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

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

REPORT AND ORDER

Adopted: November 20, 2019 **Released: December 3, 2019**

By the Commission: Commissioner O'Rielly issuing a statement; Commissioners Rosenworcel and Starks concurring and issuing separate statements.

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I. INTRODUCTION

1. The Commission's E-Rate program[1] is a vital source of support for connectivity to—and within—schools and libraries. In particular, the E-Rate program provides funding for internal connections, which are primarily used for Wi-Fi, a technology that has enabled schools and libraries to transition from computer labs to one-to-one digital learning.[2] Today, we make permanent the "category

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[1] The E-Rate program is more formally known as the schools and libraries universal service support mechanism.

[2] *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8898-8922, Section IV.B. (2014) (*2014 First E-Rate*

(continued….)

two budget" approach[3] that the Commission adopted in 2014 to fund these internal connections. 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. In adopting this approach, the Commission also established a five-year test period (from funding year 2015 to funding year 2019), to consider whether this approach would be effective in ensuring greater and more equitable access to E-Rate discounts.[4]

2. Based on the overwhelming record support for the category two budget approach from the E-Rate community,[5] coupled with our own experience during the five-year test period,[6] we conclude that the category two budget approach has provided broader, more equitable, and more predictable funding for schools and libraries than under the prior rules. The budget amount provided to schools and libraries during the test period proved to be successful, and, moving forward, we intend to generally remain within those parameters of support. Building on the success of the category two budget approach, we take important steps to (1) streamline processes to ensure more equitable, consistent distribution of support for small, rural schools and libraries within the existing E-Rate program budget for category two services, (2) simplify the category two budgets, and (3) decrease the administrative burden of applying for category two services. As a result of the measures we take today, the category two budget approach will become more streamlined, furthering the program's overall effectiveness and the deployment of Wi-Fi in schools and libraries across the country.

II. BACKGROUND

3. Focusing on connectivity in schools and libraries, the E-Rate program provides support for what are called category one and category two services. Category one services provide connectivity *to* schools and libraries, while category two services provide connectivity *within* them.[7] Under the E-Rate program rules, funding is committed up to an annual Commission-established cap.[8] If demand exceeds the cap, E-Rate funds are allocated according to rules of priority, so that funding for category one services

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Order); *Modernizing the E-Rate Program for Schools and Libraries; Connect America Fund*, WC Docket Nos. 13-184, 10-90, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538, 15571-78, Section III.A. (2014) (*2014 Second E-Rate Order*); *see also* Remarks of Commissioner Ajit Pai, Connecting the American Classroom: A Student-Centered E-Rate Program (July 16, 2013), https://www.fcc.gov/document/commissioner-pai-speech-student-centered-e-rate-program (proposing a budget approach for the E-Rate Program).

[3] *See 2014 First E-Rate Order*, 29 FCC at 8898-8922, Section IV.B.; *2014 Second E-Rate Order*, 29 FCC at 15571-78, Section III.A.

[4] *2014 First E-Rate Order*, 29 FCC Rcd at 8898-8922, Section IV.B.; *2014 Second E-Rate Order*, 29 FCC Rcd at 15571-78, Section III.A.

[5] *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, 34 FCC Rcd 5406, 5406, para. 3 (rel. July 9, 2019) (*2019 Category Two Notice*); *see also* WESD Comments at 2 ("We fully support permanently extending the category two budget approach" as "[t]he current process has allowed districts more flexibility and time to make budgetary decisions regarding Category 2 purchases"); CGCS Comments at 2 ("The continuation of Category 2 budgets – as well as the continued eligibility of managed internal broadband services, caching, and basic maintenance of internal connections – is necessary for school districts to progress in their efforts to provide safe, secure and modern classrooms that prepare graduates for college and careers after the K-12 experience"); EducationSuperHighway Comments at 3 ("The Category 2 budget approach has unquestionably resulted in a broader and more equitable distribution of funding to schools, and as a result, greater access to Wi-Fi in the classroom and the environments where learning takes place").

[6] *See Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report, 34 FCC Rcd 319, 332, para. 42 (WCB 2019) (*Category Two Budget Report*).

[7] 47 CFR § 54.502(a)(1)-(2).

[8] *See* 47 CFR § 54.507(a), (f).

is committed first and the remaining funding is committed to category two services beginning with applicants eligible for a 90% discount and in descending order of the discount until the cap is reached.[9]

4. For years, the Commission applied the two-in-five rules, which limited funding for internal connections for any given school or library to two out of every five years, but placed no limit on the amount of funding applicants could request.[10] Under the two-in-five rules, demand far exceeded available funding, so only the schools and libraries with the highest discount rates (which were disproportionately urban schools) received support for internal connections in most funding years. And in funding years 2013 and 2014, no schools or libraries received any support for internal connections.[11] Applicants had little certainty that funding for internal connections would be available. As a result, schools and libraries, particularly those below the top discount bands for which funding was unlikely to be available, were discouraged from planning for support for internal connections.[12]

5. In 2014, the Commission moved to a new budget approach for category two services.[13] Specifically, it adopted rules that established five-year, pre-discount budgets for applicants requesting funding for the category two equipment and services needed to bring high-speed broadband into classrooms and libraries and meet the Wi-Fi needs of students and library patrons.[14] In adopting this new approach, the Commission held that managed internal broadband services, caching, and basic maintenance of internal connections would be eligible for category two support through funding year 2019.[15]

6. Under the current rules, schools are eligible to request E-Rate discounts on costs up to $150 per student over five funding years,[16] while libraries are eligible to request discounts on costs up to $2.30 or $5.00 per square foot over the same period, depending on the location of the library.[17] To ensure sufficient funding for schools with low student counts and small libraries, the Commission adopted a pre-discount funding floor of $9,200 over five funding years.[18] Before the start of each funding year, the budget multipliers and funding floor are adjusted annually for inflation, but are not rounded.[19] For example, in funding year 2019, the budget multiplier for schools is $159.669053922 per student.[20]

7. Further, the current rules set the per-student and per-square foot budgets at the entity level, rather than at the school district or library system level.[21] As a result, each school in a school

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[9] *See id.*

[10] *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Third Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 26912, 26917-18, paras. 11-12 (2003) (*Third Report and Order*).

[11] *2014 First E-Rate Order*, 29 FCC Rcd at 8894-95, para. 64.

[12] *Id.* at 8912-13, para. 109.

[13] *Id.* at 8898-8922, Section IV.B.; *2014 Second E-Rate Order*, 29 FCC Rcd 15571-78, Section III.A.

[14] *See First E-Rate Order*, 29 FCC Rcd at 8898-8922, Section IV.B.; *2014 Second E-Rate Order*, 29 FCC Rcd at 15571, Section III.A.

[15] *2014 First E-Rate Order*, 29 FCC Rcd at 8918-20, para. 123-30.

[16] 47 CFR § 54.502(b)(2).

[17] 47 CFR § 54.502(b)(3).

[18] 47 CFR § 54.502(b)(4).

[19] 47 CFR §§ 54.502(b)(1); 54.507(a)(1)-(2).

[20] *See Wireline Competition Bureau Announces E-Rate and RHC Programs' Inflation-Based Caps for Funding Year 2019*, CC Docket No. 02-6, Public Notice, 34 FCC Rcd 1138, 1138 (WCB Mar. 8, 2019) (*2019 Inflation Public Notice*).

[21] 47 CFR § 54.502(b)(5).

district or library in a library system must calculate its own budget and allocate the costs of services shared by multiple entities between multiple budgets.[22] Applicants may also request funding in one or multiple years and may use their budgets over a five-year funding cycle, beginning in the first year that funding is committed to any school or library in a school district or library system.[23] Thus, to calculate the amount of funding remaining in its category two budget each funding year, a school would subtract any pre-discount funding previously received during its five-year budget cycle from its current student count multiplied by the applicable inflation-adjusted budget multiplier for that funding year.[24] Schools may also count part-time students that split their time between schools, if the part-time students regularly increase the maximum number of students on the school premises at the same time during the school day.[25]

8. To illustrate how the category two budget approach currently works, we consider a hypothetical school with 1,000 students that sought funding for category two services in funding year 2015. Under the current rules, the school's initial pre-discount budget for funding year 2015 would have been $150,000.[26] The costs of equipment or services shared with other schools, such as a switch serving all schools in a district, would be divided reasonably between the budgets of each school sharing the service.[27] Under the category two budget approach, the school may spend all of its budget in one funding year, or it may choose to request some funding each funding year, as long as its funding requests do not exceed its overall five-year category two budget. Each year of its five-year budget cycle, the school would recalculate its available pre-discount budget by multiplying the current number of students at the school by the inflation-adjusted budget multiplier for that funding year,[28] and then subtracting the pre-discount amount of any category two funding previously received by that school.[29] If the school did not install some portion of an approved category two services funding request in a prior funding year, it

[22] *See id*.

[23] *2014 First E-Rate Order*, 29 FCC Rcd at 8911-12, para. 107. Under the Commission's rules, for all schools in a school district, or all libraries in a library system, the five-year budget cycle begins (1) the first funding year that any school or library in the district/library system receives category two funding and (2) no earlier than funding year 2015. *See* 47 CFR § 54.502(b) ("Libraries, schools, or school districts with schools that receive funding for category two services in any of the funding years between 2015 and 2019 shall be eligible for support for category two services pursuant to paragraphs (b)(1) through (b)(6) of this section."); *id.* § 54.502(b)(1) ("Each eligible school or library shall be eligible for a budgeted amount of support for category two services over a five-year funding cycle beginning the first funding year support is received.").

[24] 47 CFR § 54.502(b)(1)-(2). A new school applying for funding before the school has opened may estimate the student count for the coming funding year, but it must repay any support provided in excess of the student enrollment the following funding year.

[25] *See 2014 Second E-Rate Order*, 29 FCC Rcd at 15573, para. 87.

[26] Using the budget multiplier for funding year 2015, a school with 1,000 students has a pre-discount budget of $150,000 (1,000 x $150).

[27] 47 CFR § 54.502(b)(5). The district may divide the costs equally or provide USAC with another reasonable allocation, such as prorated based on student count.

[28] For example, for schools, the budget multiplier increased from $150 per student in funding year 2015 to $159.669053922 in funding year 2019. *See 2019 Inflation Public Notice*, 34 FCC at 1138.

