, the Commission must limit the amount applicants can spend on eligible devices, or the possibility exists that no funding will be available to pay for home broadband connections for unconnected students. If schools are allowed to purchase Macbooks and other $1,000+ devices using ECF resources, the Commission could see educational device requests in excess of $8 billion. Moreover, if the Commission allows applicants to apply for reimbursements for devices already purchased during the pandemic, this figure could exceed $10 billion.[12]

EducationSuperHighway proposes that the Commission cap the amount of allowable reimbursement for educational devices at $500 per unconnected student. This is more than sufficient to purchase either of the two most commonly used educational devices (iPads and Chromebooks) and necessary accessories. In addition, EducationSuperHighway supports the Commission's proposal "not to include mobile phones (i.e., smartphones) as eligible connected devices because such devices do not allow students, school staff and library patrons to

[11] 1.8 million devices x $500 per device plus 3 million broadband connections x $20 per month x 6 months.
[12] Both of these estimates will be higher if library requests for educational devices are included.

meaningfully participate in remote learning activities and thus do not qualify as 'similar' devices under American Rescue Plan."[13]

V. THE COMMISSION SHOULD EXPLICITLY ALLOW EXISTING BULK PURCHASE PROGRAMS OR SPONSORED SERVICE AGREEMENTS TO QUALIFY FOR ECF FUNDING

During the pandemic, states and school districts quickly realized that unconnected households faced many barriers to obtaining the Internet connections their K-12 students needed. These included: (1) difficulty finding information about affordable broadband options; (2) challenges navigating the complex sign-up procedures required to access these programs, especially for non-English speakers; (3) a lack of required documentation such as social security numbers; and (4) financial obstacles, including poor credit ratings and bad debt with service providers. As a result, school districts and states often realized that the only way to provide a significant number of unconnected students with the Internet access they needed to participate in remote learning was to take responsibility for aggregating and procuring broadband connections for these households.

In response to demand from school districts, service providers began offering "sponsored service" programs where states, municipalities, or school districts could purchase home broadband connections for K-12 households. These sponsored service programs removed many of the information, process, documentation, and financial obstacles faced by unconnected households and were widely adopted by school districts as the most cost-effective and expeditious means of connecting their unconnected students to wired and wireless broadband services. As noted by NCTA, broadband providers during the pandemic have implemented "hundreds of sponsored service agreements with school districts and community partners across the country," representing "more than 12,000 schools with roughly 7 million enrolled students."[14] As a result, approximately three million K-12 students were connected to home broadband in just over six months.

The Emergency Connectivity Fund provides an opportunity to meaningfully expand the number of school districts that participate in these sponsored service programs. While hundreds of school districts have leveraged these programs, hundreds, if not thousands, more have not participated due to a lack of available funding to pay for students' home broadband connections. With over 80 ISPs, covering nearly 90% of K-12 households, launching sponsored service programs as part of EducationSuperHighway's K-12 Bridge to Broadband initiative, these programs are now available to the vast majority of school districts nationwide.

---

[13] Public Notice in WC Docket No. 21-93, released March 16, 2021, page 6.
[14] NCTA analysis, https://www.ncta.com/whats-new/how-the-cable-industry-is-bridging-the-digital-divide

To maximize the number of K-12 students connected by the Emergency Connectivity Fund, the Commission must build on what has been shown to work to connect K-12 students. Specifically, the Commission should explicitly allow services purchased under these "sponsored service" agreements to qualify for reimbursement (on a prospective basis for services received after the opening of the filing window for the ECF program only) from the Emergency Connectivity Fund.

VI. THE COMMISSION SHOULD REQUIRE APPLICANTS TO CERTIFY THAT ECF RESOURCES ARE ONLY BEING USED FOR STUDENTS WHO CURRENTLY LACK HOME BROADBAND CONNECTIONS OR AN EDUCATIONAL DEVICE.

As discussed above, to meet the Emergency Connectivity Fund's goal of closing the Homework Gap, the Commission must limit the use of ECF resources to connecting K-12 students who currently lack home broadband connections or educational devices. To ensure ECF resources are used in this manner, the Commission should require applicants to certify that funds are only being used for students who currently lack a home broadband connection or an educational device, or for students where the home broadband connection was already being purchased and paid for by the applicant. Applicants are already required to provide certifications related to the use of E-rate funds, and thus such an additional certification will not place an undue burden on applicants.

EducationSuperHighway also supports the WCB's proposal that Emergency Connectivity Fund participants be required to maintain an asset inventory of devices purchased, a record of services purchased, and a record of the service address for fixed broadband services, including all the details described in the Public Notice.[15] Such record-keeping will enable the Commission to audit the certifications being made by applicants.

