

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

In the Matter of)	
)	
Modernizing the E-rate)	WC Docket No. 13-184
Program for Schools and Libraries)	
)	
)	

COMMENTS OF THE CITY OF BOSTON, MASSACHUSETTS

INTRODUCTION

The City of Boston, Massachusetts (the “City” or “Boston”)¹ files these comments in response to the Commission’s June 28, 2019 Notice of Proposed Rulemaking regarding the E-Rate program’s Category Two budget approach.²

In 2014, the FCC divided E-Rate support into two categories. Category One funds are to be used to connect to schools or libraries, while Category Two funds are to support the equipment inside the facilities to make broadband accessible to users. As the NPRM explains, “The 2014 approach, known as the ‘Category Two’ budget approach, consists of five-year budgets for schools and libraries that provide a set amount of funding to support internal connections. The Commission also established a five-year test period (from funding year 2015

¹ The City, incorporated as a town in 1630 and as a city in 1822, exists under Chapter 486 of the Acts of 1909 and Chapter 452 of the Acts of 1948 of The Commonwealth of Massachusetts which, as amended, constitute the City’s Charter. The Mayor is the chief executive officer of the City. Martin J. “Marty” Walsh is the City’s fifty-fourth mayor. He has general supervision of, and control over, the City’s boards, commissions, officers, and departments. The City’s budget for all departments and operations including the Boston Public Library system, except the School Department and the Boston Public Health Commission, is prepared under the Mayor’s direction.

² *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, FCC 19-58 (Rel. Jul. 9, 2019) (“*NPRM*”).

to funding year 2019) to consider whether the Category Two budget approach is effective in ensuring greater access to E-Rate discounts for internal connections.”³

The NPRM further explained that the Category Two budget rules are set to expire for some applicants at the end of funding year 2019 and for all applicants at the end of funding year 2023.⁴ The FCC is therefore faced with a choice between continuing with the Category Two budget approach or returning to its prior rules. Based on its experience since 2014, the FCC:

- (1) Proposes making permanent the Category Two budget approach for all applicants;
- (2) Seeks comment on ways to improve the Category Two budget approach; and
- (3) Seeks comment on how best to transition from the five-year test period to a permanent extension of this approach.

The City agrees with the Commission that the “E-rate program is a vital source of support for connectivity to—and within—schools and libraries.”⁵ An efficient and effective E-rate program will complement the City’s efforts to ensure that all Bostonians can fully participate in the information age by accessing affordable, high-speed broadband facilities. To that end, Boston:

1. Supports the Commission’s proposal to make permanent the five-year budget for Category Two services enacted in 2014;
2. Requests guidance to USAC that E-Rate supported services are permitted to be made available to the public after schools and libraries have closed; and
3. Urges the Commission to:
 - a. Change the metric it uses to allocate funding to E-Rate recipients;

³ *Id.* ¶ 2.

⁴ *Id.* ¶ 13.

⁵ *Id.* ¶ 1.

- b. Increase the Category Two budget floor for both schools and libraries; and
- c. Permit Category Two funding be used toward providing broadband to students' residences off school grounds.

DISCUSSION

The current Category Two budgetary approach to the E-Rate Program contains some glaring flaws, and the City hopes that the Commission takes this opportunity to make needed improvements to the program. When Congress codified the concept of universal service in the Telecommunications Act of 1996, it called for the creation of different programs tailored to promote affordable communications services for varying demographics, including students and library patrons. By capping the funding that schools and libraries receive based on the number of students in a school or the square footage of a library, the Commission undermines its own efforts to remediate the “digital divide.” The City hopes these comments shed light on better alternatives to the E-Rate Program.

A. Boston Supports the Commission’s Proposal to Make Permanent the Five-Year Budget for Category Two Services Enacted in 2014.

The City applauds the Commission’s decision to make the five-year budget for Category Two services permanent. The Commission previously applied “two-in-five rules” for its E-Rate program before switching to the five-year budget approach in 2014.⁶ The two-in-five rules limited funding for each E-Rate recipient to two out of every five years, but placed no limit on the amount of funding that applicants could request.⁷

While that approach seemed ideal on paper, it was clearly flawed in practice. The limitless nature of the funding allowed demand to far exceed supply, and as a result, no schools

⁶ *Id.* ¶ 5.

⁷ *Id.*

or libraries received Category Two funding in 2013 or 2014.⁸ The need for a new approach was obvious.