[29] Under the Commission's rules, the earliest funding year that a school or library's five-year budget cycle could start is funding year 2015, and a school or library cannot subtract category two funding received prior to funding year 2015 when calculating its category two budget. *See* 47 CFR § 54.502(b)(1) ("Excluding support for internal connections received prior to funding year 2015, each school or library shall be eligible for the total available budget less any support received for category two services in the prior funding years of that school's or library's five-year funding cycle.").

would have to file an FCC Form 500 cancelling that portion of the commitment in order to make the funding available again in a future funding year.[30]

9. In the *2014 Second E-Rate Order*, the Commission established a five-year test period (from funding years 2015 to 2019) to help it determine if the category two budget approach is an effective means to ensure greater access to E-Rate discounts for internal connections.[31] In doing so, it directed the Wireline Competition Bureau (Bureau) to report on the sufficiency of the category two budget approach before the opening of the filing window for funding year 2019.[32] On September 22, 2017, the Bureau released a *Public Notice* seeking comment on the category two budget approach in preparation for the report.[33] In response, commenters expressed near-unanimous support for the category two budget approach,[34] and no commenter expressed a desire to return to the two-in-five rules.[35]

10. On February 11, 2019, the Bureau released its report on the sufficiency of the category two budget approach.[36] Based on the record in response to the *Public Notice* and the additional findings therein, the Bureau recommended that the Commission retain the category two budget approach and avoid a return to the two-in-five rules. The Bureau found that under the category two budget approach, "greater funding is available for internal connections, distributed to more applicants, in a more equitable and predictable manner, giving applicants more flexibility to determine how best to upgrade their systems."[37]

11. Following the release of the Bureau's report, in July 2019, the Commission adopted a Notice of Proposed Rulemaking (*2019 Category Two Notice*), proposing to make the category two budget approach permanent.[38] In the *2019 Category Two Notice*, we also proposed and sought comment on several modifications to improve the category two budget approach,[39] including, for instance, whether to

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[30] *See* USAC, *FCC Form 500 Filing*, https://www.usac.org/e-rate/applicant-process/before-youre-done/fcc-form-500-filing/ (last visited Nov. 14, 2019) (describing the form that allows applicants to make post-commitment changes to an applicant's funding requests, including reducing the amount of a funding request).

[31] *2014 First E-Rate Order*, 29 FCC Rcd at 8911, para. 106; *2014 Second E-Rate Order*, 29 FCC Rcd at 15571, para. 82.

[32] *2014 Second E-Rate Order*, 29 FCC Rcd at 15575, para. 93.

[33] *Wireline Competition Bureau Seeks Comment on Category Two Budgets*, WC Docket No. 13-184, Public Notice, 32 FCC Rcd 7012 (WCB 2017) (*2017 Category Two Public Notice*).

[34] Nebraska Department of Education Public Notice Comments at 2 (calling the category two budgets a "welcome change" from the two-in-five rules); Urban Libraries Council Public Notice Comments at 2 (stating that the budgets provide "a relatively predictable and equitable framework"); American Library Association Public Notice Comments at 2 (stating that the budgets allow entities to "self-determine how to prioritize planning"); CoSN Public Notice Comments at 5 (calling the category two budgets an "unquestioned success").

[35] Florida E-Rate Team Public Notice Comments at 2 (noting that the Commission "should not revert back to the 2/5 rule"); Pennsylvania Department of Education Public Notice Comments at 9 (observing that the "2/5 Rule was inconsistent with the needs of schools and libraries"); Utah Education and Telehealth Network Public Notice Comments at 2 (imploring the Commission to "avoid a return to the pre-modernization 2/5 rule"); *see also, e.g.*, Montana State Library Public Notice Comments at 1; SHLB Public Notice Comments at 2.

[36] *See Category Two Budget* Report, 34 FCC Rcd at 319. The filing window for funding year 2019 opened on January 16, 2019. However, due to the lapse in appropriations that resulted in the suspension of most Commission operations from January 3, 2019 to January 25, 2019, the Bureau released the *Category Two Budget Report* on February 11, 2019. *Id.* at 319, para. 1 & n.3.

[37] *Id.* at 332, para. 42.

[38] *See 2019 Category Two Notice*, 34 FCC Rcd at 5410-11, paras. 14-16.

[39] *See id.* at 5411-15, paras. 17-30.

move from entity-level budgets to district-wide or library system-wide budgets.[40] In addition, we proposed retaining the existing budget multipliers and funding floor and sought comment on whether to raise the funding floor to address the needs of smaller entities and increase their participation in the program.[41] Similarly, we asked whether the budget multipliers for libraries should be adjusted to meet the needs of entities that may experience higher costs due to their geographic location,[42] as well as several other ways to generally ease administration of the budgets and reduce the administrative burden on applicants.[43]

12. Recognizing the need to allow for a smooth and effective transition to permanent rules, we also sought comment on the best way to transition,[44] including whether to move to fixed five-year budget cycles or maintain the rolling budget approach.[45] In this regard, we also asked whether we should "consider using funding year 2020 as a bridge to transition to the final rules" adopted in the proceeding, including, for example, whether to extend the existing category two budget rules for one additional funding year without modification.[46] Lastly, we sought comment on providing additional category two support to all applicants in such a transition funding year.[47]

III. DISCUSSION

13. To ensure that our nation's students and library patrons have access to high-speed broadband and to further the Commission's goal of bridging the digital divide for all Americans, we permanently extend the category two budget approach, which has provided certainty and more equitable funding to schools and libraries for the last five funding years. Doing so avoids a return to the two-in-five rules. Furthermore, informed by our experience with administering the category two budgets during the five-year test period, we simplify and streamline the category two budget approach to allow applicants to make more effective use of category two funding and to reduce administrative burdens. As part of these improvements, we also provide more equitable, consistent support for small, rural schools and libraries within the existing category two services budget and make permanent the eligibility of managed internal broadband services, caching, and basic maintenance of internal connections.

14. As detailed below, to ensure a smooth transition to the new rules, we establish rules for funding year 2020 that extend the five-year test period for an additional year and provide a prorated amount of category two support to all applicants. In this way, we balance the desire to meaningfully improve the category two budget approach while minimizing the impact associated with such changes for the upcoming funding year. Thus, the new rules we adopt for the category two budget approach will apply beginning in funding year 2021, at which time the budgets will reset for all applicants as we move to fixed five-year funding cycles, the first of which will run from funding years 2021 to 2025.

A. Permanent Adoption of Category Two Budget Approach

15. Based on a review of the record, we first adopt our proposal to make the category two budget approach permanent, thus ensuring that the two-in-five rules will not come back into effect for any

[40] *See id.*

[41] *Id.* at 5412, paras. 19-20.

[42] *Id.* at 5412-13, para. 21.

[43] *Id.* at 5415-16, paras. 28-30.

[44] *See id.* at 5416-18, paras. 31-36.

[45] *Id.* at 5416-17, paras. 32-33 (explaining that the category two budgets were designed to be rolling budgets, but were not in practice due to the five-year test period adopted in 2014, which made it such that no applicant could request funding in a sixth year).

[46] *Id.* at 5417-18, para. 36.

[47] *Id.*

applicants following funding year 2019. Doing so is supported by the record and consistent with the findings of the Bureau's *Category Two Budget Report*. Commenters unanimously support the category two budget approach, and no commenter expressed a desire to return to the problematic two-in-five rules.[48] In particular, commenters state that the benefits of the category two budget approach far outweigh any benefits of the alternative two-in-five rules approach.[49] This view is consistent with the Bureau's finding that, since funding year 2015, funding has gone to all fifty states and all discount levels in a manner that more closely approximates the composition of participating schools and libraries in the E-Rate program overall.[50]

16. Moreover, there is agreement that the category two budget approach "has led to wider, more robust deployment of broadband services within schools and libraries."[51] Likewise, the category two budget approach has "enabled all applicants, regardless of their place on the E-Rate discount matrix, to receive funding for broadband equipment and services inside their school and library buildings."[52] With respect to libraries, ALA observed that "for the first time in over fifteen years our libraries are assured of receiving C2 funding. The result is that all libraries, whether in rural remote areas or urban centers, have access to much needed funding for their in-building network requirements."[53] Commenters also note that extending the category two budget approach permanently will give "both applicants and service providers confidence that category two funding will continue in a reliable and predictable manner."[54]

17. Finally, the record contains no evidence of any significant economic costs associated with a transition to a permanent category two budget approach. Accordingly, the economic benefits of transitioning to a permanent category two budget are expected to outweigh the costs. For all of these reasons, we make the category two budget approach permanent.

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[48] *See, e.g.*, ADTRAN Comments at 5; ALA Comments at 2; Aruba Comments at 1; CGCS Comments at 2; Cisco Comments at 1; City of Boston Comments at 4; Columbia County Library Comments at 1; Cotter Public School District Comments at 1; Cox Comments at 1; EducationSuperHighway Comments at 3; E-Rate & Educational Services Comments at 1; E-rate Expertise Comments at 1; E-mpa Comments at 3; eStem Comments at 1; Infinity Comments at 2; KDE Comments at 2; NMPSFA Comments at 6, North Little Rock School District Comments at 1; PADOE Comments at 3-4; Pulaski County Special School District Comments at 1; SECA/SHLB Comments at 2; South Carolina Comments at 1; Vector Comments at 1; WESD Comments at 2; ODE Reply at 2; WGA Reply at 1; NEDOE Reply at 1.

[49] *See, e.g.*, NEDOE Reply at 2 (comparing the four funding requests that received $1 million in funding in Nebraska in funding years 2011 through 2014 with the 649 funding requests at all discount levels that received over $15 million in funding in funding years 2015 through 2018); South Carolina Comments at 1 (showing that 89 applicants in South Carolina received category two support in funding year 2015, compared with zero in funding year 2014 under the two-in-five rules); Wisconsin DPI Reply at 1-2 (comparing $2,545,828 received in Wisconsin under the two-in-five rules with $73,338,238 under the category two budget approach).

[50] *See Category Two Budget Report*, 34 FCC Rcd at 328-30, paras. 28-32, Appendix B.

[51] ADTRAN Comments at 5-6; *see also* SECA/SHLB Comments at 2; ALA Comments at 2; City of Boston Comments at 4; EducationSuperHighway Comments at 3.

[52] SECA/SHLB Comments at 2; *see also* City of Boston Comments at 4; ALA Comments at 2; E-mpa Comments at 3; WESD Comments at 2; ADTRAN Comments at 5; EducationSuperHighway Comments at 3; NvLS at 1; TUESD Comments at 1.

[53] ALA Comments at 2.

[54] E-mpa Comments at 3; s*ee also, e.g.*, SETDA Reply at 2 (noting that the category two budget approach "provides greater operational certainty, which in turn helps to facilitate the long-term technical and financial planning required to implement significant education infrastructure projects").

B. Improved Category Two Budget Approach Effective in Funding Year 2021

18. Recognizing that the category two budget approach, while successful during the five-year test period, can be improved upon, we take this opportunity to simplify the budgets and make category two funding even more effective than during the last five funding years.[55] Specifically, beginning in funding year 2021, we reset all applicant budgets and begin fixed five-year budget cycles. As part of this modification, we also adopt district-wide and library system-wide budget calculations, which will relieve applicants of some of the most significant administrative burdens associated with the category two application process and management of the budgets. Furthermore, to ensure the needs of schools with low student counts and small libraries, particularly those in rural areas, are met and to promote their increased participation, we increase the category two funding floor to $25,000. We maintain the per-student budget multipliers that served schools well during the five-year test period and adopt a single budget multiplier for libraries, all of which will be adjusted for inflation every five years. Additionally, we make managed internal broadband services, caching, and basic maintenance of internal connections permanently eligible, and confirm their eligibility for all applicants in funding year 2020.

