In the Matter of Addressing the Homework Gap through the E-Rate Program	WC Docket No. 21-31

COMMENTS OF NORTH AMERICAN CATHOLIC EDUCATIONAL PROGRAMMING FOUNDATION, INC. AND MOBILE BEACON

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Introduction and Summary

North American Catholic Educational Programming Foundation, Inc. ("NACEPF") and

Mobile Beacon appreciate the opportunity to comment on the Federal Communications

Commission's ("FCC" or "Commission") Notice of Proposed Rulemaking[1] released on

November 8, 2023.

NACEPF is a 501(c)(3) nonprofit organization that has licensed Educational Broadband

Service ("EBS") spectrum in 51 markets across the U.S., including 9 large metropolitan areas, 18

mid-size markets, and 24 rural, underserved parts of the country.[2] The scope and scale of NACEPF's

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[1]   *Addressing the Homework Gap through the E-Rate Program*, Notice of Proposed Rulemaking, FCC No. 23-91, WC Docket No. 21-31 (rel. Nov. 8, 2023) ("*NPRM*"). NACEPF and Mobile Beacon agree that the Commission has legal authority to extend E-Rate funding to Wi-Fi hotspots and similar devices, and associated services. *NPRM* ¶ 45.

[2]   A list of markets where NACEPF holds an EBS license is available at www.nacepfnet/about-nacepf.html.

EBS license holdings enabled it to negotiate lease terms that furnish substantial educational benefits to accredited schools in its licensed geographic service areas, and provided it the ability to provide service to a broad range of educational, nonprofit, and other community anchor institutions both in its licensed areas and throughout the country. A crucial part of these agreements is the number and quality of mobile broadband data subscriptions and devices that NACEPF receives and distributes through its wholly owned subsidiary, Mobile Beacon, to support the broadband needs of K-12 schools, public libraries, colleges and universities, nonprofits, museums, healthcare, and other community anchor institutions. Since Mobile Beacon was formed in May 2010, mobile hotspots paired with Mobile Beacon's unlimited data plans have been the primary offering utilized by Mobile Beacon's educational and nonprofit customers for nearly 14 years. Today, 771 schools, 1,740 libraries, and 6,523 nonprofits rely on Mobile Beacon's internet service each day.

Reliable, high-speed internet is critical for educational opportunity, as well as for "economic opportunity, job creation, and civic engagement."[3] NACEPF and Mobile Beacon strongly support the *NPRM*'s proposal to extend E-Rate funding eligibility to Wi-Fi hotspots and similar devices and services, and urge the Commission to adopt an inclusive approach to E-Rate funding eligibility to close the digital divide for students, school staff, and library patrons who lack adequate—or any—internet access at home.

While the Commission's Emergency Connectivity Fund ("ECF") Program data provides a helpful starting point to estimate demand for, and the potential cost of, funding Wi-Fi hotspots for at-home use, the Commission should avoid over-reliance on those numbers. The Commission should also rely on participating schools and libraries to assess unmet need in their communities

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[3]   *NPRM* ¶ 1.

and to ensure that funded devices and services are used in compliance with E-Rate Program

requirements.

I. Internet Connectivity Is Essential for Educational Opportunity.

NACEPF and Mobile Beacon support the Commission's efforts to close the digital divide

for students, school staff, and library patrons. A 2017 survey conducted by Mobile Beacon,

Bridging the Gap: What Affordable, Uncapped Internet Means for Digital Inclusion, confirmed:

> Digital inequality is a persistent challenge in our increasingly online society. Though more content and services continue to be driven online, there are still 34 million Americans without access to technology or connectivity. While there are multiple barriers to connectivity, the two main drivers that affect a person's ability to participate online are the availability of service and the ability to afford it.[4]

The *NPRM* makes a compelling case for internet access beyond on-premises internet at schools

and libraries[5] and appropriately proposes to expand on the ECF Program's effort to support

schools' and libraries' Wi-Fi hotspot loan programs for students, school staff, and library patrons

who remain stranded on the wrong side of the digital divide.

At-home internet is critical to support educational opportunity in light of the proliferation

of—and increasing reliance on—online instruction and remote learning.[6] The Commission has

previously observed that "[t]o accomplish truly ubiquitous digital learning, students must be able

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[4]   Samantha Schartman-Cycyk & Katherine Messier, *Bridging the Gap: What Affordable, Uncapped Internet Means for Digital Inclusion* 4 (2017), *available at* https://www.mobilebeacon.org/wp-content/uploads/2018/05/MB_ResearchPaper_ FINAL_WEB.pdf ("Bridging the Gap Survey"). Mobile Beacon partnered with PCs for People to create Bridging the Gap, a program that offers affordable computers and uncapped, unthrottled mobile broadband service to individuals and families below the 200% poverty line. The Bridging the Gap Survey drew from a random sample of 2,930 Bridging the Gap subscribers in the Twin Cities area of Minnesota and collected 415 responses from survey participants between December 2016 and January 2017. Bridging the Gap Survey at 6.

