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

In the Matter of
EMERGENCY RELIEF TO ALLOW THE USE OF E-RATE FUNDS TO SUPPORT REMOTE LEARNING DURING THE COVID-19 PANDEMIC ) ) ) ) ) ) WC Docket No. 21-031

COMMENTS OF
THE CITY OF CHICAGO, CHICAGO PUBLIC LIBRARY AND CHICAGO PUBLIC SCHOOLS

February 16, 2021
I. INTRODUCTION

As a result of the COVID-19 pandemic, for much of the past year, Chicago’s public schools and public libraries have pivoted to provide their services remotely. While this unprecedented situation has been challenging for everyone – students, library patrons, teachers, librarians and library personnel, and all others rising to the occasion – we are proud of the work underway to ensure that our educational missions can still be met. Thus, we applaud the Federal Communications Commission (“Commission) and Chair Rosenworcel for seeking comment on the collective set of petitions related to expanded emergency use of federal E-rate funds. The City of Chicago (“City”), Chicago Public Library (“CPL”) and Chicago Public Schools (“CPS”) (together the “Chicago Commenters”) welcome the opportunity to file these comments in response to the Commission’s Notice in the proceeding.¹ Chicago Commenters file these comments to provide Chicago’s perspective on the specific questions raised in the Notice as well as to emphasize how transformational a Commission Order that expands E-Rate funding eligibility could be for Chicago’s students, lifelong learners, and others pursuing educational opportunities.

II. ELIGIBLE EQUIPMENT AND SERVICES AND THEIR COSTS

The Notice seeks comment on the specific equipment and services that E-Rate should support to fund off-campus access to broadband services for students, staff and patrons who lack adequate home Internet access, referencing a petition’s request to include necessary wired or

¹ Public Notice, Wireline Competition Bureau Seeks Comment on Petitions For Emergency Relief to Allow the Use of E-Rate Funds to Support Remote Learning During the COVID-19 Pandemic, WC Docket No. 21-031 (Feb. 1, 2021) (“Notice”).
wireless equipment and services such as hotspot devices and fixed or mobile wireless towers.\(^2\) The Notice also asks whether other services or equipment are needed to support remote learning.\(^3\)

The Chicago Commenters agree with petitioners who support a broad definition of eligible equipment during the public health emergency. It is clear that high-speed, reliable and accessible Internet access, in tandem with the effective use of a primary device for learning, are crucial factors in, for example, mitigating the homework gap and accelerating students back to their appropriate grade level regardless of instructional scenario (remote or in-person).\(^4\) Schools and libraries, in collaboration with the City and other partners, should be allowed to use E-rate discounts to purchase any goods and services necessary to connect students and patrons off-campus but engaged in educational purpose activities. This should include hotspots, but also the purchase of infrastructure such as fixed wireless equipment to extend Internet access from school campuses and library buildings.

There are also a number of related technology investments beyond initial ‘connectivity’ that will allow E-Rate applicants to support the transformation required to broker a more effective remote learning experience. Our vision is an integrated technical ecosystem that supports access to digital content and increased volume and quality of student and patron data. For example, many school applicants will have to support the stand-up of simultaneous synchronous learning for both in-person and remote learners and thus investments are needed, quickly, in schools, libraries, and living rooms. A partial list of this type of technology, which should be considered eligible equipment and services, includes:

\(^2\) Notice at 5.
\(^3\) Id.
- **Teacher Devices.** The ongoing work to move to digital curriculum and the recognition that a remote learning capacity is now compulsory and a part of going forward strategy underscores the need to improve the capacity of teacher computing devices. Specifically, we seek to ensure that new teacher devices have adequate processing power to access digital curriculum tools and video stream with students who may be participating remotely, while simultaneously running other classroom management tools;

- **Classroom and Library Technology Refresh.** Beyond teacher devices, the new K-12 classroom and emergent blended learning models demand the incorporation of additional collaborative technology and a re-imagining of the classroom. The Chicago Commenters seek funding support to continue to deliver synchronous learning technologies (cameras, speakers, headphones, and mobile video equipment (interactive whiteboards, for example) in a more robust way;