1. Resetting the Budgets and Using Fixed Five-Year Budget Cycles

19. First, to facilitate the transition to the new rules, we will reset all budgets to the full amount eligible under the new rules, which will provide applicants the opportunity to deploy internal connections and make it easier for them to track their category two budgets in the new funding cycle. All applicants will start with a new five-year budget cycle beginning in funding year 2021, regardless of whether they completed their previous five-year budget cycle during the test period.[56] We agree with commenters that resetting the budgets at the end of the test period will alleviate confusion,[57] whereas rolling over remaining funds from the test period would be difficult to track given the changes to the rules and the budget calculations.[58]

20. Next, as part of the improvements to the category two budget approach we make today, and to ease the administration of the budgets, we adopt fixed five-year budget cycles, with the first such cycle running from funding year 2021 through funding year 2025. Applicants may submit applications in any funding year during this five-year cycle. In the *2019 Category Two Notice*, we sought comment on using rolling budgets, or setting fixed five-year budget cycles, as part of the permanent category two budget rules,[59] and asked if fixed five-year cycles would be easier to administer.[60] Commenters largely

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[55] *See, e.g.*, ALA Comments at 7-8 (describing the time and effort needed to access category two funding); ILDOIT Reply at 4 (noting that efforts to streamline and simplify the category two budget approach are welcome because the complication and burden consumes "disproportionate time, cost, and other precious resources" which "is particularly true for rural and smaller schools and those schools operating without consultants"). Inflation adjustments remain a part of the category two budget approach. *See* 47 CFR § 54.502(b).

[56] As stated above, the budget reset applies to all applicants, including those applicants who were subject to relief the Commission provided in the response to Hurricanes Harvey, Irma, and Maria. *See Schools and Libraries Universal Service Support Mechanism*, WC Docket No. 02-6, Order, 32 FCC Rcd 9538, 9547-48, paras. 18-19 (2017) (*2017 Hurricane Relief Order*) (resetting the five-year category two budgets for all directly impacted applicants of Hurricanes Harvey, Irma, and Maria).

[57] *See, e.g.*, Cisco Comments at 2-3 (stating that there was a reasonable assumption that the budgets would reset after the test period); Infinity Comments at 9 (seeking a reset of the budgets); E-Rate & Educational Services Comments at 1-2 (supporting a reset); Vallivue Comments at 2; NvLS Comments at 2 (stating that reducing budgets by funds spent during the test period would be "an administrative nightmare").

[58] *But see, e.g.*, Linn Benton ESD Comments at 3 (arguing that rollover funds could be added to the next five-year funding cycle).

[59] *2019 Category Two Notice*, 34 FCC Rcd at 5416-17, paras. 31-34.

[60] *Id.* at 5416-17, para. 33.

support fixed five-year cycles,[61] noting that fixed budgets present the "clearest and cleanest approach,"[62] and that a "simplified, fixed timeframe for budget expenditure for all applicants will alleviate much of the confusion" created by rolling budgets.[63] We agree and now adopt fixed five-year budget cycles to simplify the administration of the budgets and eliminate a source of confusion for applicants. Fixed cycles also present natural beginning and ending points for budgets, making it easier to make changes and updates to the budgets in future funding years should the need to do so arise. These changes will allow for the smoothest transition to the new rules, and we agree with commenters who stated that the risks associated with a fresh start and fixed budgets are minimal.[64]

21. We note that no commenter supported rolling budgets that begin the first year a school or library requests category two funding and look back four years, as described in the *2019 Category Two Notice*.[65] Some commenters, however, supported rolling over unused funds from the five-year test period into new, fixed five-year cycles.[66] We conclude, however, that the administrative burden of carrying unused funds from one budget period to another far outweigh the benefits of doing so, and the program would be easier to administer with clear starting and ending points to budget periods. Other commenters support rolling budgets to the extent that fixed budgets will present challenges with schools opening or closing during a five-year period.[67] We disagree and find instead that fixed five-year cycles present the simplest rules to administer, and in fact minimize the confusion caused by a school opening or closing mid-cycle. Under a rolling scenario, that school district's budget would need to reflect changes caused by a school opening or closing for an extended period of time, while fixed budget cycles reset at the conclusion of the five-year cycle, giving the district an opportunity to start fresh calculating its budget. Overall, the benefits some applicants may receive from carrying over a portion of unused funding, or from being able to start calculating budgets on a rolling basis, are outweighed by the ability of all applicants to calculate budgets on a clear, predictable basis, with established beginning and ending points that also present clear opportunities for future modifications, should the need arise.

2. School District-Wide and Library System-Wide Budget Calculations

22. Next, as part of the permanent rules that will go into effect in funding year 2021, we adopt district-wide and library system-wide category two budgets—a change that nearly all commenters support.[68] Specifically, school districts and library systems will now have a single budget to administer,

[61] *See, e.g.*, SECA/SHLB Comments at 13-15; ALA Comments at 6-7; NMPSFA Comments at 6; E-rate Expertise Comments at 3; E-mpa Comments at 4; PADOE Comments at 7; Cotter Public School District Comments at 1; Cedar Ridge School District Comments at 1; WESD Comments at 3; ILDOIT Reply at 5; ODE Reply at 3; FL E-Rate Team Reply at 10.

[62] ALA Comments at 6.

[63] KDE Comments at 2.

[64] *See, e.g.*, SECA/SHLB Comments at 16 ("Experience has shown with the pilot program that applicants will apply for funding only when they need it, even during the last year of the cycle, and they will not make unnecessary purchases even if it means foregoing E-rate funding . . . . In any event, the local match in the form of paying their non-discounted share ensures that their purchases will be limited to only what is necessary to meet their needs."); NMPSFA Comments at 6 ("Districts are not in the business of spending money on things they do not need and funding sources are scarce.").

[65] *2019 Category Two Notice*, 34 FCC Rcd at 5416, para. 32.

[66] *See, e.g.*, Linn Benton Lincoln ESD Comments at 3 (suggesting that the rolling approach worked well and that rollover funds from one five-year cycle be applied to the next five-year funding cycle).

[67] *See, e.g.*, ADTRAN Comments at 10 (arguing "that USAC can keep track of differing budget cycles that evolve from using rolling periods").

[68] *2019 Category Two Notice*, 34 FCC Rcd at 5413-15, paras. 22-27; *see, e.g.*, Funds For Learning Comments at 1; SECA/SHLB Comments at 7-13; E-Rate & Educational Services Comments at 2; PADOE Comments at 5-7; Infinity Comments at 5-7; South Carolina Comments at 4-5; MCS Comments at 2; NMPSFA Comments at 7; E-

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and the district or library system will have the flexibility to allocate category two funding among its schools and libraries as it sees fit, vastly simplifying the planning and application process for category two services. This change will simplify some of the more complicated aspects of administering the budgets and applying for funding (such as dividing the costs of shared services among multiple entities, estimating student counts at new schools, and counting part-time students), without eliminating protections against waste, fraud, and abuse, which continue to apply with respect to each individual school and library included in the school district-wide and library system-wide budgets.[69] In particular, calculating the budgets in this way will largely eliminate the need for applicants to maintain and administer separate budgets for each school or library in a district or library system and minimize instances where funding requests are delayed or denied because they exceeded the budget for a particular school or library.[70] Further, as commenters noted, different schools have different technological needs,[71] and a single district-level or system-level budget will allow the school district or library system to determine how best to account for these differences. By affording applicants the flexibility to determine how best to allocate funding within their districts and library systems, we ensure a more effective use of E-Rate funds.[72]

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mpa Comments at 8-10; ALA Comments at 4-5; NYCDOE Comments at 1-2; WESD Comments at 2-3; Oakland USD Comments at 1; EducationSuperHighway Comments at 3-4; E-Rate Advantage Comments at 2; Fortinet Comments at 3; NvLS Comments at 1; WVDOE Comments at 9-10; Central Arkansas Library Comments at 1; MCPS Comments at 1-2; Chino Valley USD Comments at 1; Ceres USD Comments at 1; South Butler County Comments at 1; Vector Comments at 3; eStem Comments at 1; Pulaski County Comments at 1; North Little Rock School District Comments at 1; ILDOIT Reply at 4; Wisconsin DPI Reply at 3-4. We disagree with CDE's contention that a district-wide approach means that "the underlying purpose of the program may be lost in the simplification." CDE Comments at 3. CDE has provided no evidence to support its position that districts may distribute funding inequitably or would not allocate funding where it is most needed. Rather, we agree with commenters who state that it is unlikely that a district would not focus these resources to the entities with the greatest needs. NMPSFA Comments at 8.

[69] *See, e.g.*, E-Rate & Educational Services Comments at 2 (district-wide budgeting removes the need to count part-time students); Gordon Howard Comments at 1 (district-wide budgeting simplifies applying for shared services); MCS Comments at 2 ("The relief on the FCC Form 471 alone [from moving to district-wide budgeting] will be significant, not to mention the FCC Form 500 and other related processes.").

[70] *See, e.g.*, EducationSuperHighway Comments at 3-4 ("If the funding amounts were at the district level, districts would have to manage five times less the number of school level budgets. Eliminating these 'mini-budgets' and giving applicants one budget to work with would greatly reduce the administrative burden on applicants."); Iowa DOE Reply at 3 ("The most common [Program Integrity Assurance] inquiry for [category two (C2) services] for Iowa districts was because applicants exceeded their C2 budget cap for one or more schools. Some applicants did not use all their C2 [budgets] because while one school used all its C2 [funding] and actually needed more, a newly constructed school in the district might not need any C2 [funding] at this time.").

[71] *See, e.g.*, Vitech Consulting Comments at 1 ("The age of school and library buildings varies considerably as do their technology needs. It is best left to the applicant to determine where E-Rate funds can be used most efficiently."); EducationSuperHighway Comments at 4 ("[S]tudents in higher grade levels tend to utilize technology more frequently and for more bandwidth-intensive purposes than students at lower grade levels . . . it is entirely likely that a high school with a relatively small student population will require as much, or more, technology infrastructure and Wifi coverage to support its curricular program than an elementary school with a larger student count.").

[72] *See, e.g.*, E-Rate Advantage Comments at 2; ADTRAN Comments at 9 ("Because schools tend not to be architecturally uniform, the costs for implementing Wi-Fi networks can vary significantly, and the school district is best positioned to determine how those differing costs should be addressed."); TUESD Comments at 2 ("The current site-by-site budget made it impossible for TUESD to maximize the E-rate funds since the needs at each school were different. The current site restricted budgets do not align with agency needs and it creates an unnecessary challenge to administer.").

23. In adopting district-wide budgets, we provide general guidance on what constitutes a "school district." Given that applicants are likely to be in the best position to apply this guidance to their particular circumstances, we do not strictly define the term for the purposes of applying for and calculating a district-wide budget. In response to our request for comment on how applicants and USAC should determine which entities are part of a school district for calculating category two budgets,[73] we received several comments, but no clear consensus.[74] To provide administrative ease and flexibility to account for differing scenarios and consistent with the manner in which applicants currently calculate district-wide discount rates,[75] applicants should consider all schools that fall under the control of a central administrative agency as a district for the purpose of calculating a shared, district-wide budget.

24. Under this approach, private schools and charter schools that operate independently of a public school district or a central administrative agency, and are individually responsible for their finances and administration, should separately calculate their category two budgets and apply for funding. Independent charter schools, private schools, and other eligible educational facilities that seek support for more than one school building should factor all students in facilities under the control of their central administrative agency or entity into the category two budget calculation. For example, if a group of parochial schools shares administration and finances, they should calculate a single, "district-wide" category two budget for all students under the central administrative entity or agency.