[5]   *NPRM* ¶ 11 n.35, ¶ 12 n.41-43.

[6]   *Id.* ¶¶ 1-2.

to connect beyond the school walls."[7] Mobile Beacon's Bridging the Gap Survey similarly observes that "most students across the country are expected to research topics online, write papers, and create presentations using computers and the internet."[8] In 2017, 54% of parents in the Bridging the Gap Survey reported that their children spend more than four hours per week doing online homework.[9] The ongoing popularity of homeschooling and hybrid teaching[10] have reframed the concept of the "classroom."[11] Learning can and does occur beyond a school campus or library building.

Yet many students and school staff members are unable to connect to the internet at home, and "[a] lack of internet access at home makes completing these tasks much more difficult."[12] An estimated 15-16 million students are affected by the Homework Gap, either because they lack an adequate internet connection at home, lack a distance learning device, or both.[13]

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[7]   The Digital Textbook Collaborative, *Digital Textbook Playbook* at 5, 30 (2012), *available at* https://transition.fcc.gov/files/Digital_Textbook_Playbook.

[8]   Bridging the Gap Survey at 12.

[9]   *Id.* at 5.

[10] *See* Melissa Kay Diliberti & Heather L. Schwartz, RAND Corp., *The Rise of Virtual Schools: Selected Findings from the Third American School District Panel Survey* 1 (2021), *available at* https://www.rand.org/pubs/research_reports/RRA956-5.html ("One-quarter of surveyed [K-12 school] districts plan to run a virtual school in 2021–2022, which is a ninefold increase from the pre-pandemic level.").

[11] *NPRM* ¶ 52.

[12] Bridging the Gap Survey at 12.

[13] Sumit Chandra et al., *Closing the K-12 Digital Divide in the Age of Distance Learning* at 10 (2020), *available at* https://www.commonsensemedia.org/sites/default/files/featured-content/files/common_sense_media_report_final_7_1_3pm_web.pdf ("*Closing the K-12 Digital Divide in the Age of Distance*").

Lack of connectivity has a real impact on students' educational experience: in a 2015 study conducted by the Hispanic Heritage Foundation, nearly 50% of survey participants were unable to complete a homework assignment because they did not have access to the internet or a computer, while 42% responded that they received a lower grade on an assignment because they did not have internet access.[14] A 2021 report from Boston Consulting Group, Common Sense Media, and Southern Education Foundation observed that "[h]istorically students caught in the digital divide have had overall GPAs about 0.4 points lower than students with access."[15]

To bridge the digital divide, some schools loan out mobile hotspots so that students without access to the internet at home can complete school assignments, engage in remote learning, and otherwise fully engage in their educational experience. Beginning in 2020, the COVID-19 pandemic made remote learning a necessity, and Mobile Beacon provided mobile hotspots to more than 1,422 schools throughout the United States. Schools using those hotspots consumed 3,523,000 GBs of data, a 45% increase in data usage by schools compared to the previous year—as data-intensive applications like video conferencing became the norm during the COVID-19 pandemic.[16]

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[14] Bridging the Gap Survey at 12 (citing Clare McLaughlin, *The Homework Gap: The 'Cruelest Part of the Digital Divide'*, NEAToday (Apr. 20, 2016), https://www.nea.org/nea-today/all-news-articles/homework-gap-cruelest-part-digital-divide). *See also* Hispanic Heritage Found. et al., *Taking the Pulse: of the High School Student Experience in America Research Findings "Access to Technology" Phase 1 of 6*, at 11 (2015), *available at* https://fosi-assets.s3.amazonaws.com/media/documents/Taking_the_Pulse_Phase_1_Research_Findings_FINAL.pdf.

[15] Titilayo Tinubu Ali et al., *Looking Back, Looking Forward: What it Will Take to Permanently Close the K-12 Digital Divide* 8 (2021), *available at* https://www.commonsensemedia.org/sites/default/files/featured-content/files/final_-_what_it_will_take_to_permanently_close_the_k-12_digital_divide_vfeb3.pdf; *see also NPRM* ¶ 17 n.64.

[16] *Supporting Schools During the COVID Pandemic*, Mobile Beacon (Jan. 5, 2021), https://www.mobilebeacon.org/supporting-schools-during-the-covid-pandemic-blog/.