In 2014, the Commission took action to reform E-Rate funding by establishing five-year budgets for applicants requesting Category Two funding, capped by the number of students within a school, or the square footage within a library.⁹ The five-year budget has been effective at ensuring the availability of Category Two funding, and Boston's schools and libraries are better equipped to provide broadband as a result.

For those reasons, the City is glad that the Commission is taking action to make the five-year budget plan permanent. However, further action is needed to ensure that the E-Rate program provides as much support as possible for students and library patrons, as will be discussed below.

B. Boston Requests Guidance to USAC that E-Rate Supported Services are Permitted to be Made Available to the Public After Schools and Libraries Have Closed.

As previously mentioned, the City applauds the efforts that the Commission has taken in recent years to modernize and improve the E-Rate program, thereby ensuring greater internet access to Bostonians. One such instance of improving the E-Rate program was in 2010, when the Commission waived its own rules to permit members of the general public to use schools' E-Rate supported Internet access during non-operating hours.¹⁰ This decision maximized the use of facilities and services supported by E-Rate, which otherwise were lying fallow when schools were not in session.

⁸ *Id.*

⁹ *Id.* ¶ 7.

¹⁰ *Schools and Libraries Universal Serv. Support Mechanism*, CC Docket No. 02-6, Order and Notice of Proposed Rulemaking, 25 FCC Rcd. 17324 (Rel. Dec. 15, 2010).

When the Commission modernized the E-Rate program in 2014,¹¹ it did not address the issue of E-Rate supported broadband in schools during non-operating hours. The decision not to address the issue in 2014 has created confusion among E-Rate participants. The City urges the Commission to clarify to USAC that the use of E-Rate supported broadband in schools and libraries by the general public when after operating hours is permitted under the Commission's rules. The logic underlying the Commission's 2010 decision applies just as much today as it did then. To decide otherwise would result in extremely inefficient uses of broadband facilities and services around the country, especially in areas where broadband access is desperately needed. Facilities-based broadband access is not a finite resource or meted out by the Gig. It can and should be an "always-on" resource to students and library users.

C. Boston Urges the Commission to Update its Category Two Funding Methodologies

In response to the Commission's specific proposal, Boston offers the following three insights:

1. The Commission should change the metric it uses to allocate E-Rate funding

The Commission proposes maintaining its existing budget multipliers for Category Two funding.¹² Currently, schools are eligible to receive \$150 per student,¹³ and libraries are eligible to receive up to \$2.30 or \$5.00 per square foot (depending on their Institute for Museum and

¹¹ *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, FCC 14-99, 29 FCC Rcd. 8870 (2014).

¹² *NPRM*, ¶ 19.

¹³ 47 CFR § 54.502(b)(2).

Library Services (IMLS) locale codes).¹⁴ The Commission contends that “maintaining the existing multipliers will fit the needs of the majority of applicants.”¹⁵

The City respectfully disagrees with the Commission’s contention that the existing multipliers will adequately serve E-Rate recipients. Putting the exact multiplier figures aside, the City questions the wisdom of basing E-Rate funding on the number of students for schools and on square footage for libraries. The costs associated with Category Two services are not dependent on the number of students within a school, but rather the equipment and wiring needed to distribute the connection. The cost of this equipment and wiring (e.g., wireless access points, controller systems, routers, switches, basic maintenance, etc.) are essentially the same if you’re serving 10 students or 200. Therefore, budget multipliers based on the number of students within a school do not accurately capture the budgetary needs of schools in providing broadband to students. As a result, the current budget multipliers are providing a disservice to smaller schools, particularly elementary and special schools.

Similarly, the square footage of a library bears minimal correlation to the costs faced by that library in providing broadband. Library patrons are not a static number, and broadband usage fluctuates throughout the day depending on the number of patrons present at a given moment. For example, seniors might use services in the morning, students in the afternoon, and the working population in the evening. Just as with schools, the more accurate representation of a library’s costs lies in the equipment and wiring needed to service the library during peak internet usage hours. These costs are wholly irrelevant to square footage.

¹⁴ 47 CFR § 54.502(b)(3).

¹⁵ *NPRM*, ¶ 19.