25. To address issues that may arise regarding changes to school districts and library systems during a five-year budget cycle, as well as issues that may arise in accommodating states' varied definitions of school or library districts,[76] we direct the Bureau to provide clarifying guidance consistent with the terms of this Report and Order, and publish clarifications or additional guidance with respect to the implementation and administration of district-wide and library system-wide category two budgets to the extent necessary.[77]

26. *Full-Time Enrollment.* In another effort to streamline both the application filing and review process, going forward we will base student counts on full-time enrollment only and eliminate the

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[73] *See 2019 Category Two Notice*, 34 FCC Rcd at 5414, para. 25.

[74] *See, e.g.*, CSM Reply at 4-5 (stating that independent charter schools and charter organizations should have their own category two budget allocations if they can prove that they operate independently from its chartering agency/school district); E-mpa Comments at 10-11 (supporting a view that all charters are independent of a school district); E-Rate Advantage Comments at 2 (recommending that charter schools that are administratively and operationally independent from a sponsoring district be considered independent schools for category two budget calculations); KSLLC Comments at 3 (stating that all charters should be treated as independent); South Carolina Comments at 5 (noting that all charter schools in South Carolina are treated as independent and stating that merging districts should take into consideration all past category two funding requests).

[75] *See 2014 First E-Rate Order*, 29 FCC Rcd at 8956, para. 220 ("[A]n applicant should determine its discount using all E-rate eligible students in schools that fall under the control of a central educational agency.").

[76] *See, e.g.*, South Carolina Comments at 5 (requesting clarity regarding how merging or dividing districts' budgets would be calculated and noting that, in South Carolina, charter schools are independent from their associated school district and are listed as independent schools and file their own category two applications); NMPFSA Comments at 8-9 (indicating that guidance is needed regarding how charter schools that are classified as part of the school district by the state, but where the district does not handle the E-Rate filing for the charter, should apply for category two funding).

[77] *See Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Third Report and Order, 12 FCC Rcd 22485, 22489, para. 6 (1997) (delegating authority to the Bureau to issue orders interpreting our rules as necessary); *see also Lifeline and Link Up Reform and Modernization; Telecommunications Carriers Eligible for Universal Service Support; Connect America Fund*, WC Docket Nos. 11-42, 09-197, 10-90, Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4120, para. 433 (2016) (delegating to the Bureau authority to make further rule changes to ensure that the reforms adopted by the Commission would be reflected in the rules) (*2016 Lifeline Order)*.

need for schools or school districts to count part-time students in their enrollment numbers.[78] Commenters support this change as a simplification that stems from district-wide budgets.[79] More specifically, because the district-wide budgets will allow school districts greater flexibility in allocating category two support, it is no longer necessary for schools with lower full-time enrollment, but high part-time enrollment to take the often difficult and time-consuming steps to count and verify their part-time enrollment numbers in order to obtain category two funding. Using district-wide budgets, we believe that all schools in a district will have adequate support to ensure appropriate deployment of local area networks.

27. We also will no longer permit school districts to estimate the number of students for buildings under construction because those students will otherwise be accounted for by the district enrollment numbers. However, an independent school with its own entity-level budget will still be allowed to estimate its enrollment numbers in order to be able to request category two support while construction is underway. As presently required by our rules, if an applicant overestimates the number of students who enroll in that school, it must return to USAC any funding in excess of that which it was entitled based on the actual enrollment by the end of the next funding year.[80]

3. Funding Floor and Budget Multipliers

28. To ensure that all E-Rate applicants, including small schools and libraries in rural areas, have the funding they need to deploy their internal connections networks within the existing E-Rate program budget for category two services, we take several steps to make access to category two funding more equitable and, in turn, result in a more consistent distribution of support for small, rural schools and libraries. First, we raise the category two budget funding floor from $9,200 to $25,000. Second, we eliminate the funding disparity between urban and rural libraries inherent in the current bifurcated approach that disadvantages rural libraries and adopt a unified budget multiplier for all libraries.

29. *Funding Floor*. To ensure that small schools and libraries have sufficient funding to deploy their internal connections, we increase the funding floor to a pre-discount level of $25,000 over the five-year funding cycle beginning in funding year 2021. In the *2019 Category Two Notice*, we sought comment on whether the funding floor should be increased to $25,000.[81] We agree with commenters that the existing funding floor level of $9,200, combined with the overall administrative burden of requesting category two support, resulted in a low participation rate by small and rural entities with low student enrollment or small square footage.[82] For instance, from funding year 2015 through funding year 2019, school sites nationwide, on average, used 60% of their category two funding support, but small sites that only qualify for the funding floor, on average, used only 33% of their category two funding support,[83] in

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[78] In limited circumstances, basing student counts on full-time enrollment only could slightly reduce the category two budget for some applicants. *See 2014 Second E-Rate Order*, 29 FCC Rcd at 15566, para. 87. We believe, however, that the administrative benefits of basing student counts on full-time enrollment only that are discussed above outweigh the slight reductions in funding these applicants will experience.

[79] *See, e.g.*, E-Rate & Educational Services Comments at 2 (stating that district-wide budgets eliminate the need to count part-time students); NEDOE Reply at 4 (noting that district-wide budgets could simplify the application process by eliminating part-time student counts).

[80] *2014 First E-Rate Order*, 29 FCC Rcd at 8915, para. 115. If an applicant underestimates its number of enrolled students on its application, its budget will be calculated based on this underestimated student count. *See* 47 CFR § 54.502(b)(2) (permitting new schools to estimate student counts and requiring them to repay any support provided in excess of its maximum budget based on its estimated student counts).

[81] *See 2019 Category Two Notice*, 34 FCC Rcd at 5412, para. 20.

[82] *See, e.g.*, COSN/AASA/ASBO Reply at 7-8; Butte County Comments at 2 (supporting an increase of the floor to $25,000 to provide more equitable funding for small schools).

[83] *See* Funds For Learning Comments at 11.

large part because so little funding was available to them or because the benefits of the funding at the floor were often lower than the costs associated with the application process.[84]

30. To illustrate why few entities at the funding floor (which include many rural schools and libraries) took advantage of category two funding during the five-year test period, we consider a small school at an 85% discount rate with 61 students. During that period, which set the budget floor at $9,200, such a school would have been eligible to receive category two support of just $7,820 despite having many of the same technical needs for its Wi-Fi networks as larger schools.[85] In fact, one commenter estimates that it would cost $24,350 to deploy switches, wireless access points, wireless access point controllers, routers, and cabling to a small school with 61 students.[86] We agree with those commenters that argue that a budget floor of $25,000 is sufficient to ensure that those small sites that previously did not participate can deploy internal connections networks.[87] With a $25,000 funding floor, that same small school at an 85% discount rate will receive $21,250 in E-Rate support.[88] We expect that this additional funding, in addition to the increased flexibility of district-wide and library system-wide budgeting generally, will make it attractive and beneficial for small schools and libraries to take advantage of category two funding support. And we find that this increase in the funding floor can be done within the existing E-Rate program budget for category two services in combination with our other reforms to the category two budget approach.

31. *School Multiplier*. Consistent with the findings in the *Category Two Budget Report,* we continue to believe that the existing category two budget mechanism is generally sufficient for schools, and thus we adopt our proposal to maintain the $150 per student school budget multiplier adjusted for inflation from the five-year test period, and—for administrative simplicity—adjust that amount ($166.44) up to $167 per student for the new five-year funding cycle beginning in funding year 2021. We find that maintaining the same per-student level of support as was available in the previous category two budget cycle is sufficient to meet schools' internal connections needs. This level of support enabled 85% of school sites to receive category two funding support during the funding year 2015 through funding year 2019 budget cycle.[89] Many schools required less funding than the $167 per student budget multiplier we adopt today—in fact, 50% of schools used less than $131 per student over those five years.[90]

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[84] *See, e.g.*, Acklin & Associates Comments at 1; Funds For Learning Comments at 2, 11-12 (noting that participation rates go up at a higher funding level even in districts that have schools that are both large and small); E-Rate & Educational Services Comments at 2 (stating that "small districts at the floor . . . did not want to tackle the complexity of E-rate for a small amount of funding which would not fully upgrade their networks"); E-rate Expertise Comments at 1 (stating that applicants "have had to reduce their funding requests because of insufficient [category two] budget amounts at smaller library branches"); WESD Comments at 2; ADTRAN Comments at 8; Alaska DEED Comments at 4; TUESD Comments at 1-2.

[85] A pre-discount price of $9,200 at an 85% discount rate equals $7,820 in E-Rate discounts.

[86] *See, e.g.*, NMPSFA Comments at 10-11.

[87] *See* Infinity Comments at 5; Acklin & Associates Comments at 1; City of Boston Comments at 7; Butte County Comments at 2; ALA Comments at 4 (suggesting a floor of $15,000). Some commenters advocate for a higher funding floor. *See* SECA/SHLB Comments at 7 (retrofitting a building costs $30,000); E-mpa Comments at 6-7 (supporting a floor of $30,000). However, a floor of $25,000 has more widespread support than other proposals, and based on the comments we received, we determine that a funding floor of $25,000 will provide small schools and libraries sufficient funding to deploy their internal connections networks and that a floor any higher than $25,000 is not necessary for most small schools and libraries.

[88] A pre-discount price of $25,000 at an 85% discount rate equals $21,250 in E-Rate discounts.

[89] *See* Letter from John D. Harrington, Chief Executive Officer, Funds For Learning, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-184, CC Docket No. 02-6, at 4 (filed Sept. 3, 2019) (Funds For Learning Sept. 3 *Ex Parte*).

[90] *See id*. at 13.

32. Some commenters argue that a higher budget multiplier is needed for schools to build their Wi-Fi networks.[91] We disagree. We find that increasing per-student budgets beyond the rate of inflation is not necessary at this juncture, particularly given the other changes we make to the category two budget approach in this Report and Order. In fact, we believe that today's changes will lead to additional category two funding support being available for those schools that need it.

33. The streamlined district-wide budget approach we adopt today empowers school districts to allocate category two funding support to the sites that need it most. Entity-specific budgets have constrained category two funding support to be directed to specific sites based on enrollment numbers or square footage without the ability to make adjustments for level of need. If there was a school in a district that required less than the per-site budget allocation to deploy a Wi-Fi network and another school in the district that required more than the per-site allocation, the district could not re-direct the unused funding to complete the more expensive network, which meant that part of the category two budget support for the district went unspent and an identified need went unmet. Implementing district-wide budgets lifts this restriction and allows applicants to allocate category two funding to the sites that most need it, which, in turn, permits them to take advantage of a greater portion of their category two budgets. For example, Funds For Learning estimates that adopting school district and library system-wide budgets will make an additional $94.1 million per year in category two funding available to applicants.[92] Further, by increasing the funding floor, we are providing additional category two funds to some of the smallest schools in the country. As a result, under our new approach, these small schools do not need an increase in the per-student allocation to receive an increase in the category two funding available to them.

34. *Library Multiplier*. To eliminate the funding disparity between rural and urban libraries inherent in the existing bifurcated approach to calculating budgets for libraries and to ease administration, we establish a single pre-discount budget multiplier for all libraries of $4.50 per square foot over the five-year funding cycle beginning in funding year 2021. Currently, the library multipliers differ based on geography. Specifically, libraries located in cities and urbanized areas with a population of 250,000 or more, as identified by the Institute of Museum and Library Services (IMLS) locale codes of 11, 12, and 21, receive $5.00 per square foot, adjusted annually for inflation, and libraries in all other locations receive $2.30 per square foot, adjusted annually for inflation.

