April 15, 2024

Marlene H. Dortch, Secretary
Federal Communications Commission
45 L Street, NE
Washington, DC 20554

Re: Notice of Proposed Rulemaking proposing E-Rate support for Wi-Fi Hot Spots for Remote Learning, Addressing the Homework Gap Through the E-Rate Program, WC Docket No. 21-31

Dear Ms. Dortch:

The Schools, Health & Libraries Broadband (SHLB) Coalition, the American Library Association (ALA), and the Consortium for School Networking (CoSN) take this opportunity to respond to the misguided filing from the Heritage Foundation concerning the FCC's proposal to allow E-rate funding for wireless broadband connectivity off-campus. The Heritage Foundation says it opposes the FCC's proposal due to its "arbitrariness, lack of evidence, erosion of parental authority, wasteful spending, and lack of authority." None of these characterizations are valid.

Our organizations strongly support the FCC's initiative, with one important clarification that we discuss below. The proposal to provide financial support to allow schools and libraries to extend their broadband service from the school or library building to students and library patrons at home is a cost-effective way to bring high-speed internet access to low-income families and students who cannot otherwise afford it.

     I.   Several studies show that Internet access promotes education and learning.

The Heritage Foundation letter asserts that there is no evidence that providing wi-fi hot spots will lead to improved homework completion or quality rates. First, it is worth noting that "homework completion" is not the only relevant standard for determining the value of the FCC's proposal; improving education is multi-faceted. In fact, there is substantial evidence that shows a positive connection between Internet access and education and learning.   Consider the following statements and body of research from a variety of reputable education and research organizations:

-   The Quello Center issued a study in early 2020 that found a significant positive impact on academic performance for students with internet access compared to those without. It concluded: "We find that students who do not have access to the Internet from home or are dependent on a cell phone alone for access perform lower on a range of metrics, including digital skills, homework completion, and grade point average. They are also less likely to intend on completing a college or university degree. A deficit in digital skills compounds many of the inequalities in access and contributes to students performing lower on standardized test scores,

such as the SAT, and being less interested in careers related to science, technology, engineering, and math."[1]

- The Consortium for School Networking (CoSN) found in a 2022 study that students experienced significantly slower network speeds outside of school hours than during school hours. More connectivity to the school network happens from outside the school (vs. at-school) as students use the internet to do their homework and learning. The same study also found that approximately one-third of high school students experienced "Far Below" or "Below" guidelines for connectivity at home, which particularly impacted socioeconomically disadvantaged students. It concluded that addressing insufficient home connectivity must continue to be a priority.[2]

- The Internet Society found that "Access to the Internet . . . can improve the quality of education in many ways. It opens doorways to a wealth of information, knowledge and educational resources, increasing opportunities for learning in and beyond the classroom. Teachers use online materials to prepare lessons, and students to extend their range of learning. Interactive teaching methods, supported by the Internet, enable teachers to give more attention to individual students' needs and support shared learning. This can help to rectify inequalities in education experienced by girls and women."[3]

- According to the Elearning Industry there are five ways that the Internet has impacted education: 1) access to knowledge, 2) collaborative learning, 3) personalized learning, 4) enhanced research capabilities, 5) global perspective and cultural exchange. It concludes: "Due to the internet's radical changes in education, a new era of learning in the digital age has begun. It has improved research capacities, promoted cooperation, widened access to knowledge, and expanded personalized learning. Additionally, it has made it possible for cross-cultural interaction and worldwide linkages, enabling pupils to flourish in a linked world. As technology develops, internet service providers are increasingly important in ensuring educational institutions have dependable, fast internet connectivity to use digital education's advantages fully." [4]

- The Sioux City (IA) School District, after receiving and implementing an FCC grant for "the Wireless on the Go" program, concluded that "While this project was only implemented for a single school year it does appear to have contributed to positive improvements in attendance, student discipline, student engagement, graduation rate, dropout rate, and some improvement in standardized test scores." [5]

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[1] https://quello.msu.edu/broadbandgap2020/.

[2] https://public.tableau.com/app/profile/jennifer.boronyak/viz/CoSNHomeInternetConnectivityFindingsJuly2022/DataStory.

[3] https://www.internetsociety.org/resources/doc/2017/internet-access-and-education/.