2. *The Commission should increase the Category Two budget floor for both schools and libraries.*

The Commission's current Category Two budget floor for schools and libraries is \$9,200 over five funding years.¹⁶ The Commission seeks comment on whether that figure is sufficient, or whether it should be increased.¹⁷ The City agrees with commenters from the previous E-Rate proceeding that the budget should be increased to \$25,000, at the least.¹⁸ Just as with a budget multiplier based on the number of students, the budget floor of \$9,200 provides a disservice to smaller and more rural schools. Under the current approach, unless a school has a sufficient number of students, it is left without adequate funding to even address base-level network access and functionality.¹⁹ The City urges the Commission to rethink this woefully low figure so that schools and libraries are guaranteed funding, regardless of their size, that can be put to productive uses. After all, the smaller and more rural schools and libraries are the most likely to truly need financial assistance in providing broadband.

3. *The Commission should permit Category Two funding be used toward providing broadband to student residencies off school grounds.*

The Commission also seeks comment on which services should be eligible for Category Two funding.²⁰ The City would like to take this opportunity to advocate for rules that permit the resources built using E-Rate funding to be used for providing broadband to students' homes beyond the school grounds. As previously noted, once built or contracted, the cost of

¹⁶ 47 CFR § 54.502(b)(4).

¹⁷ *NPRM*, ¶ 20.

¹⁸ See AdvanEdge Solutions Public Notice Comments at 4; Janice Meyers Educational Consulting Public Notice Comments at 2; Claire O'Flaherty Public Notice Comments at 1.

¹⁹ AdvanEdge Solutions Public Notice Comments at 4.

²⁰ *NPRM*, ¶ 18.

provisioning service in schools and libraries is always available and the added expense is de minimis.

While commenters have advocated for this approach in previous E-Rate proceedings,²¹ a recent GAO study highlighted the importance of broadband service for students at home.²² Broadband is a crucial tool for students not just in the classroom, but also at home, as homework assignments are increasingly assigned and completed on the internet. These assignments are frequently interactive in nature, as opposed to content that can be stored or cached to be later accessed without an internet connection.²³ These “under connected” students are at risk of falling behind better-connected peers, a condition known as the “homework gap.”

According to the GAO Study, school-age children may be more likely than those in higher-income households to be reliant on mobile broadband for internet access. More specifically, 22% of households with school-age children and income below \$25,000 per year use mobile wireless to access the internet but not fixed broadband, as opposed to just 8% in households with incomes of \$75,000 or more.²⁴ This figure is particularly troubling because of the limitations of smartphones and similar devices for completing homework.²⁵ In addition, data limitations and varying service quality make it even more difficult for those students to complete

²¹ See, e.g., Comments of Connected Nation.

²² GOV'T ACCOUNTABILITY OFFICE, *FCC Should Assess Making Off-School-Premises Access Eligible for Additional Federal Support* (July 2019), available at <https://www.gao.gov/assets/710/700629.pdf> (“GAO Study”).

²³ Comments of Connected Nation at 1.

²⁴ GAO Study at 10.

²⁵ *Id.* at 11.

their homework at home.²⁶ These limitations frequently force lower-income school-age children to use public wifi to complete their homework.²⁷

The GAO Study concludes that the Commission has not taken sufficient steps to address the “homework gap,” and specifically mentions the E-Rate Program.²⁸ The City urges the Commission to take the opportunity of this current proceeding to take a vital next step in the E-Rate program and allow Category Two funded networks to be used to provide broadband to students at home and library users outside the footprint of the building.

For the service providers, this would not be a big leap from current service offerings. As of 2017, 50% of the population living in public housing is within .27 miles of E-Rate supported internet.²⁹ And in more residential areas, students’ homes are typically within close geographic proximity to the schools currently served by the E-Rate Program. Thus, from a technical standpoint, the expansion from schools and libraries to residences is entirely feasible, even logical. Only regulatory obstacles stand in the way.

²⁶ *Id.* at 12.

²⁷ *Id.*

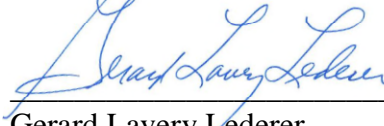
²⁸ *Id.* at 24.

²⁹ Emily Kissane, *E-Rate Regulations and Community Internet Access*, NDIA, <https://www.digitalinclusion.org/blog/2017/11/27/e-rate-regulations-and-community-internet-access/> (Nov. 27, 2017).

CONCLUSION

The City welcomes the Commission's effort to improve the E-rate program to ensure its continued success. Boston looks forward to working closely with the Commission, on the issues addressed in these comments and others, throughout this proceeding.

Respectfully submitted,



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