VII. THE COMMISSION SHOULD REQUIRE APPLICANTS TO PROVIDE ESTIMATES OF THE NUMBER OF STUDENTS CURRENTLY LACKING HOME BROADBAND OR AN EDUCATIONAL DEVICE WHEN APPLYING FOR ECF FUNDS AND TO REPORT THE SPECIFIC NUMBER OF STUDENTS PROVIDED A HOME BROADBAND CONNECTION OR EDUCATIONAL DEVICE USING ECF FUNDS.

To measure the Emergency Connectivity Fund's success in closing the Homework Gap, the Commission should require applicants to provide estimates of the number of students currently lacking home broadband or an educational device when applying for ECF funding. This will provide the Commission with a baseline of the size of the Homework Gap at the start of implementation of the ECF. The Commission can then track progress against the objective of

[15] Public Notice in WC Docket No. 21-93, released March 16, 2021, page 16.

closing the Homework Gap by requiring applicants to report (i) the number of students they expect to provide home broadband or educational devices to when they submit specific requests for funding and (ii) the specific number of students who were provided a home broadband connection or educational device when they submit reimbursement requests. All of this data should be made public at the applicant level to enable other stakeholders to measure progress and target their own efforts to assist school districts in closing the Homework Gap.

Requiring such estimates will not pose a significant burden on applicants. Since the start of the pandemic, school districts have invested significant time and effort to identify which of their students are unconnected or lack a device, and most already have lists of many of these households. In addition, over twenty states have worked with their student information systems vendors to add fields that track whether a student has home Internet access, making it easy for districts to track the unconnected and gather additional information from families during school registration this spring. Finally, the launch of the K-12 Bridge to Broadband public-private partnership between ISPs and EducationSuperHighway, modeled after successful efforts in Chicago and North Dakota, gives states and school districts a tool to rapidly identify their unconnected students by exchanging anonymized address data with ISPs under NDA. The program currently has ISP participation covering nearly 90% of households in the United States, and data exchanges can be completed in as little as two weeks.

VIII. THE COMMISSION SHOULD FOLLOW ITS STANDARD E-RATE PRACTICES AND MAKE ALL PROCUREMENT DATA RELATED TO THE EMERGENCY CONNECTIVITY FUND TRANSPARENT AND PUBLICLY AVAILABLE.

E-rate data transparency was one of the most important drivers for closing the digital divide for America's K-12 public schools and can similarly accelerate the closing of the Homework Gap. By making E-rate procurement data transparent at the line item level, applicants could see what school districts were paying for their broadband connections and then use this information to negotiate better deals with ISPs that provided more bandwidth at lower costs. This resulted in school broadband costs decreasing 92%, with the median cost per Mbps dropping from $22 in 2013 to $1.85 in 2020. E-rate data transparency also allowed the Commission and others to track progress toward the K-12 school connectivity goals the Commission established during E-rate modernization, creating accountability for stakeholders and accelerating upgrades.

Data transparency has a similar role to play in closing the Homework Gap. By requiring applicants to report what they are buying, from whom, and at what price, the Commission can leverage open data to ensure that schools and libraries maximize the cost-effectiveness of their home broadband and educational device purchases. In addition, by requiring applicants to report the number of students served by home broadband and educational device purchases at the line item level, the Commission and other stakeholders will be able to track progress in closing the

Homework Gap and create accountability amongst federal, state, and school district leaders to take the actions necessary to finish the job.

To make this possible, EducationSuperHighway urges the Commission to require applicants to report the following information on their applications to the Emergency Connectivity Fund and to direct USAC to make this data available to the public in the same manner that it makes E-rate Form 471 data available.

For home broadband purchases:

- Broadband Provider
- Service type (e.g., cable, fiber, mobile hotspot, DSL, etc.)
- Upload and download bandwidth speeds
- Data caps (if any)
- Number of households served
- Number of students served
- Upfront cost (per unit and total)
- Monthly recurring cost (per unit and total)
- Contract start date
- Contract end date

For educational device purchases:

- Device Manufacturer
- Device type (e.g., iPad, tablet, Chromebook, laptop, desktop, etc.)
- Model number
- Cost per unit
- Total cost
- Processor & speed
- Screen size
- Memory (GB)
- Storage (GB)
- Connectivity (Wi-Fi, LTE, 5G, etc.)
- Includes video camera (yes / no)
- Any other accessories should be itemized (accessory, cost, quantity, etc.)

In addition, given the challenges that many school districts have faced with convincing K-12 families to adopt free home broadband, the Commission should require applicants to report the number of connections actually activated with each request for reimbursement and should direct USAC to make this data publicly available electronically as reimbursements requests are submitted.

IX. THE COMMISSION SHOULD ALLOW APPLICANTS TO USE A VARIETY OF TECHNOLOGIES AND STRATEGIES TO PROVIDE HOME BROADBAND FOR STUDENTS.