[4] https://elearningindustry.com/the-internets-impact-on-education-transforming-learning-in-the-digital-age.

[5] The FCC launched a "Learning on the Go" Pilot program in 2010 and awarded $10 million to test a variety of wireless projects by schools and one library to provide wireless broadband connectivity off-campus. See, the Final

- The IEEE said: "In the short term, students without broadband access may face learning challenges and limited access to relevant materials. This means they often struggle to complete homework, fall behind, receive lower grades, and sometimes even fail to graduate. Using smartphones to complete assignments causes additional problems since outdated learning software often functions poorly on smaller screens. The long-term consequences of letting the [digital] divide grow affects students for years. Many middle skill jobs require digital skills that students on the wrong side of the digital divide never learn. This limits their career opportunities throughout their life. Additionally, less education generally leads to fewer job opportunities and less financial stability."[6]

- "A 2010 study published by Economic Inquiry concluded that teenagers with access to home computers were 6–8 percentage points more likely to graduate from high school than teenagers who did not. . . . Home computers may increase high school graduation by reducing nonproductive activities, such as truancy and crime, among children in addition to making it easier to complete school assignments (JEL I2)."[7]

The evidence clearly shows how important Internet access is for education and learning, and it is completely logical for the FCC to find that expanding Internet availability will promote these goals.

2.   While screen time may raise health concerns for young people, the solution is to educate young people about these risks rather than to deny them Internet access altogether.

The Heritage filing cites several statistics documenting the increase in screen time for children and teenagers over the past few years. The "screen-time" statistics cited are not related to school-use or school-provided resources. In fact, directing students to productive and beneficial uses of technology and broadband access through their school or library would shift "screen-time" toward more educational uses and away from more harmful options. Schools have a specific interest in using "technology protection measures" to prevent inappropriate use. Schools are measured on academic outcomes and direct their scarce resources accordingly. Schools and libraries do not aim to expose minors to harmful content, to alienate their community, or to force hotspots on unwilling households.

The Heritage filing seems to be making an argument for prohibiting internet use by teenagers anytime, anywhere. But that genie left the bottle about twenty-five years ago. The Heritage approach would exarcebate the current homework gap by denying low-income households the opportunity to obtain affordable Internet access that higher income households already enjoy. Rather than trying to turn back the clock and prohibit access to social media altogether, it is much more feasible for schools and parents to educate young people about how to use the technology properly, and to ensure all students and families have equitable access to complete assignments and engage in learning.

Report filed by the Sioux City (IA) Community School District (dated February 24, 2012), WC Docket 10-222 (posted October 22, 2013) available at https://www.fcc.gov/ecfs/document/6017471147/2.
[6] https://ctu.ieee.org/consequences-of-the-digital-divide-in-education/.
[7] Robert W. Fairlie & Daniel O. Beltran & Kuntal K. Das, 2010. "HOME COMPUTERS AND EDUCATIONAL OUTCOMES: EVIDENCE FROM THE NLSY97 and CPS," Economic Inquiry, Western Economic Association International, vol. 48(3), pages 771-792, July. Available at https://ideas.repec.org/a/bla/ecinqu/v48y2010i3p771-792.html

Further, the Heritage filing ignores the reality that some social media is helpful to education. Some students may use social media for journalism or media classes, which is exactly the type of education that should be encouraged so that students learn how to use this technology appropriately. Social media may be especially important for children with disabilities.

It is also important to remember that no school or library forces parents to accept hot spots. Under the FCC's proposal, wireless services would be made available to families who need and want them. Even if the FCC adopts the funding proposal, parents will be the decision-makers; they will have the authority to decide whether or not acquiring an Internet device is in the best interests of their children. [8]

3. The FCC's proposal would be efficient and cost-effective.

The Heritage letter also suggests that the proposal would "waste" E-rate funds, and that "Adding another source for E-rate funds squeezes the current funding." This reflects a misunderstanding of how the current E-rate system operates. The current E-rate cap sits are $4.9 billion per year,[9] but the actual demand for E-rate support is around $3.2 billion.[10] There is sufficient headroom in the E-rate program to support off-campus E-rate support without "squeezing" existing E-rate services.