- **Augment existing E-Rate WAN System Improvements.** CPS is currently in year one of a three year E-Rate funded program to construct a next-generation wide area network that will see a twenty-fold increase to the internet capacity at each CPS school. Allocation of additional emergency-related resources here would add resource capacity to the ongoing project to expedite completion sooner than the current three year projection. CPS currently anticipates wiring 81 schools in the first year of this project and 240 schools each during the second and third years, respectively, a pace that could be accelerated if E-Rate funding were augmented to quickly enhance hybrid learning;

- **Digital Curriculum Platform Investments.** Through the Curriculum Equity Initiative (CEI),\(^5\) CPS is in the final stage of development of its first culturally-responsive, PreK-12

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digital curriculum, scheduled for release in July 2021. The curriculum is accessed, housed, distributed and tracked via a centralized technical ecosystem that leverages new and existing enterprise platforms. Interoperability standards are the ecosystem’s linchpin, affording a plug and play architecture that is agile enough to meet the needs of evolving instructional formats. Additionally, the digital nature of the curriculum will expand classroom walls and allow for reduction of the persisting opportunity gap, but only if schools, homes and community hubs are technically outfitted to support students.

○ The digital curriculum would benefit significantly from investments in:

■ Student Online Personal Protection Act (SOPPA) compliant educational technology tools that provide students with additional opportunities for acceleration and remediation;

■ enhanced cable in the classroom by increasing the digital channels available over the network (e.g. rack shelving, digital tuners and encoders) to support utilization of news content that can be recorded/used in digital lessons; and

■ modern, targeted digital content packages, for STEM, English learners, and other priority populations.

● **Augment Investments in Mobile Hotspots and Devices.** Through its “Internet to Go” program, CPL currently offers mobile hotspots and hotspot kits with Chromebooks for circulation in areas with limited broadband access in order to support at home learning. A pilot program was introduced in 2016 following research which indicated in-home broadband use in many of Chicago's lowest-income neighborhoods barely reached the 50 percent mark and is significantly lower in a subset of the lowest-income areas. The pilot has since been extended, and approximately 350 hotspots are currently in circulation, with
additional devices being purchased with grant funding. The data plans to support hotspots are complex and difficult to fund within the existing CPL budget.

- **Augment Public WiFi Access.** CPL currently has open WiFi access in 81 locations that service all 77 Chicago neighborhoods. Due to current restrictions in E-Rate funding, CPL is not boosting these signals during the COVID-19 pandemic so as to expand past library walls, even despite a reduction of in-person library visits during the public health emergency. Expanded service with enhanced wireless equipment that could broadcast beyond library walls at each CPL location would greatly expand broadband access for Chicagoans and would certainly be “integral, immediate, and proximate” to the provision of library patron services.

The Notice seeks comment on the level of broadband connectivity service required to support remote learning.⁶ Currently, speeds of 50mbps download and 5-10mbps upload are the local offering via the City-CPS Chicago Connected broadband access program.⁷ However, actual level of service will vary depending on the number of students and users in a home and the nature of the curriculum. All applicants would benefit from a more aggressive FCC position on minimum levels of service resulting from E-Rate funded connectivity.

The Notice asks commenters to provide recent experience and specific information regarding the costs of services being purchased and efforts to keep those costs reasonable.⁸ The Chicago Commenters provide below our general costs for various equipment utilized to provide connectivity and remote educational opportunities during the COVID-19 pandemic:

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⁶ Notice at 5.
⁷ https://www.cps.edu/strategic-initiatives/chicago-connected/
⁸ Notice at 5.
Connectivity through City-CPS Chicago Connected Program

- RCN Internet First - $9.95 per month
- Comcast Internet Essentials - $9.95 per month
- T-Mobile Mobile Hotspot (with unlimited data) - $15.00 per month
- Recently both Comcast and RCN speeds increased from 25/3mbps to 50/5mbps and 50/10mbps, respectively.