Closing the Homework Gap requires that applicants be given a fair degree of flexibility in finding and implementing home connectivity solutions. Millions of households, particularly in rural areas, do not have access to broadband infrastructure that can support remote learning, and millions more face adoption challenges described earlier that hinder them from signing up for available commercial services. The Commission should allow applicants to experiment with innovative solutions such as CBRS, mesh networks, and school-managed Wi-Fi networks in low-income multi-family housing and mobile home parks with significant student populations to overcome these issues. These solutions can bring high-speed broadband to places that commercial networks do not reach and overcome adoption issues by eliminating the need for families to sign contracts with ISPs.

In determining whether to approve a specific project, the Commission should utilize the same approach that it uses to evaluate special construction projects in the E-rate program. Specifically, the Commission should approve any project that delivers at least 25/3 service at an equal or lesser total cost over a five-year period than the total cost of procuring a 25/3 solution from a commercial ISP.

X. THE COMMISSION SHOULD UPDATE ITS COMMUNITY USE RULES TO ALLOW THE USE OF E-RATE FUNDED FACILITIES AND SERVICES AT ALL TIMES SO LONG AS SUCH USE IS FOR AN EDUCATIONAL PURPOSE AND FREE OF CHARGE.

By updating its rules regarding the *Community Use of Schools E-rate Funded Facilities and Services*, the Commission can reduce the cost of closing the Homework Gap by allowing school districts to extend their existing broadband networks into the community.[16]

Specifically, the Commission should update its rules to eliminate the limitation that community use is only allowed during non-operating hours so long as such use is primarily for an "educational purpose" and free of charge. With this change, the Commission should clarify that schools and libraries may extend their networks into the community to enable such community use in any way they see fit. They should further clarify that in doing so, schools and libraries will not be required to cost allocate the E-rate Funded Facilities and Services that provide connectivity to their buildings and these network extensions.

Eliminating restrictions on the community use of E-rate funded facilities and services will meet the Commission's objective of promoting broadband access and Congress's directive to

[16] FCC 10-33 Order, "E-rate Community Use Order", February 19, 2010.

consider how anchor institutions, such as schools, can ensure access to broadband services.[17] Moreover, as the Commission itself has concluded, such enhanced access comes at no additional cost to the E-rate program[18], particularly when students participate in remote learning and therefore not at school to use E-rate supported services. It is also consistent with the Commission's conclusion that community use of E-rate supported services supports the overarching goals of universal service to promote access to telecommunications and information services and that no provision of the Communications Act prohibits community use of E-rate supported services.[19]

Finally, permanently eliminating restrictions on the timing of community use of E-rate funded facilities will allow schools to determine the best ways to leverage E-rate supported services to meet their students' learning objectives. This is consistent with the Commission's conclusion that schools are in the best position to establish their own individualized community use policies, including determining hours of use.[20]

In addition to the above-recommended changes to the Community Use rules, EducationSuperHighway supports the comments made by SECA, advocating that "the FCC should issue a Declaratory Order as soon as possible to waive the off-campus cost allocation requirement as of March 13, 2020, when the pandemic emergency was first declared."[21]

CONCLUSION

Students need home connectivity to receive a public education today, whether to attend schools remotely or have an equal opportunity to succeed in their homework. This problem existed before the COVID-19 pandemic and will continue once schools reopen. It is crucial that our collective focus remains on implementing permanent solutions to closing the Homework Gap and digital divide at large. The Council of Great City Schools put the need for a long-term solution very well: "We have known for years that home connections are essential for all students and yet completely inaccessible for too many. We need to start preparing for the future – not just an extended catch-up and recovery period for students, but a long-term prioritization of reliable broadband access for all of our students."[22]

The Emergency Connectivity Fund is a groundbreaking stride in the road to a permanent closure of the K-12 Homework Gap. Implemented effectively, with a goal of closing the Homework Gap, a focus on students who currently lack either a home broadband connection or

[17] Sixth Report and Order, FCC 10-175, September 23, 2010 paragraph 23.
[18] The Sixth Report and Order prohibits schools participating in the E-rate program from requesting funding for more services than are necessary for educational purposes to serve their current student population (paragraph 24).
[19] Sixth Report and Order, FCC 10-175, September 23, 2010 paragraph 23.
[20] Sixth Report and Order, FCC 10-175, September 23, 2010 paragraph 25.
[21] SECA's Initial Comments to WC Docket No. 21-31, page 4.
[22] Council of the Great City Schools Initial Comments to WC Docket No. 21-31, page 4.

educational device, and policies that ensure the availability of data that demonstrates the cost-effective progress that has been made, the Emergency Connectivity Fund can provide the evidence needed to convince policymakers to fund a permanent solution to this critical issue of educational equity.

Respectfully submitted,

Evan Marwell
CEO
EducationSuperHighway