35. As demonstrated by the record, the cost to deploy a Wi-Fi network does not vary significantly based on geography.[93] As internal connections are provided *within* school and library buildings, which are similar regardless of location, we are now persuaded by experience from the test period that the costs to install the equipment and the type of equipment needed to provide connections within these buildings should also be comparable regardless of location.[94] Indeed, some commenters contend that internal connections deployment costs are higher in rural areas than urban areas,[95] and even those commenters that favor a higher budget multiplier for libraries in highly-concentrated urban areas recognize that an increase in the budget multiplier for rural libraries is needed.[96] Accordingly, we find

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[91] *See, e.g.*, Funds For Learning Comments at 2; E-mpa Comments at 4-6; PADOE Comments at 11; ADTRAN Comments at 7-8; Fortinet Comments at 3.

[92] *See* Funds For Learning Reply at 2.

[93] *See, e.g.*, E-Rate Advantage Comments at 1 (stating that the cost of building in urban and rural libraries is the same).

[94] *See id.*; *see also 2014 First E-Rate Order*, 29 FCC Rcd at 8907-09, paras. 98-102 (describing the limitations of the data used to set library multipliers in 2014 and describing it as "less robust than that for schools").

[95] *See* ADTRAN Comments at 9 (noting that installation costs are higher in rural and remote areas than urban areas); CDE Comments at 3.

[96] *See* E-rate Expertise Comments at 3 (arguing that the budget multiplier for applicants outside of highly-concentrated urban areas should be increased because the multiplier was so low that it was causing applicants to make short-sighted purchasing decisions); ALA Comments at 4.

that experience has not borne out the prediction that costs would be higher and the need for support would be greater in highly concentrated urban areas than for libraries in the rest of the country.[97]

36. Moreover, our experience during the five-year test period shows that a lower budget multiplier for rural applicants creates a considerable disparity in access to the amount of category two funding support available for rural libraries.[98] As the Bureau's *Category Two Budget Report* found, rural libraries seek category two funding support at a much lower rate than urban libraries.[99] Commenters attributed rural libraries' lack of participation to insufficient budgets[100] and recommended an increase to the multiplier for rural libraries.[101] Raising the budget multiplier for libraries outside of highly-concentrated urban areas, therefore, is a necessary step towards ensuring that they have sufficient funding to deploy their internal connections.

37. Finally, setting a single budget multiplier for all libraries simplifies the library budget calculations for applicants and will reduce the application review burden for USAC. Without the need to determine the IMLS locale code for each E-Rate supported library and the overall budget multiplier for a library system, applicants and USAC should be able to increase the efficiency and pace of the filing and processing of applications.

38. To provide a single budget multiplier for all libraries within the existing budget, we adopt a pre-discount multiplier of $4.50 per square foot for all libraries. We calculated this number, first, by estimating the potential total of all pre-discount library budgets from funding year 2015 to funding year 2019 using all public libraries. We then divided this potential total of all pre-discount library budgets by the total square footage of all public libraries. We provided a slight upward adjustment to $4.50 per square foot to reflect the anticipated participation rates of libraries requesting category two funding under the E-Rate program. This new budget multiplier, coupled with the increased funding floor, will make additional category two support available for those small and rural libraries that did not participate during the five-year test period.

39. Our experience indicates that a pre-discount multiplier of $4.50 per square foot will minimally impact libraries in highly concentrated urban areas while providing sufficient additional funding to enable other libraries to deploy internal connections networks. Given that 91% of libraries in highly concentrated urban areas used less than $3.99 per square foot from funding years 2015 through 2019, we expect that this reduction will affect only a small proportion of libraries in those areas.[102] Indeed, those applicants will still be under budget, even with a budget of $4.50 per square foot. Moreover, as with schools, introducing library system-wide budgets will give library systems enhanced

[97] *See 2014 Second E-Rate Order*, 29 FCC Rcd at 15573, paras. 88-91 (stating that the cost of internal connections increases with usage density and adopting a higher library multiplier for libraries in highly-concentrated urban areas).

[98] USAC, *Category Two Budget*, https://www.usac.org/e-rate/applicant-process/applying-for-discounts/category-two-budget/ (last visited Nov. 14, 2019).

[99] *Category Two Budget Report*, 34 FCC Rcd at 329, para. 31 (explaining that while urban and rural schools participated at roughly the same rates, at 82% and 81%, respectively, urban libraries were more likely to participate than rural libraries, at 54% and 38%, respectively); ALA Comments at 3 ("We are concerned that libraries in rural communities do not apply for C2 funding to the same degree as libraries in urban communities.").

[100] *See, e.g.*, E-rate Expertise Comments at 2 (stating "it seems like the modernization rule changes are hitting the smaller and more rural libraries with unintended and disproportionate negative impacts"); EdLiNC Reply at 5 (arguing that the current category two budget multipliers are inadequate to address internal connection needs of rural applicants, and citing rural applicants' responses to Funds for Learning's 2019 E-Rate Trends Report).

[101] *See, e.g.*, E-Rate Advantage Comments at 1; South Carolina Comments at 4 (requesting a multiplier of $5.00 per square foot for all libraries).

[102] *See* Funds For Learning Sept. 3 *Ex Parte* at 18.

flexibility to allocate funding throughout their sites as they see fit, and raising the funding floor will provide greater funding for small libraries, even if their per square foot allocations are reduced slightly.

40. *Calculating District-Wide and Library System-Wide Budgets*. Based on the changes to the budget multipliers and funding floor we make today, we detail how applicants will calculate their budgets under the district-wide and library system-wide budget methodology. Specifically, to ease administration and to recognize that school and library systems are in fact systems with generally unified budgets that have the ability to direct support to whatever school or library in the system needs it most, we require school districts and library systems to calculate total budgets using their aggregate student count or square footage and the "aggregate funding floor" (i.e., the aggregate number of schools or libraries times the funding floor).[103] Therefore, a school district or library system need only determine the aggregate number of students or square footage throughout the system as well as the total number of eligible schools and libraries in the system, without detailing the precise number of students or square footage attributable to any individual school or library. We expect most school districts and library systems to receive funding significantly above the aggregate funding floor and to appropriately allocate funds to those that need it most.[104] In addition, we recognize that smaller school districts and library systems have less access to shared resources and are more likely to be located in rural areas where funding is scarce. As such, we create an exception for small school districts and library systems. Specifically, we give school districts and library systems with 10 or fewer sites the option to calculate their budgets on a per-site basis by adding together the budgets of each eligible site within the district or library system.

41. To illustrate how the calculation would work, we consider a school district with five schools, three of which have 200 students each and two of which have 100 students each. Using the $167 budget multiplier for schools and the $25,000 funding floor for funding year 2021, the school district would have a total pre-discount budget of $150,200, to spend across the five schools over the five-year period.[105] Giving small systems this option will ensure that small, rural school districts and library systems can take full advantage of the increased funding floor,[106] with only minimal increases to administrative complexity for applicants and for USAC.[107]

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[103] In other words, a school district with 10,000 students would normally have an aggregate budget of $1,670,000. If those students were spread across 100 schools, then its budget would instead be $2,500,000 (the aggregate funding floor). Accordingly, the funding floor only comes into play if the aggregate budget for the system would fall under the aggregate funding floor for the system.

[104] *See* Vitech Consulting at 1 (district-wide budgets allow applicants to allocate category two funds where they are most needed).

[105] Each school with 100 students would be eligible for a $16,700 budget (which is less than what they would receive under the funding floor) and each school with 200 students would be eligible for a $33,400 budget. Hence the aggregate budget here is 2 x $25,000 + 3 x $33,400 = $150,200. Without this exception, the school district's aggregate budget would be determined by multiplying the aggregate number of students in the district ((3 x 200) + (2 x 100) = 800) by the school multiplier ($167). Hence, the aggregate budget would be 800 x $167 = $133,600, which is less than what the district's budget would be under the exception.

[106] *See, e.g.*, WVDOE Comments at 9; PADOE Comments at 12-13; E-Rate & Educational Services Comments at 3.

[107] Although we recognize that allowing site-by-site calculations increases the number of auditable issues for applicants and USAC and could lead some applicants to shuffle headcounts to maximize support, we find such concerns of little consequence for the smaller school districts and library systems for which we create this option. Our experience with USAC audits persuades us that the administrative burdens on USAC are likely to be manageable if we limit this option to school districts and library systems with 10 or fewer locations, particularly given that those districts and systems present fewer opportunities for shifting headcount and, on that basis, gaming the funding support rules. Thus, although the record does not enable us to precisely identify the "ideal" number of locations at which to draw this line, we find that our choice of 10 or fewer reasonably balances our interests in managing the administrative burden of the program and guarding against the risk of gaming.

42. *Inflation Adjustment*. For both budget multipliers and the funding floor, we amend our rules to make a one-time adjustment for inflation before the start of the filing window for each five-year funding cycle. Commenters generally agree that a one-time inflation adjustment over a five-year cycle will reduce confusion surrounding the category two budget calculations,[108] although commenters suggested different approaches for calculating inflation.[109] We reject suggestions that use either predictions or other inflation indicators as too complex. Instead, we find that the simplest, most effective, and most accurate approach is to adjust for inflation before the start of the filing window for each five-year funding cycle, providing notice to applicants about the upcoming budget multipliers and funding floor. Adjusting for inflation in this way will simplify the budget calculation, and will ensure that subsequent five-year funding cycles accurately reflect historical inflation rates. To ensure that applicants know their budgets well in advance of funding year 2021, we announce the budget multipliers and the funding floor in this Report and Order. Our calculations of the budget multipliers and funding floor account for future inflation through funding year 2021 using estimated inflation adjustments.[110] Accordingly, these figures will not be further adjusted for inflation between now and the funding year 2021 filing window, or again during this initial five-year funding cycle.[111]

43. For future funding years, before the start of every five-year funding cycle, we direct the Bureau to calculate and announce the inflation adjustments. Specifically, the Bureau will announce the budget multipliers and funding floor as adjusted for inflation at least 60 days before the start of the filing window for the next five-year funding cycle. For funding year 2026 and beyond, the Commission shall use the last four quarters of available data on the Gross Domestic Product Chain-type Price Index (GDP-CPI) compared with the equivalent quarters from the beginning of the five-year funding cycle. The increase shall be rounded to the nearest 0.1% and shall be used to calculate the category two budget multipliers and funding floor for that five-year funding cycle. The budget multipliers and funding floor will also be rounded to the nearest cent to eliminate confusion surrounding the calculation, as supported by commenters.[112]

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[108] *See, e.g.*, CSM Reply at 7 (noting that "the extended inflation-adjusted per-student/per square foot amounts have caused rounding issues in [the E-Rate Productivity Center], further confusing Category Two budget calculations"); Iowa DOE Reply at 5 (supporting a single adjustment of the multiplier prior to the beginning of each five-year budget cycles); PADOE Comments at 9-10 (same).

[109] *See, e.g.*, SECA/SHLB Comments at 16 (suggesting a one-time inflation adjustment that is based on historical and predicted rates for the entire five-year funding cycle); PADOE Comments at 10 (suggesting that the Commission use historical five-year inflation rates as one of several indicators to guide the multiplier amounts).