Public libraries similarly loan out mobile hotspots to close the digital divide for library patrons without access to the internet at home.[17] In 2012, Mobile Beacon pioneered the library hotspot lending model with Providence Community Library in the first library hotspot lending program of its kind in Rhode Island.[18] The program caught national attention from the American Library Association and the Online Computer Library Center, and Mobile Beacon began working with other libraries throughout the United States. In 2014, Mobile Beacon partnered with Sprint to provide the New York Public Library with 10,000 mobile hotspots, the largest library hotspot lending program in the country at that time.[19] Several years later, a 2017 survey conducted by Mobile Beacon, *Creating Opportunity Through Connectivity: How Mobile Broadband for Anchor Institutions Impacts Communities*, noted that over 62% of public libraries across the nation were the only free source of internet in their community.[20] Library patrons who

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[17]   Bridging the Gap Survey at 4.

[18]   *How one Library is "Loaning out the Internet" using Mobile Technology,* Mobile Beacon, https://www.mobilebeacon.org/how-one-library-is-loaning-out-the-internet-using-mobile-technology/ (last visited Jan. 16, 2024).

[19]   *See* Monica Alleven, *NYC libraries to lend out 10,000 Wi-Fi hotspots*, Fierce Wireless (Jan. 13, 2015), https://www.fiercewireless.com/tech/nyc-libraries-to-lend-out-10-000-wi-fi-hotspots; *Mobile Beacon Partners with Sprint on the Largest U.S. Library Internet Lending Pilot*, Mobile Beacon, https://www.mobilebeacon.org/mobile-beacon-partners-with-sprint-and-new-york-libraries-on-the-largest-library-internet-lending-pilot-in-the-united-states/ (last visited Jan. 16, 2024).

[20]   Samantha Schartman-Cycyk & Katherine Messier, *Creating Opportunity Through Connectivity: How Mobile Broadband for Anchor Institutions Impacts Communities* at 13 (2017), *available at* https://www.mobilebeacon.org/wp-content/uploads/2018/01/Creating OpportunitiesResearchPaper_2018-1.pdf ("Creating Opportunity Survey"). The Creating Opportunity Survey drew from a random sample of 2,508 Mobile Beacon nonprofit clients and collected 443 responses from survey participants between November and December 2016. *Id.* at 5.

"borrow[ed] the internet" through a hotspot lending program accounted for 55% of Mobile Beacon's service use.[21]

As longtime supporters of school and library hotspot lending programs, NACEPF and Mobile Beacon support the *NPRM*'s proposal to extend E-Rate funding eligibility to devices, like Wi-Fi hotspots, that expand much-needed access to at-home connectivity.

II. The Commission Should Adopt an Inclusive Approach to E-Rate Funding Eligibility.

In light of the importance of internet connectivity for students, school staff, and library patrons, NACEPF and Mobile Beacon urge the Commission to adopt an inclusive approach to E-Rate funding eligibility for Wi-Fi hotspots in order to maximize connection opportunities for those who lack adequate internet connectivity at home. To meet this challenge, the Commission should take the following steps.

First, the Commission should extend E-Rate eligibility not just to Wi-Fi hotspots, but also to other devices that perform equivalent functions. The *NPRM*'s proposal to limit eligibility to Wi-Fi hotspots alone focuses too narrowly on a specific technology and device rather than on the underlying goal of providing educational connectivity.[22] Although Wi-Fi hotspots are one popular class of device, other devices—such as USB modems,[23] Chromebooks with built-in data

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[21] *Id.* at 15.

[22] *NPRM* ¶ 19.

[23] *See* Candiece Cyrus, *What Is an Internet Dongle?*, Forbes (Nov. 4, 2022), https://www.forbes.com/advisor/au/internet/what-is-an-internet-dongle/#:~:text=Otherwise%20known%20as%20a%20wi,the%20device%20you're%20using; *Ways To Use Cellular Data To Get Online: Mobile Hotspot, Smartphone, Tablet Or Router?*, Mobile Internet Res. Ctr. (Dec. 7, 2023), https://www.rvmobileinternet.com/guides/mifijetpack-usb-modem-or-smartphone-hotspotting/.

connections,[24] and other Wi-Fi enabled devices such as tablets—offer equivalent functionality. Such devices are capable of providing connectivity to students, school staff, and library patrons with unmet need, and may be particularly useful to students, school staff, and library patrons living in rural or other remote areas with limited connectivity options. There is no reason to exclude them from E-Rate funding eligibility.

Second, instead of adopting a blanket per-household or per-user limit on funding eligibility,[25] the Commission should consider whether funding-eligible hotspots are served by an account with a sufficient data allowance for educational purposes.