Devices sponsored by CPS

- Dell Chromebook 3100 - $301
- Apple iPads - $475.57 with component costs as follows:
  - 10.2-inch iPad Wi-Fi 32GB - $287.36 per unit
  - STM Dux Plus Duo for iPad - $34.60
  - AppleCare for Enterprise for iOS - 36 Months - $98.61
  - Apple Professional Services (APS) iPad Services - $55.00

Synchronous Learning Equipment (For CPS Classrooms)

- Wide Angle Cameras (AVerMedia Live Streamer CAM 313 web camera) - $88.63
- Headphones (Avid AE 36 headset) - $10.50
- Speaker (Jabra SPEAK 710 speakerphone) - $195.00

Connectivity Through CPL Hotspots

- Sprint Hotspot Data - $22.99 per month, unlimited
- T-Mobile Hotspot Data - $29.75 per month, unlimited

Devices Sponsored by CPL

- Hotspot device, no data - $90 each
- Dell Chromebook, including Google for Education license - $301

III. COST-EFFECTIVE PURCHASES

In the next portion of the Notice, the Commission asks a series of questions regarding how it can successfully balance the urgent need to adapt to remote learning, as we now approach nearly a year living through the COVID-19 pandemic, with the E-Rate program’s extensive safeguards
against fraud, waste, and abuse and favoring competitive solicitations and cost-effective purchases.\footnote{Id.}

The Chicago Commenters are fully supportive of continued processes and rules that protect against waste and fraud and stretch E-Rate funding as much as possible through cost-effective pricing. Nonetheless, we also believe the unprecedented emergency we find ourselves in necessitates relief from certain existing E-Rate rules. Thus, we suggest the Commission consider waiving the off-campus cost allocation requirement for an extended period (if not indefinitely) in recognition that remote and synchronous learning is likely here to stay for the foreseeable future. This would allow schools and libraries to provide off-campus students and patrons the opportunity to connect to the networks without jeopardizing existing E-Rate funding. In addition, we recommend waiving the 28-day bidding requirement. Assuming Form 470 Notification and the existence of demonstrated local controls, applicants would benefit from the flexibility to award contracts quickly.

In expressing openness to consider certain accommodations from existing E-Rate bidding and purchase requirements, the Notice seeks comment on how the Commission can safeguard against wasteful spending.\footnote{Id.} The Chicago Commenters believe there are alternatives that can provide analogous protections as competitive bidding subject to existing E-Rate rules. For example, the Commission can require that applicants produce evidence of market research and that price comparisons have been made. The Commission can analyze the reliability of such submissions utilizing industry research products and the Commission’s staff expertise. It would also be beneficial to define specific parameters under which applicants could acceptably select a higher cost item; for example, if it reduces demonstrated total cost of ownership downstream and

\footnote{Id.}
for the applicant. While the Commission asks whether it can rely on the non-discount “matching” share as an incentive to prevent wasteful spending, Chicago Commenters believe that wasteful spending is more often due to lack of discipline and appropriate methodology as opposed to opportunistic intent. Thus, the non-discount share is a useful incentive for applicants to control costs but also not the sole method of effectively managing E-Rate spending.

The Notice seeks steps that schools and libraries have taken to ensure cost-effective purchases of off-premises broadband services. As described above, in Chicago, we are currently using a combination of CPS funds, City CARES Act funding and philanthropic investment to support the Chicago Connected program, one of the broadest, longest, no-cost internet offerings for students and their families. We do not currently offer home connectivity support for CPS teaching staff. Relative to the investments we’ve made to date, we solicited multiple providers for pricing through an RFI, in both the wired and hotspot provider space. We selected the most competitive prices from the responses received. In addition, CPL applied for and received a competitive grant to expand the number of hotspots available for circulation.

Finally, the Notice seeks comment on existing or expanded audit requirements and existing E-Rate record keeping requirements. Chicago Commenters believe the existing E-Rate audit requirements are reasonable in this context but urge the Commission to avoid imposition of any added audit requirements. Most potential applicants are stretched for resources and any audit measures above and beyond those that are customary would likely be an undue burden. Regarding any record keeping pertaining to off-site E-Rate equipment and services, we urge the Commission

11 Id.
12 Id.
13 Id.
to avoid onerous requirements that will prevent deployment such as definitive proof that a particular student or patron lacks Internet access.