The E-rate program does not need "cleaning up", as the letter suggests. In fact, the E-rate program has been operating extremely efficiently over the past few years, as the improper payment rate for E-rate program dropped to 1.59% in 2023, compared to 6.33% in 2019 due to the FCC's improved management of the program.[11]

The Heritage letter further reveals its misunderstanding of E-rate by alleging that the E-rate program may lead to "overbuilding." While the concept of overbuilding may be relevant in the high-cost program, it is irrelevant in E-rate. The E-rate program is based on a provider-neutral competitive bidding process that requires schools and libraries to use the most cost-effective solution to its broadband needs. Schools and libraries often receive multiple bids from existing providers and new entrants. This process encourages a market-based, competitive process that leads to lower rates and better service quality for schools and libraries. The Heritage letter seems to suggest that schools/libraries should never be able to acquire the services of a new entrant, even if the new entrant will provide better service or lower prices. A ban on "overbuilding" would lead to less competition, higher prices and poorer quality of service for schools and libraries, and a larger Universal Service Fund.

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[8] The Heritage filing argues that there is an "exception" for social media in the CIPA statute - this is factually incorrect and no such exception exists. In fact, CIPA is written to allow *local communities* to define what is inappropriate for minors and then *requires* the use of "technology protection measures" to prevent minors from such uses. Some schools and school districts have chosen, by their own local determination, to block social media for all students. Some have chosen to do so only for younger students. For Heritage to suggest there should be a national edict overriding local community standards would dramatically expand the role of the federal government and take authority away from parents.

[9] https://www.fcc.gov/document/e-rate-and-rhc-programs-inflation-based-caps-funding-year-2024.

[10] https://www.fcc.gov/ecfs/document/10328124696356/1.

[11] See the 2023 dataset, column L, available at https://www.paymentaccuracy.gov/payment-accuracy-the-numbers/.

4.   The FCC should adopt a technology-neutral policy that allows schools and libraries to consider using Wi-Fi mesh networks or CBRS-based wireless solutions in addition to traditional hot spots.

There is, however, one way to improve the efficiency of the proposed E-rate program support for wireless services: to allow schools and libraries to take a technology-neutral approach when deciding how to bring wireless service to students and library patrons at home. While many schools and libraries obtained hot spots during the ECF program and used them successfully, many other schools and libraries found that traditional hot spots were not effective. Online learning requires high-capacity data (streaming video) that can penetrate walls and into student homes, but traditional hot spots often do not have the signal strength for video or indoor use. Restricting the proposal to traditional hot spots alone would leave some students disconnected. Other technologies – such as Wi-Fi mesh networks or CBRS-based service could provide higher levels of service at lower cost. We encourage the FCC to review the [cost study](#) submitted into the record by Dr. Raul Katz in September, 2022 on behalf of SHLB and OTI/New America which documented the substantial cost savings that could be achieved if these other technologies are equally eligible for funding.

5.   The Communications Act provides multiple provisions that provide the FCC's legal authority for this program.

Finally, it is worth noting that the FCC has considerable legal authority to allow E-rate off-campus use. The Heritage Foundation is incorrect when it says that Section 254 states that E-rate funds may "only" be used in classrooms and libraries; the word "only" does not appear in that section of the statute. In fact, there are several provisions in section 254 that provide the Commission with the legal authority to take this kind of action, including the following:

> 254 (b)(1): "Quality services should be available at just, reasonable and affordable rates."

> 254 (b)(2) "Access to advanced telecommunications and information services should be provided in all regions of the country."

> 254 (c)(3) "In addition to the services included in the definition of universal service under paragraph (1), the Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers for the purposes of subsection (h)."

> 254(h)(2) "The Commission shall establish competitively neutral rules—
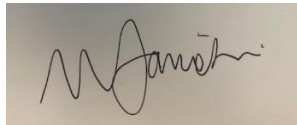
>> (A)   to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and nonprofit elementary and secondary school classrooms, health care providers, and libraries;"

For all the reasons above, we encourage the Commission to adopt an order to allow E-rate funding to support wireless internet connectivity, on a technology-neutral basis, beyond the school or library campus to help connect low-income students, library patrons and families to affordable Internet service.
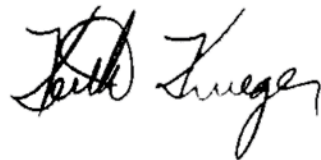
Respectfully submitted,

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