Certain providers offer mobile hotspot devices with an accompanying Wi-Fi service plan with a data cap, while others, like Mobile Beacon, offer unlimited data plans. The Bridging the Gap Survey showed that prior to enrolling in the Bridging the Gap Program, an overwhelming 94% of households surveyed had previous internet service subject to 10 GB or less of data per month, with 30% having access to 2 GB or less per month.[26] Data caps limit functionality: twenty-two percent of survey respondents reported an inability to complete certain online activities due to insufficient data, with a significant proportion reporting difficulty using data-capped service for online classes or homework.[27]

Instead of focusing on whether a hotspot will allow a single user or multiple users to connect, the Commission should instead consider the impact of data-capped service plans. There is no reason to exclude multi-user hotspots from funding eligibility if the hotspot is served by an

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[24]   Comments of Educational Broadband Service Agency LLC (d/b/a Mobile Beacon) at 2, WC Docket Nos. 11-42, 09-197, 10-90 (filed Aug. 31, 2015) ("Mobile Beacon 2015 Comments").

[25]   *NPRM* ¶ 20.

[26]   Bridging the Gap Survey at 16.

[27]   *Id*. at 18.

unlimited data plan or otherwise provides sufficient data for multi-user functionality. Indeed, standard commercially available hotspots are, in NACEPF and Mobile Beacon's experience, all capable of connecting multiple users—NACEPF and Mobile Beacon are not aware of any that are restricted to single-user use. Thus, hotspot devices would need to be affirmatively limited to restrict the device to single-user functionality, which, as discussed above, is not necessary to achieve the Commission's objectives.

For the same reason, wireless internet access services that can be supported and delivered by multi-user hotspots should be funding-eligible, provided that they do not have data caps or otherwise offer sufficient data for educational purposes.[28] And, even for single-user hotspots, the Commission should ensure that such devices are served by sufficient data for educational purposes. Households with more than one school-age student will likely require either a multi-user hotspot with unlimited data or a sufficiently high data cap, or, if the hotspot is served by a low data cap, multiple per-user hotspots to support learning objectives.[29]

With regard to funding eligibility for multi-user hotspots, the Commission should also account for the role of parental involvement in students' school performance. Parents and guardians require connectivity to support students' learning objectives. In the Bridging the Gap survey, 94% of parents reported that Mobile Beacon's internet service helped them better support their child's academics, and 95% of respondents with school-age children reported that they can communicate with their child's teachers more often since enrolling in the Bridging the Gap

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[28]   *NPRM* ¶ 21.

[29]   *Closing the K-12 Digital Divide in the Age of Distance Learning* at 17 (estimating data needs for real-time classroom engagement administered through video ranging from 10 GB-100 GB/month).

Program.[30] Research has found that "parental involvement is associated with higher student achievement outcomes."[31] The Commission should account for parents' and guardians' need for at-home connectivity to support students' education.

Third, the Commission should extend funding eligibility to both Wi-Fi hotspots and similar devices, and to the services associated with such devices.[32] Such funding goes hand-in-hand; it makes little sense to divorce funding for devices from funding for the services necessary to make those devices functional.

Fourth, the Commission should not limit funding eligibility to a nine-month school year.[33] Many students will require connectivity for summer school and related extracurricular educational programming, many school staff will require connectivity over the summer to plan their curriculum for the upcoming year, and many library patrons will require connectivity to participate in libraries' summer programing. Recent data from the National Center for Education Statistics shows that 78% of U.S. public schools offered academic summer programming in 2023.[34] Summer programming is not limited to schools—a 2019 survey from the School Library Journal found that 97% of public libraries across the nation increase youth programming,

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30   Bridging the Gap Survey at 13-14.

31   William H. Jeynes, *Parental Involvement and Student Achievement: A Meta-Analysis*, Family Involvement Research Digests, Harvard Family Research Project (Dec. 2005), https://archive.globalfrp.org/publications-resources/publications-series/family-involvement-research-digests/parental-involvement-and-student-achievement-a-meta-analysis. *See also* William H. Jeynes, *A Meta-Analysis of the Relation of Parental Involvement to Urban Elementary School Student Academic Achievement*, 40 Urban Educ. 237, 237 (2005).

32   *NPRM* ¶ 21.

33   *Id.* ¶ 39.

34   *The Majority of K-12 Public Schools Offer Academically Focused Summer and After-School Programs*, Nat'l Ctr. for Educ. Stats. (NCES) (Nov. 8, 2023), https://nces.ed.gov/whatsnew/press_releases/11_8_2023.asp#:~:text=Eighty%2Dtwo%20percent%20of%20U.S.,bridge%2C%20and%20other%20summer%20programs.

including reading initiatives, over the summer.[35] Indeed, in light of the learning loss that occurred during the COVID-19 pandemic, the year-round learning opportunities offered by schools and libraries should be supported through E-Rate-eligible funding. The Commission should not discourage continued learning through the summer by cutting off connectivity required for that learning.[36] Instead of a one-size-fits all rule, the Commission should trust educators to make individual decisions about which students need access and when.