IV. FUNDING AND PRIORITIZATION

As the Commission notes, the need in dollars likely vastly exceeds available E-Rate funding. The Notice laudably seeks comment on ways to ensure targeting and focusing funds on populations such as Native American, African American and Latinx students, students with disabilities, rural students and other important populations experiencing the effects of the Homework Gap and a lack of adequate home Internet access.\textsuperscript{14} Chicago Commenters strongly believe this aspect of the Notice must be addressed in a Commission Order acting on the petitions. The Commission should require that applicants provide a thorough methodology for prioritizing those communities using real data and community input. For example, to help prioritize student device investments and eligible families for the Chicago Connected home Internet program, we looked at the following school and student level indicators to promote equity and prioritize need.

\textbf{School Level}: Title I status is an excellent bedrock for the identification of neighborhoods with homes in need. We also considered the University of Illinois-Chicago ("UIC") Great Cities Institute Hardship Index to augment or confirm the final determination of our focus areas.

- UIC Great Cities Institute Hardship Index: The index can be used to identify schools that reside in neighborhoods that are likely in an internet desert. The Hardship Index measures the following household data points: Unemployment (over the age of 16 years), • Education

\textsuperscript{14} Id. at 6.
(over 25 years of age without a high school diploma) • Per capita income level • Poverty (below the federal poverty level) • Crowded housing (housing units with more than one person per room) • Dependency (population under 18 or over 64 years of age)

**Student Level:** Free and reduced meal status is the foundation for most existing internal methods of identifying students living in economically challenging environments, but CPS also considers additional factors related to students such as:

- Students in Temporary Living Situations
- English Language Learners
- Diverse Learners
- Options Students

Additionally, by allowing funding to expand/accelerate existing equity-centered programs and investments, such as the CEI discussed above, applicants can accelerate support for students disproportionately affected by the opportunity gap. The CEI will ultimately produce a suite of culturally-responsive digital resources for teachers, students and parents that includes content and functionality intentionally designed to support English learners and students with disabilities. Through a universal city curriculum, the CEI intends to bridge programs and increase partnership opportunities across municipal, cultural and community organizations - extending the reach and impact of investments such as E-Rate funding on populations affected by the Homework Gap and a lack of connectivity.

V. **TIMING**

Next, the Notice seeks comment on timing for off-campus use of E-Rate funding and applicants’ ability to use such expanded funding both prospectively and retroactively, given the
Notice was issued nearly eleven months into the COVID-19 event.\textsuperscript{15} Chicago Commenters seek flexibility and the discretion to determine if funding could be utilized proactively or retroactively. Retroactive relief would be welcome by most applicants, most of whom have likely had to make very difficult choices over the past year to provide solutions to bridge the homework gap and have launched local programs such as Chicago Connected while advocating for additional federal-level solutions.

Chicago Commenters also believe that commonsense measures can be implemented to ensure that E-Rate funding is additive and used in conjunction with other funding sources, as opposed to duplicative. Existing guardrails exist and do not require re-engineering. Schools are already required to record the use of their local, state, and federal funding, including E-Rate discounts. Applicants are also required to certify their proper use of these funds and maintain documentation to demonstrate an appropriate use. Moreover, we again urge caution in avoiding onerous requirements such as certifications regarding the connectivity status of individual students or households. The Commission’s mantra should be increased flexibility in response to this unprecedented emergency without abandoning appropriate safeguards against waste, fraud, and duplicative spending.

In allowing the flexibility to seek either retroactive or prospective funding, the Commission should use the date of the first declaration of a national public health emergency for retroactive spending as a common look-back date.

Prospectively, off-site use of funds should at a minimum extend through the end of the COVID-19 public health national emergency.\textsuperscript{16} As noted above, however, we expect hybrid

\textsuperscript{15} Id.

learning models to continue for the foreseeable future and believe the Commission should again be flexible in determining an end-point.

VI. LEGAL ISSUES

The Notice seeks comment on the Commission’s legal authority to grant relief sought in the various petitions. Chicago Commenters believe sufficient legal authority exists to grant such relief and will respond, if necessary, elaborating on that position in reply comments.

VII. CONCLUSION

Chicago Commenters commend the Commission in taking this overdue step in considering additional ways to support schools, libraries, and local governments as they seek to ensure that educational opportunity remains available to all students and residents, both at home and in schools and libraries. The COVID-19 pandemic has starkly revealed the challenge in meeting that vision. Swift action by the Commission here is one step toward ensuring that off-site learning and educational services can be as robust as those in classrooms and libraries.

Respectfully submitted,

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17 Id. at 7.