[110] Pursuant to section 54.502(b), the Bureau calculates category two annual inflation adjustments to the multipliers using the calculation explained in section 54.507(a). 47 CFR §§ 54.502(b)(1); 54.507(a). That is, the Bureau calculates annual inflation after all four quarters of data have been released by the Bureau of Economic Analysis (BEA), which generally occurs in late January. *See 2019 Inflation Public Notice*, 34 FCC Rcd at 1138, para. 1 & n.3 (calculating a 2.2% increase for funding year 2019 based on a gross domestic product of 107.932 in 2017 and 110.337 in 2018 using Table 1.1.4 of the National Income and Product Accounts Table from the BEA). Under the funding year 2021 rules we adopt today, we now calculate the category two inflation adjustment using the last four quarters of data available (111.41) as compared with the prior four quarters (109.074), or a 2.1% increase. *See also* National Income and Product Accounts Table, Bureau of Economic Analysis, Table 1.1.4 (Sept. 26, 2019), https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=3&isuri=1&1910=x&0=-99&1921=survey&1903=4&1904=2015&1905=2017&1906=a&1911=0. We apply a 2.1% increase to funding year 2020 and funding year 2021.

[111] Specifically, as discussed above, we establish a school budget multiplier of $167, a library budget multiplier of $4.50, and a funding floor of $25,000 for funding year 2021.

[112] *See, e.g.*, Infinity Comments at 8 (supporting an inflation calculation rounded to two decimal places beginning in funding year 2020 as "[t]his small change will make the calculations so much easier on both USAC staff and E-Rate applicants"); South Carolina Comments at 6 (noting that "rounding the Category 2 budget multipliers for inflation would simplify the program not only for applicants, but USAC reviewers as well"); NvLS Comments at 2 (stating

(continued….)

44. *Student Counts and Square Footage.* To further reduce administrative burdens, and consistent with the record,[113] we will require applicants to provide student counts and library square footage for schools and libraries only once (calculated at the time that the discount is calculated that funding year) during a five-year funding cycle beginning with the first such cycle that starts in funding year 2021. Specifically, under the fixed, five-year budgets we adopt today, we will require applicants to validate their student counts or library square footage for each school and library in the district or library system in the first year an applicant applies for category two support during the relevant five-year cycle. Applicants, if they choose to do so, can update their student counts or square footage information in subsequent funding years to reflect, for example, an increased budget due to increased student enrollment. Applicants, however, are not required to do so, and can instead keep the student count and square footage information for the entire five years of the budget cycle. We note, contrary to what was suggested in the record,[114] that the requirement that the category two budget enrollment numbers only be validated once every five years has no impact on the requirement that schools update their enrollment and National School Lunch Program or Community Eligibility Provision numbers for purposes of calculating discount rates each year.[115]

4. Eligible Services

45. In the *2019 Category Two Notice*, we proposed to permanently extend the eligibility of managed internal broadband services, caching, and basic maintenance of internal connections under a category two budget approach consistent with our determination in 2014 to make these services eligible for support through funding year 2019.[116] Commenters expressed broad support for retaining the eligibility of these three services.[117] Consistent with our determinations in the *2014 First E-Rate Order*, we find that category two budgets allay concerns about wasteful spending on these three services, and we therefore see continued benefit for the functionality of networks within schools and libraries in making these services eligible for category two support.[118] Accordingly, we adopt the proposal to make these services eligible for category two support under the permanent category two budget approach.

46. The *2019 Category Two Notice* sought comment on whether additional services should be made eligible for category two funding.[119] In response, commenters urged the Commission to make

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that "two decimals are plenty and less confusing"); WVDOE Comments at 12 (supporting an inflation calculation rounded to two decimals as it "will simplify for the applicants and state coordinators educating applicants" as well as "the calculation of the budgets").

[113] *See*, *e.g.*, SECA/SHLB Comments at 17-18 (describing the burden involved in annual updates to the number of enrolled students and number of square feet per library and stating "[t]he application process would be streamlined considerably" if applicants are only required to provide student counts once during a five-year cycle and that this approach will allow applicants "to have the predictability of how much funding they can utilize and incorporate into their five-year technology planning"); E-mpa Comments at 12 (recommending that USAC collect discount and budget information in the first year of each five-year category two budget cycle and set category two budgets that will remain the same throughout the five-year cycle); Infinity Comments at 7 (same).

[114] *See* SECA/SHLB Comments at 3, 18 (suggesting that applicants should be able to rely on their enrollment numbers for all five years of the funding cycle and that they should not be required to update enrollment and eligibility numbers each year unless they are updating their category two budget enrollment).

[115] *See* 47 CFR § 54.505(b).

[116] *2019 Category Two Notice*, 34 FCC Rcd at 5411-12, para. 18.

[117] *See, e.g.*, ADTRAN Comments at 6; ALA Comments at 2; ApplianSys Comments at 1-2; Aruba Comments at 3; Cisco Comments at 4-5; EducationSuperHighway Comments at 3; Vector Comments at 2; FL E-Rate Team Reply at 12; Iowa DOE Reply at 3-4.

[118] *2014 First E-Rate Order*, 29 FCC Rcd at 8921, para. 131.

[119] *2019 Category Two Notice*, 34 FCC Rcd at 5411-12, para. 18.

eligible several additional services. For example, several commenters requested that we make eligible under category two the filtering technology necessary for compliance with the Children's Internet Protection Act.[120] But the Commission has previously explained that the Children's Internet Protection Act prohibits recipients from obtaining discounts under the universal service support mechanism for the purchase or acquisition of technology protection measures necessary for compliance with the Children's Internet Protection Act.[121] Others requested that we make eligible services that the Commission has either previously made ineligible or that the Commission has previously declined to make eligible.[122] We decline to make additional services eligible under category two so that E-Rate eligible entities continue to focus requests for category two funding on the internal connections that are truly necessary to deliver high-speed broadband to students and library patrons via local area networks and wireless local area networks, consistent with the Commission's reasoning in the *2014 First E-Rate Order*.[123] And we find that the requests of still other commenters to make additional services eligible for category one support are beyond the scope of this proceeding.[124]

47. At the request of several commenters,[125] we direct the Bureau to address ongoing issues related to the application of our eligible services rules with respect to category two services by providing clarifications in instances where the terminology used in our rules does not align with the terminology used by service providers in the context of bid responses and invoicing or has otherwise caused applicant uncertainty or confusion about how to request category two services.

5. Other Issues

48. *Equipment Transfer Rule.* Consistent with our efforts to streamline the process for requesting support for category two services, we now ease our equipment transfer rule to lessen the paperwork burden on school districts and library systems. As we stated in the *2019 Category Two Notice*, and supported by the record,[126] the original concerns that led to the adoption of a prohibition on

[120] *See, e.g.*, SECA/SHLB Comments at 27-28; EducationSuperHighway Comments at 7; Fortinet Comments at 2.

[121] *See Federal-State Joint Board on Universal Service*, *Children's Internet Protection Act*, CC Docket No. 96-45, Report and Order, 16 FCC Rcd 8182, 8204, paras. 54-55 (2001).

[122] *See, e.g.*, Aruba Comments at 4 (requesting funding for network security features); Cisco Comments at 5-9 (same); SECA/SHLB Comments at 26 (same); Funds For Learning Comments at 13 (requesting funding for network monitoring) EducationSuperHighway Comments at 7 (same); South Carolina Comments at 3-4 (requesting funding for servers); Fortinet Comments at 2 (requesting funding for voice over internet protocol (VoIP) services).

[123] *See 2014 First E-Rate Order*, 29 FCC Rcd at 8917-18, paras. 119-121 (designating only services necessary to ensure delivery of high-speed connections as E-Rate eligible).

[124] *See, e.g.*, John C. Fremont Library District Comments at 1; City of Boston Comments at 7-9; Vitech Comments at 2; Linn Benton Lincoln ESD Comments at 4.

[125] *See*, *e.g.*, Vitech Comments at 1 (requesting clarity about how to apply for bundled products that include services that fall under both the internal connections and the basic maintenance of internal connections categories); SECA/SHLB Comments at 24-26 (noting that vendors may classify a service as a different category two subcategory (e.g., managed internal broadband services) than the applicant selected on its FCC Form 470 (e.g., internal connections), which results in a denial of funding due to a competitive bidding violation); PADOE Comments at 18-19 (requesting that the Commission allow pre-paid multi-year contracts for software support and annual license updates under either basic maintenance of internal connections or internal connections).

[126] *2019 Category Two Notice*, 34 FCC Rcd at 5415, para. 27; E-Rate Advantage Comments at 2 (stating that district-wide budgets should "eliminate the equipment transfer rules"); NMPSFA Comments at 7 ("Another benefit of district-wide budget is that it would eliminate, almost entirely, the need for the equipment transfer process because the district would have the flexibility to move equipment based on its business and instructional needs. If audited, the district would need to demonstrate that the equipment was being used at an eligible entity. This then must be documented via the asset register required by FCC rules and verified via visual inspection."); Alaska DEED Comments at 3 ("[W]e believe that the transfer rule on equipment should be removed with a school district or library system wide budget so that applicants can best place their equipment within their organization.").

equipment transfers for a period of three years after purchase—namely, that applicants might replace or upgrade their equipment more often than necessary or to circumvent the then-existent two-in-five rules—are no longer relevant under a district-wide and library system-wide category two budget approach. Under the district-wide and library system-wide category two budget approach, the category two purchases for all individual schools within the district fall under the same budget, so there will no longer be the incentive to purchase a piece of equipment for one site and move it to another. This incentive existed under the two-in-five rules because there were limits on the internal connections funding that each individual school could receive. Under those rules, if an individual school did not request equipment when it had the opportunity to do so, another school in the same district could circumvent the two-in-five rule by requesting that equipment and moving it to the facility where it was needed. As the two-in-five rules no longer apply, the provisions of the equipment transfer rules that prevent its circumvention are no longer needed.

49. We therefore modify section 54.513(d) of the Commission's rules, effective for funding year 2021, to allow districts and library systems to transfer equipment between schools within a district and libraries within a system.[127] Importantly, transferors no longer must notify USAC of the transfer, but both the transferor and recipient must maintain detailed records documenting the transfer and the reason for the transfer for a period of five years as required by the Commission's rules.[128] Additionally, as a reminder to all applicants, under section 54.516(a) of the Commission's rules, schools, libraries, and consortia are required to maintain asset and inventory records of equipment purchased and the actual locations of such equipment for a period of 10 years after purchase.[129]

50. *Non-Instructional Facilities*. In the *2019 Category Two Notice*, we noted that the cost allocation of the shared costs of a piece of equipment located in a non-instructional facility could be more easily handled in a district-wide category two budget because the district-wide approach relieves the burden of allocating costs among the budgets of eligible entities.[130] Under the per-entity budget rules, district-wide applicants requesting funding for equipment that would be shared district-wide but housed in a non-instructional facility determined each school's use of the shared equipment as well as the non-instructional building's use of the shared equipment, deducted the cost of the non-instructional building's use of the shared equipment, and submitted funding requests from each school for each portion of eligible funding. USAC then reviewed each funding request to ensure that funding is only provided for equipment used by eligible entities. Under the district-wide budget approach adopted today, applicants will only need to deduct the cost of the non-instructional facility's use of the shared network equipment.