Fifth, the Commission should not limit the number of off-premises hours during which a student, school staff member, or library patron can use a funded hotspot.[37] Schools' ongoing reliance on hybrid teaching means that all students may have a need for at-home connectivity for educational purposes. Students spend a significant number of hours online each day—54% of parents in the Bridging the Gap survey reported that their children spend more than 4 hours per week doing online homework alone.[38] Students' hotspot use may vary over time, depending on the connectivity needed for digital learning and homework. And, there may be times when students need to use a hotspot for a longer time period than typical—for example, if they are catching up on assignments after being out sick or studying for year-end exams. Instead of

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[35] Lauren Barack, *Public Library Summer Programming Is Vital to Communities, SLJ Shows*, Sch. Libr. J. (June 11, 2019), https://www.slj.com/story/Public-Library-Summer-Programming-Is-Vital-to-Communities-SLJ-Survey-Shows. *See also Summer Reading Programs Statistics*, N.Y. State Libr. (last updated June 14, 2023), https://www.nysl.nysed.gov/libdev/summer/programstatistics.htm ("Over 1.4 million young people from pre-K to teens participated in *Summer Reading at New York Libraries* in 2022.").

[36] As discussed below, if demand exceeds available funds, the Commission can consider requiring schools and libraries to identify students, school staff, and library patrons who require continued connectivity over the summer. For example, schools could verify which students are actually enrolled in summer educational programming.

[37] *NPRM* ¶ 36.

[38] Bridging the Gap Survey at 5.

focusing on the duration of use, the Commission should, as discussed below, rely on educators and library administrators to ensure that funded hotspots are used for an educational purpose.

Sixth, the Commission should not impose unnecessary restrictions on households' receipt of funding from multiple federal universal service programs. The *NPRM* acknowledges that there is no prohibition on a household simultaneously benefiting from multiple Universal Service Fund ("USF") programs.[39] Indeed, households are entitled to apply under different USF programs for different eligible needs. Moreover, the Commission has previously acknowledged that "no one program or entity can solve [the homework gap] problem on its own."[40] In lieu of an unduly restrictive approach, the Commission can, as discussed in more detail below, rely on schools and libraries to assess unmet need in their communities and distribute hotspots to students, school staff, and library patrons who would otherwise lack internet access at home.

If the Commission were to impose such cross-program restrictions, it would need to do so at a high level of granularity to avoid counterproductive outcomes. For example, a school-age student might spend weekdays with one parent and weekends with another parent in a different household, and could require mobile weekend connectivity for homework and other educational purposes. The Commission's restrictions would also need to avoid unfounded assumptions. For example, the Commission cannot assume that an adult with a hotspot-enabled smartphone can provide the phone to a school-age child in the household to complete homework assignments—the adult might have a data-capped service plan that is inadequate for educational purposes. The

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[39] *NPRM* ¶ 42.

[40] *Lifeline and Link Up Reform and Modernization et al.*, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, Second Report & Order, and Memorandum Opinion & Order, 30 FCC Rcd. 7818, 7831 ¶ 22 (2015).

Commission is ill-suited to perform such fact-specific cross-program vetting—rather, educators are best situated to assess the needs of the students in the communities they serve.

Finally, Head Start and pre-kindergarten school populations should not be categorically excluded from funding eligibility.[41] The Commission should not discount the possibility that younger students require education-related connectivity nor should it rule out the possibility that connectivity is needed to access certain educational programs targeting younger students. For example, much like mobile case workers in the healthcare field benefit from access to a patient's electronic healthcare record at all times, educators providing early learning services to students at home may similarly benefit from electronic access to assist in the delivery of certain services or to access a student's history, testing, or goals. Importantly, funding eligibility for Head Start and pre-kindergarten students will still be cabined by the threshold E-Rate Program requirement that the at-home connectivity must be used for an educational purpose.

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[41] *NPRM* ¶ 33.

III. ECF Program Data Is a Useful Proxy, But Does Not Set a Ceiling, for Estimating the Cost of Funding Wi-Fi Hotspots.

The *NPRM* estimates that "approximately 4.5 million students, school staff, and library patrons received mobile broadband service and/or hotspots through the ECF Program for the 2021-2022 school year, with an average cost of approximately $294 per user per year."[42] The *NPRM* proposes to use this ECF Program data to estimate the demand for E-Rate Program-funded Wi-Fi hotspots and the resulting cost of funding Wi-Fi hotspots and service through the E-Rate Program. While ECF Program data provides a helpful starting point, the Commission should avoid over-relying on such data for several reasons.

Data on demand for *ECF* Program-funded hotspots provides a useful proxy for estimating demand for *E-Rate*-funded hotspots, but should not be used to set a cap on maximum expected demand. The *NPRM* estimates that approximately 4.5 million individuals received mobile broadband service and/or hotspots through the ECF Program. As ECF Program funding sunsets, these individuals are likely to look to the E-Rate Program to fund continued connectivity. But the Commission should bear in mind that applicants faced significant logistical obstacles in seeking funding from the ECF Program,[43] resulting in a second window to submit funding requests.[44] In

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[42] *Id.* ¶ 25.

[43] *Id.* ¶ 14 n.53.

[44] *See id.* ¶ 25 n.80; *see also* News Release, FCC, FCC Announces Over $5 Billion in funding Requests Received in Emergency Connectivity Fund Program at 1 (Aug. 25, 2021), *available at* https://docs.fcc.gov/public/attachments/DOC-375210A1.pdf ("The FCC will open the second application filing window to provide support for the current school year in light of outstanding demand, including applications that were filed after the close of the initial application filing window, and resource challenges some schools faced with a summertime application filing window."); *Establishing Emergency Connectivity Fund to Close the Homework Gap*, Order, 37 FCC Rcd. 1915, 1919 ¶ 11 (2022) (referencing "delays," "administrative burdens," and "confusion among program participants"); Divya Sridhar, *#AskExcelinEd: What are the lessons learned from the first round of the Emergency Connectivity Fund?*, ExcelinEd (Sept. 14, 2021), *available at* https://excelined.org/2021/

light of this, demand for E-Rate Program-funded hotspots may well exceed the number of

applicants for ECF Program-funded hotspots. While the 4.5 million figure[45] is useful to assess

potential minimum demand for E-Rate Program-funded hotspots, it should not be used to

estimate maximum demand.

Once the Commission accurately estimates demand for funded hotspots, it must estimate

the cost of purchasing and servicing each device. As the *NPRM* acknowledges, the estimated cost

of $294 per user per year is only an average cost.[46] The *NPRM* takes the average cost of a Wi-Fi

hotspot ($107.80 per device) and the average cost of mobile broadband service for one user in a

single year ($15.44 for one month, multiplied by twelve) and combines the two to reach the $294

figure.[47] But the *NPRM* does not specify whether the $15.44/month figure accounts for unlimited

data usage or reflects a data-capped plan—as noted above, this distinction is critical to ensuring

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09/14/askexcelined-what-are-the-lessons-learned-from-the-first-round-of-the-emergency-connectivity-fund/ ("[S]tates and districts faced some hurdles with applying and leveraging the opportunity during the first funding window . . . The application window was opened primarily during the summer when many state and district personnel and coordinators supporting applications are away . . . Program participation rates may have fallen short due to lack of awareness about the program and a lack of coordination among the various stakeholders needed to complete the application process."); Letter from Marijke Visser, Senior Policy Advocate, ALA, and Alan Inouye, Public Policy and Government Relations, ALA, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 21-93, at 1 (filed July 12, 2021), *available at* https://www.ala.org/advocacy/sites/ ala.org.advocacy/files/content/telecom/erate/ALA_letter_patron_data_retention_extention_0 7122021.pdf ("Libraries that are considering applying for ECF funding are currently working to implement such processes but because of necessary adaptions to the systems which libraries use to circulate materials, including ECF eligible devices, many are concerned that they will not be able to be in compliance by the close of the application window. This issue has been raised as a reason to decide not to participate in the ECF program.").

[45] *NPRM* ¶¶ 25-26.

[46] *See id.* ¶ 25 n.80.

[47] *Id.*

that students are not merely connected, but also have sufficient bandwidth for their educational

needs. The $294 figure also does not account for certain added costs, such as taxes.[48]

Additionally, given the timing of the ECF Program, the $107.80 per device figure may

reflect the cost of a 4G mobile hotspot. If so, the Commission should ensure that its data reflects

current-generation technology and the on-average higher cost of 5G mobile hotspot devices. For

example, Mobile Beacon's 4G mobile hotspot is offered for $57,[49] but its 5G mobile hotspots

range in price from $190-$336.[50] AT&T currently offers three 5G mobile hotspots ranging in

price from $209.99 to $459.99, but only one 4G mobile hotspot for $79.99.[51] Over time, 4G-only

mobile hotspots are likely to become "end of life" devices such that only 5G mobile hotspots

(which also provide 4G connectivity) will be available.

The *NPRM* also does not estimate the cost of devices other than hotspots that perform

equivalent functions. As noted above, such devices should be funding-eligible, and the

Commission should account for the estimated cost of such devices. The cost of an iPad for

schools can be approximately $329 while the price of Chromebooks for schools can range in

price from approximately $150 to $250.[52] If the Commission allows these other types of Wi-Fi

devices to be eligible for E-Rate funding, the Commission could either make the entire device

cost eligible for funding or set a cap on device funding per unit. This approach would cover at

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[48] *Id*.