51. In response to the *2019 Category Two Notice*, commenters agreed that cost allocation of the use of shared equipment is burdensome,[131] and requested that the Commission allow all buildings associated within a district or library system, including non-instructional facilities, to qualify for category two funding support because the category two budget places a ceiling on the amount that can be spent on category two services.[132] We decline to modify our rules regarding whether non-instructional facilities or

[127] 47 CFR § 54.513(d); *see also infra* Appendix A (adopting final rules).

[128] 47 CFR § 54.513(d).

[129] 47 CFR § 54.516(a).

[130] *2019 Category Two Notice*, 34 FCC Rcd at 5413-14, para. 23 & n.63.

[131] *See, e.g.*, SECA/SHLB Comments at 21-22; E-Rate & Educational Services Comments at 4; E-mpa Reply at 4-5.

[132] *See, e.g.*, Linn Benton Lincoln ESD Comments at 2-3 ("Non-instructional facilities are essential for schools to properly serve their students. If a district wide category two budget approach was adopted then non-instructional facilities could be seamlessly included."); NMPSFA Comments at 7-8 ("In smaller districts the administrative functions are, generally, housed in a school and are thus eligible to receive Category 2 funding because they are not a stand-alone non-instruction facility (NIF). Larger districts that have standalone NIFs are currently disadvantaged because their administrative offices cannot receive Category 2 services despite no prohibition for smaller entities with shared school and administrative facilities.").

the administrative buildings of libraries qualify for category two funding support. The district-wide budgets we adopt today will reduce the administrative burden on applicants that use non-instructional facilities or other administrative buildings to house network equipment shared district-wide and will make it easier for USAC to review such requests by eliminating the need to allocate among eligible entities in a district. However, we are not persuaded that the administrative burden associated with deducting the cost of the non-instructional building's use of shared network equipment warrants eliminating a rule designed to ensure that E-Rate support is only provided to eligible entities for eligible purposes.[133] The relatively simple task of subtracting the cost of the non-instructional facility's use of the shared network element is unlikely to significantly burden either applicants or USAC. Accordingly, we will continue to require applicants to deduct the cost of non-instructional facilities' use of shared equipment from their requests for E-Rate support, as required by the current rules.

C. Extension of Five-Year Test Period Through Funding Year 2020

52. Today, we extend the five-year test period for the category two budget approach through funding year 2020 and provide a prorated portion of category two funding for each applicant for that additional year. This approach ensures a smooth transition to the permanent rules effective in 2021 while providing applicants with sufficient funding to deploy internal connections in funding year 2020.

53. In the *2019 Category Two Notice*, we sought comment on using funding year 2020 as a bridge year between the five-year test period and the permanent extension of the category two budget approach.[134] We have weighed the costs and benefits of attempting to allow applicants to begin requesting E-Rate program support for category two services under these permanent rules—including the district-wide approach we adopt today—in funding year 2020 and find that the costs of doing so far outweigh the benefits. In particular, implementing new rules for funding year 2020 would likely cause delays in funding commitments, and USAC would likely need to conduct manual application reviews to accommodate any rule changes. We therefore adopt rules extending the five-year test period by one additional year and provide prorated E-Rate support for funding year 2020 while the Bureau and USAC take the necessary steps to ensure effective implementation of the permanent rules beginning funding year 2021.[135] By extending the test period into funding year 2020, and making additional category two support available during that funding year, we provide needed certainty and predictability to E-Rate participants while allowing the Commission and USAC adequate time to implement and ensure a smooth transition to the permanent rules we adopt today.

54. First, to implement the permanent rules, we recognize that the Commission and USAC will need time to update (1) E-Rate program forms in compliance with the Paperwork Reduction Act;[136] (2) USAC's IT systems, including the E-Rate Productivity Center (EPC), to track the district-wide and library system-wide budgets and ensure funding requests that are over budget are reduced; and (3) administrative processes, such as Program Integrity Assurance procedures, to ensure consistent review for all five years of the funding cycle. Implementing our new rules as quickly as possible will, at best, take us into next year before completion. While SECA and SHLB suggest that USAC perform manual workarounds, including performing manual calculations of district-wide and library-wide budgets,[137] we

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[133] *Federal-State Joint Board on Universal Service*, CC Docket Nos. 96-45, Fourth Order on Reconsideration and Report and Order, 13 FCC Rcd 5318, 5440, paras. 208-10 (1997) (limiting support for internal connections in non-instructional buildings used by a school district to those that are essential for the effective transport of information within instructional buildings).

[134] *2019 Category Two Notice*, 34 FCC Rcd at 5417-18, para. 36.

[135] Funding year 2020 will run from July 1, 2020 through June 30, 2021. Funding year 2021 will run from July 1, 2021 through June 30, 2022. *See* 47 CFR § 54.507(b).

[136] 44 U.S.C. § 3507.

[137] *See* SECA/SHLB Comments at 19-21 (acknowledging EPC and administrative procedures may need to be updated eventually, but also suggesting that applicants use the existing application processing system to apply under

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disagree. Doing so would require USAC to make such calculations for approximately 50,000 schools. Moreover, manual review of applications in the first year of a five-year funding cycle introduces risks of improper payments and the potential inability for USAC to properly track the category two budgets until the end of the funding cycle. Because these are fixed five-year budgets, any error that occurs in the first funding year has the potential to impact multiple funding years. Such an outcome would introduce further complexity and thus directly contradict our overall goal to simplify and streamline the category two budget approach.

55. Moreover, implementation of new rules has a strong potential to significantly delay the application filing window for funding year 2020. Despite the statements from some commenters that this months-long delay would be preferable to the community,[138] we find that the potential harms, including delaying commitments for category one funding requests—which, this funding year, represented nearly $2 billion's worth of high-speed broadband service and equipment[139]—are unacceptable.[140] A delay in funding commitments would create delays in the deployment of E-Rate supported services, to the detriment of schools and libraries.

56. We also are unpersuaded by arguments that extending the five-year test period will cause more confusion than rushing the implementation of the permanent rules with insufficient outreach to stakeholders. Instead, to give certainty to applicants in advance of the expected opening of the filing window for funding year 2020 and to smooth the transition to new, permanent rules, we find that the public interest would be served by an extension of the test period through funding year 2020. Since funding year 2015, over 90,000 schools and 4,900 libraries have used category two support to deploy Wi-Fi networks for the benefit of students and library patrons.[141] We largely make no changes to how applicants should apply for support for category two services in funding year 2020, allowing applicants to move forward using their existing knowledge of the category two budget approach and providing an amount of funding equivalent to a single funding year's budget to aid applicants whose budgets would have ended in funding year 2019. We also set out clear guidance on the budget calculations for funding year 2021, allowing applicants to begin much-needed technology planning.

57. We find that the benefits of clear rules for funding year 2021 strongly outweigh the costs and risks associated with new rules implemented without adequate outreach to applicants and subsequent

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a district-wide or library system-wide budget by not performing any cost allocations and having USAC perform manual calculations of the new district-wide and library system-wide budgets).

[138] *See, e.g.*, E-mpa Comments at 3 (recommending "pushing the filing window for category two products and services for FY 2020 back long enough to accommodate the changes" to ensure that category two funding will be available for applicants for funding year 2020); Infinity Comments at 10 (requesting the Commission "either allow for a longer Form 471 filing window (by at least four months) to apply for these Category Two projects, or delay the opening of the Form 471 filing window by four months after the new order and rules are released" as applicants are already four to six months behind the normal schedule for designing category two systems due to the uncertainty about category two budgets).

[139] USAC estimated that demand for category one services in funding year 2019 would total $1.91 billion. Letter from Catriona Ayer, Vice President, Schools and Libraries Division, Universal Service Administrative Company, to Kris Monteith, Chief, Wireline Competition Bureau, Federal Communications Commission at 1 (Apr. 1, 2019), https://www.fcc.gov/ecfs/filing/1040110172922; *see also 2019 Funding Public Notice*, 34 FCC at 6185.

[140] Commenters agree that delayed funding commitments can create uncertainties and barriers for applicants. *See, e.g.*, SECA/SHLB Comments at 13-14 (noting that "unless and until the applicant receives their annual funding approval, it will be reluctant to purchase and install the equipment and assume the risk of subsequently receiving a funding denial"); ALA Comments at 7-8 (providing an example of when a delay in receiving a funding commitment decision letter caused the library to miss the deadline on state matching funds; without those funds the library was unable to implement its planned category two upgrades).

[141] *Category Two Budget Report*, 34 FCC Rcd at 325-26, paras. 20-21.

delays in funding commitments. By using funding year 2020 as a bridge to a permanent set of rules for category two services, we will be able to ensure that the permanent rule changes are carefully and thoroughly implemented and administered, and that applicants are given a smooth transition period and notice for planning technology changes or upgrades. As a result of our extension of the test period, all applicants will continue to be able to request category two support under the existing category two budget approach in funding year 2020, and we will not revert back to the two-in-five rules for any applicants.

58. We provide a prorated portion of category two funding to all applicants in funding year 2020, which we will treat as a sixth year of the test period. In the *2014 First E-Rate Order*, the Commission established a pre-discount category two budget for schools of $150 per student over five funding years, or 20% of the total funding per student annually.[142] Accordingly, in extending the five-year test period by an additional year, we provide an additional 20% in funding to schools and libraries, as well as to the funding floor.[143] We direct the Bureau to release updates to the category two budget multipliers and funding floor for the test period, adjusted for inflation and proration and rounded to the nearest cent, consistent with this Report and Order, within 15 days of publication of the Report and Order in the Federal Register. As in previous years of the test period, the available category two funding that will be available to applicants in funding year 2020 will be the updated budget multipliers and funding floor that the Bureau calculates minus the category two funding that applicants spent earlier in the test period.[144]

59. This action will ensure that all applicants, including those who have exhausted their category two budgets or completed their five-year budget cycles, can request category two support in funding year 2020. While ALA argued against making additional funds available during a bridge year,[145] we find providing support for this one funding year more equitable and appropriate than denying funding to applicants that in good faith managed their five-year budgets over a five-year period (and did not anticipate a sixth year).

60. Moreover, this approach is consistent with the Commission's intent in the *2014 First E-Rate Order* to provide approximately $1 billion per year in category two support to ensure applicants had access to funding for internal connections on a predictable, consistent, and equitable basis.[146] Demand for category two services has tracked closely to this initial target.[147] By providing a prorated portion of

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[142] *See 2014 First E-Rate Order,* 29 FCC Rcd at 8906, para 93.

[143] To take a simplified example that does not take into account inflation or changes in the number of eligible students, a school with a $500,000 budget for the test period would receive an additional $100,000 (i.e., 20% of $500,000) for funding year 2020, the sixth year of the test period. If that school already spent $250,000 of its budget, it would have $350,000 (i.e., $600,000 - $250,000) remaining to spend during the sixth year.

[144] We note that this same calculation is applicable to applicants whose category two budget was reset based on relief the Commission granted in the *2017 Hurricane Relief Order*. *See 2017 Hurricane Relief Order*, 32 FCC Rcd at 9547-48, paras. 18-19. If applicants affected by those hurricanes had their category two budgets reset in 2017 or later, their five-year category two budget period would be calculated from that date, and like other applicants whose category two budgets began in 2017, would also be eligible for the prorated 20% per student in category two funding we are making available for funding year 2020.