[49] *4G LTE Mobile Devices,* Mobile Beacon, https://www.mobilebeacon.org/devices/ (last visited Jan. 16, 2024).

[50] *5G Mobile Devices*, Mobile Beacon, https://www.mobilebeacon.org/5g-mobile-devices/ (last visited Jan. 16, 2024).

[51] Pricing obtained at https://www.att.com/buy/connected-devices-and-more/ on January 16, 2024.

[52] *iPad vs. Chromebook for Schools — A Complete Comparison*, GoBox, https://go-box.com/resources/ipad-vs-chromebook-for-school/ (last visited Jan. 16, 2024).

least some device costs while still affording schools and libraries the flexibility to select the device that best meets the needs of their students, school staff, and library patrons.

The Commission should also factor in the useful life of a Wi-Fi hotspot and replacement needs when determining funding costs. NACEPF and Mobile Beacon agree with the *NPRM*'s estimate that many Wi-Fi hotspots have a useful life of three to five years. However, many such devices come with a one-year warranty, and a certain percentage will require replacement before the three-to-five-year period expires. A review of our own internal mobile hotspot data shows that hotspots are generally very reliable, with a failure rate of only 2.3% for all 4G mobile hotspots deployed over a three-year period. Of that small number of failed devices, 55.8% of those were deemed defective within the first 12 months, 27.78% of those were deemed defective in year 2, and 16.37% were deemed defective in year 3. The Commission should take these replacement realities into account when determining overall funding levels.

IV. Participating Schools and Libraries Are Best Situated to Assess Unmet Need, While Service Providers Are Best Situated to Validate Ability to Meet That Need.

Educators and library administrators are best situated to assess unmet need within their communities, and the Commission should rely on schools and libraries to compile this data.

National School Lunch Program ("NSLP") and School Breakfast Program enrollment provides one data point to assess unmet need,[53] but the Commission should avoid overreliance on such data. There may be instances in which a household is ineligible for NSLP enrollment but nonetheless has an unmet need for home internet connectivity. For example, an individual may live in an area where their income is too high to qualify for NSLP but where their household

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[53]   *NPRM* ¶ 32.

remains unconnected because there is no fixed provider serving the area or because the cost of connectivity is prohibitively high.

Indeed, there is often no "low cost option" available to consumers, especially in rural areas. For instance, the National Digital Inclusion Alliance ("NDIA") recently published a white paper raising awareness that two of the nation's largest telecommunications providers are charging essentially identical rates ($63–65/month) for high-speed fiber service, and their slow internet service is provided on old, copper-only infrastructure.[54] The Commission accordingly should not condition Wi-Fi hotspot support on participation in NSLP or similar programs, and instead should adopt a more flexible standard for demonstrating unmet need.

To implement that standard, the Commission should rely on schools and libraries to survey and compile data on unmet need.[55] Schools and libraries are closest to their students, school staff, and library patrons and are best positioned to assess such need within their community. Schools and libraries can undertake a survey of their students, school staff, and patrons to assess connectivity options in constituents' homes and can update that data with renewed surveys on a periodic basis.

The Commission should also account for whether a service provider in the area is able to offer connectivity to households with unmet need. The *NPRM* acknowledges that in certain areas, "a single service provider may not be able to provide service throughout the school's or library's service area."[56] E-Rate-funded purchase of a Wi-Fi hotspot device alone is an

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[54]   Bill Callahan & Angela Siefer, Nat'l Digit. Inclusion All., *Tier Flattening: AT&T and Verizon Home Customers Pay a High Price for Slow Internet* (July 31, 2018), *available at* https://www.digitalinclusion.org/wp-content/uploads/2018/07/NDIA-Tier-Flattening-July-2018.pdf.

[55]   *NPRM* ¶ 31.

[56]   *Id.* ¶ 24.

insufficient solution in areas where there is no commercially available mobile service or where existing service is of insufficient speed or quality to meet remote learning needs.[57] To address potential lack of service coverage, participating schools and libraries should be permitted to rely on multiple service providers to meet constituents' connectivity needs in their area.[58] Broadband Data Collection maps could help validate whether a particular household with unmet needs can be served by a provider in the area.

Funding Wi-Fi hotspots will necessarily be an iterative process—a student, school staff member, or library patron may borrow a funded device, take it home, and then learn that the hotspot will not work or cannot offer adequate connectivity in their home with the school or library's selected service provider. The Commission's rules should build in sufficient flexibility to address this possibility—for example, the school or library may consider selecting a different service provider for the user's geographic location or may request that the user return the device, so it can be distributed to someone else in the community. Data collected from schools and libraries regarding unmet need and connectivity options for household in their communities should be fed into the Commission's ongoing Broadband Data Collection mapping process, creating synergies between the two initiatives. If service is unavailable to a student, school staff member, or library patron receiving the mobile hotspot, the school or library will receive that feedback, and if not unduly burdensome, participating schools and libraries could enter that data into the Broadband Data Collection mapping process.

In the event that demand exceeds available funding, the Commission can consider several options to prioritize funding based on unmet need. The Commission might consider offering

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[57] *Id.* ¶ 27; *see also* Bridging the Gap Survey at 28-29 (assessing amounts of data usage associated with education-related online activities).

[58] *NPRM* ¶ 24.

subsidies for service—which is an ongoing cost that is prohibitively expensive for some users in rural or other remote areas—before it subsidizes device costs, which would allow schools and libraries with existing hotspot programs and ECF-funded hotspots to continue loaning out those devices for off-premises use.[59] More broadly, the Commission should also consider whether there are other ways of rationalizing its funding priorities. For example, the Commission should consider whether there is a reason to focus on specific types of service, rather than neutrally funding any service that supports students' ability to learn and meets the applicable legal requirements for E-Rate funding. Lastly, if necessary, without eliminating funding for year-round connectivity for students and library patrons enrolled in summer learning programs, the Commission could require schools to discontinue service if they do not offer summer programming, or to discontinue service only for students who are not actually enrolled in summer programming.

V. Participating Schools and Libraries Are Best Situated to Monitor Compliant Usage of E-Rate-Funded Devices and Service.

Participating schools and libraries are best positioned to monitor whether E-Rate-funded hotspots are being used for an educational purpose. As the *NPRM* suggests, schools and libraries can provide copies of hotspot acceptable use policies to any student, school staff member, or library patron who borrows a hotspot.[60] This practice would not require review of, or intrusion

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[59] *Id.* ¶¶ 21, 26.

[60] *Id.* ¶ 36; *see also Establishing the Emergency Connectivity Fund to Close the Homework Gap*, Report & Order, 36 FCC Rcd 8696, 8737 ¶ 82 (2021) ("To ensure that libraries are providing eligible equipment and services to patrons with unmet needs, we therefore require that on a going forward basis before providing a library patron with eligible equipment or services, for which the library is seeking Emergency Connectivity Fund support, the library must provide the patron a copy of an eligible use policy, which explains that the equipment or service is intended for library patrons who do not otherwise have access to equipment or services sufficient to meet the patron's educational needs.").

into, user content.[61]

If the Commission adopts a numerical threshold to identify non-usage of devices,[62] that threshold should be sufficiently flexible to account for periods of lower use or disuse—for example, a hotspot might be used infrequently during the start of a summer holiday and be used more frequently near the end of summer when students are completing back-to-school activities such as summer reading projects. The Commission should require service providers to compile usage data and send a notification to a school or library when a funded device is not being used.[63]

Schools and libraries are best situated to maintain any required usage and compliance records. The Commission could require schools and libraries to retain surveys of unmet need within the community and documents validating a true need for summer connectivity. Schools and libraries are also best situated to maintain inventory records similar to those used in the ECF Program,[64] by keeping track of loaned and available devices and maintaining records for devices that are reported as lost or never returned.

Finally, NACEPF and Mobile Beacon support the Commission's goal of extending connectivity for educational purposes. However, this focus assumes that the funded hotspot device is served by a plan subject to a data cap, such that the limited data should be kept available for educational use. Where a device is served by an unlimited data plan, if any incidental use of the service occurs by a member of the household, there is no risk that the service will not remain primarily available for the educational needs of the student or library

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[61]   *NPRM* ¶ 37.

[62]   *Id.* ¶ 39.

[63]   *Id.* ¶ 40.

[64]   *Id.* ¶ 43.

patron in the household. NACEPF and Mobile Beacon accordingly support the *NPRM*'s suggestion that schools and libraries permit their communities to use E-Rate Program-funded hotspots and services for incidental and legitimate purposes—such as telehealth appointments— provided that students, school staff, and library patrons have first priority of use.[65] As long as such incidental use does not inhibit or preclude the service from being used primarily for its educational purpose, the Commission should not be overly restrictive in excluding the ability of others to benefit from the service, especially when such incidental use is also for an educational purpose—for example, to help parents and guardians communicate with teachers, assist with homework, apply for financial aid, earn their General Educational Development ("GED") degree, or enroll in additional online courses.

Conclusion

NACEPF and Mobile Beacon support the Commission's efforts to extend at-home connectivity for students, school staff, and library patrons who remain on the wrong side of the digital divide. To meet the challenge of closing the Homework Gap, the Commission should adopt an inclusive approach to funding eligibility, compile and assess relevant data to estimate demand and cost, and rely on schools and libraries to assess need and monitor compliant use in their communities.

Respectfully submitted,

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[65]　*Id.* ¶ 38 n. 97.

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