[145] *See* ALA Comments at 7 (arguing that if a transition year is necessary, "only applicants who still have C2 funds remaining [should] be eligible to apply" and that "[a]pplicants who expended all their C2 funds in the FY2015 – FY2019 timeframe will need to wait until the 2021 funding year to again be eligible for C2 funding").

[146] *See 2014 First E-Rate Order*, 29 FCC Rcd at 8916, para. 118 (adopting an annual target of $1 billion, plus any annual inflationary charges, for category two services); 47 CFR § 54.507(a).

[147] The demand for funding years 2015, 2016, 2017, 2018, and 2019 was $1.665 billion, $1.279 billion, $904 million, $745 million, and $985 million, respectively. *See Wireline Competition Bureau Announces Carry-Forward of Unused Schools and Libraries Universal Service Funds for Funding Year 2015*, CC Docket No. 02-6, Public Notice, 30 FCC Rcd 4667, 4668 (WCB 2015); *Wireline Competition Bureau Directs USAC to Fully Fund Eligible Category One and Category Two E-Rate Requests*, CC Docket No. 02-6, Public Notice, 31 FCC Rcd 6751, 6751

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funding for funding year 2020, the Commission can make available approximately $1 billion for category two services, providing applicants with funding that may be needed to maintain their local area networks while we transition to permanent category two rules. We also find that providing a prorated portion of category two funding to all applicants treats all entities equitably because every entity will be eligible for the same amount of category two support during the six-year test period. Finally, this approach provides both applicants and USAC with a single calculation for all entities, which simplifies the administration in funding year 2020 for requesting and reviewing category two funding requests and reduces the chances of overpayments.

D. Effective Date

61. We find that good cause exists here to make those portions of this Report and Order that codify the permanent eligibility of managed internal broadband services, caching, and basic maintenance of internal connections for support in funding year 2020 and beyond and the proration of budget multipliers and the funding floor for funding year 2020 effective upon publication in the Federal Register. A rule may be made effective prior to thirty days from publication in the Federal Register for good cause found and published with the rule.[148] Here, to ensure that applicants have sufficient notice of the services that will be eligible and the prorated funding that will be available to them before they file their funding year 2020 applications, it is necessary to implement those portions of this Report and Order as soon as possible following release of this Report and Order. The filing window for E-Rate funding applications typically opens in mid-January each year to ensure adequate time for USAC to process such applications and issue funding commitments or denials.[149] Therefore, in light of the need to enable the release of the Eligible Services List and notification of budget multipliers and the funding floor with sufficient time to make applicants aware of what services are eligible and the amount of support available before the opening of the filing window, we find that good cause exists to make the portions of this Report and Order addressing eligible services and proration of budget multipliers and the funding floor for funding year 2020 effective upon publication in the Federal Register. Moreover, making the eligibility of managed internal broadband service, caching, and basic maintenance of internal connections and the budget multipliers and a funding floor for funding year 2020 effective immediately will not impose any implementation burden on applicants given that these services were eligible and budget multipliers and a funding floor were used during the initial five-year test period.

62. In addition, to ensure that the application filing window for funding year 2020 is not unduly delayed by implementation of our decisions herein, we waive the requirement in section 54.502(d) of the Commission's rules that the Eligible Services List be released at least 60 days prior to the opening of the application filing window.[150] Section 1.3 of the Commission's rules allows the Commission to waive a rule on its own motion for good cause shown.[151] The Bureau may find it necessary to release the Eligible Services List less than 60 days before the opening of the application filing window to ensure that

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(WCB 2016); *Wireline Competition Bureau Directs USAC to Fully Fund Eligible Category One and Category Two E-Rate Requests*, CC Docket No. 02-6, Public Notice, 32 FCC Rcd 4127, 4127 (WCB 2017); *Wireline Competition Bureau Directs USAC to Fully Fund Eligible Category One and Category Two E-Rate Requests*, CC Docket No. 02-6, Public Notice, 33 FCC Rcd 8179, 8179 (WCB 2018); *Wireline Competition Bureau Directs USAC to Fully Fund Eligible Category One and Category Two E-Rate Requests*, CC Docket No. 02-6, Public Notice, DA 19-669, 1 (WCB 2019).

[148] *See* 5 U.S.C. § 553(d)(3) (allowing for effective date to occur prior to 30 days after publication for good cause); 47 CFR § 1.427(b).

[149] For example, the filing window for funding year 2019 opened on January 16, 2019. *See* USAC, *Funding Year 2019 Filing Window*, https://www.usac.org/e-rate/resources/e-rate-productivity-center/funding-year-2019-filing-window/ (last visited Nov. 14, 2019).

[150] *See id.*

[151] *See* 47 CFR § 1.3.

the filing window opens with enough time to allow USAC to process applications for funding year 2020. Applicants will benefit from this waiver because it will help to ensure that their applications are processed in a timely manner. We find that the adoption of this Report and Order at this time and its impact on a number of eligible services constitute special circumstances that warrant waiver of the 60-day requirement, and that doing so is in the public interest.

IV. PROCEDURAL MATTERS

63. *Regulatory Flexibility Act*—Pursuant to the Regulatory Flexibility Act of 1908, as amended, 5 U.S.C. § 601 *et seq*. (RFA), the Commission's Final Regulatory Flexibility Analysis in this Report and Order is attached as Appendix C.

64. *Paperwork Reduction Analysis*—This Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law No. 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new and modified information collection requirements contained in the proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002,[152] we previously sought specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."[153] We have described impacts that might affect small businesses, which includes most businesses with fewer than 25 employees, in the Final Regulatory Flexibility Analysis (FRFA), attached as Appendix C.

65. *Congressional Review Act*—The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs that this rule is "non-major" under the Congressional Review Act, 5 U.S.C. § 804(2). The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

V. ORDERING CLAUSES

66. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 1 through 4, 201 through 202, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201-202, 254, 303(r), and 403, this Report and Order IS ADOPTED, and section 54.502(c) of the Commission's rules, 47 CFR § 54.502(c), is AMENDED as set forth in Appendix A, and such rule amendments shall be effective thirty (30) days after the publication of this Report and Order in the Federal Register, except amendments to the budget multipliers and funding floor, which shall be effective immediately and except to the extent expressly addressed below.

67. IT IS FURTHER ORDERED, that pursuant to the authority contained in sections 1 through 4, 201 through 202, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201-202, 254, 303(r), and 403, sections 54.502(d)-(e) and 54.513(d) of the Commission's rules, 47 CFR §§ 54.502(d)-(e) and 54.513(d), ARE AMENDED as set forth in Appendix A, effective upon announcement of approval by OMB under the Paperwork Reduction Act. The Commission directs the Bureau to announce the effective date for these information collections in a document published in the Federal Register announcing OMB approval.

68. IT IS FURTHER ORDERED that, pursuant to the authority contained in sections 1 through 4, 201 through 202, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201-202, 254, 303(r), and 403, sections of this Report and Order addressing eligible services and proration of budgets for funding year 2020 in paragraphs 45, 46, and 58 SHALL BECOME

[152] Small Business Paperwork Relief Act of 2002, Pub. L. No. 107-198, 116 Stat. 729 (codified at 44 U.S.C. § 3504 *et seq.*).

[153] 44 U.S.C. § 3506(c)(4).

EFFECTIVE immediately upon publication of this Report and Order in the Federal Register, pursuant to 5 U.S.C. § 553(d)(3); and 47 CFR § 1.427(b).

69. IT IS FURTHER ORDERED, that pursuant to the authority contained in sections 1 through 4 and 254 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154 and 254, and pursuant to the authority in section 1.3 of the Commission's rules, 47 CFR § 1.3, that section 54.502(d), 47 CFR § 54.502(d) IS WAIVED, and such waiver SHALL BECOME EFFECTIVE upon release.

70. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

71. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

FINAL RULES

For the reasons discussed in the preamble, the Federal Communications Commission amends title 47 CFR Part 54, Subpart F, as follows:

PART 54—UNIVERSAL SERVICE

Subpart F—Universal Service Support for Schools and Libraries

1. The authority citation for Part 54 continues to read as follows:

Sections 1, 4(i), 5, 201, 205, 214, 219, 220, 254, 303(r), and 403 of the Communications Act of 1934, as amended, and section 706 of the Communications Act of 1996, as amended; 47 U.S.C. 151, 154(i), 155, 201 205, 214, 219, 220, 254, 303(r), 403, and 1302 unless otherwise noted.

2. Amend § 54.502 by revising paragraph (c); re-designating paragraph (d) as paragraph (e); and adding new paragraph (d) to read as follows:

§ 54.502 Eligible services

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(c) *Funding year 2020*. Libraries, schools, or school districts with schools that receive funding for category two services in funding year 2020 shall be eligible for support for category two services pursuant to paragraphs (c)(1) through (6) of this section.

(1) *Six-year funding cycle*. Each eligible school or library shall be eligible for a budgeted amount of support for category two services over a six-year funding cycle. Each school or library shall be eligible for the total available budget less the pre-discount amount of any support received for category two services in the prior funding years of that school's or library's six-year funding cycle.

(2) *School budget*. Each eligible school shall be eligible for support for category two services up to a pre-discount price of $150 plus an additional prorated 20% (adjusted for inflation dating back to funding year 2015) over six funding years that will be completed at the end of funding year 2020. Applicants shall provide the student count per school, calculated at the time that the discount is calculated each funding year. New schools may estimate the number of students but shall repay any support provided in excess of the maximum budget based on student enrollment the following funding year.

(3) *Library budget*. Each eligible library located within the Institute of Museum and Library Services locale codes of "11 – City, Large," defined as a territory inside an urbanized area and inside a principal city with a population of 250,000 or more, "12 – City, Midsize," defined as a territory inside an urbanized area and inside a principal city with a population less than 250,000 and greater than or equal to 100,000, or "21 – Suburb, Large," defined as a territory outside a principal city and inside an urbanized area with population of 250,000 or more, shall be eligible for support for category two services, up to a pre-discount price of $5.00 per square foot plus an additional prorated 20% (adjusted for inflation dating back to funding year 2015) over six funding years that will be completed at the end of funding year 2020. All other eligible libraries shall be eligible for support for category two services, up to a pre-discount price of $2.30 per square foot plus an additional prorated 20% (adjusted for inflation dating back to funding year 2015) over a six-year funding cycle that will be completed at the end of funding year 2020. Libraries shall provide the total area for all floors, in square feet, of each library outlet separately, including all areas enclosed by the outer walls of the library outlet and occupied by the library, including those areas off-limits to the public.

(4) *Funding floor*. Each eligible school and library will be eligible for support for category two

services of at least a pre-discount price of $9,200 plus an additional prorated 20% (adjusted for inflation dating back to funding year 2015) over six funding years that will be completed at the end of funding year 2020.

(5) *Requests.* Applicants shall request support for category two services for each school or library based on the number of students per school building or square footage per library building. Category two funding for a school or library may not be used for another school or library. The costs for category two services shared by multiple eligible entities shall be divided reasonably between each of the entities for which support is sought in that funding year.

(6) *Non-instructional buildings.* Support is not available for category two services provided to or within non-instructional school buildings or separate library administrative buildings unless those category two services are essential for the effective transport of information to or within one or more instructional buildings of a school or non-administrative library buildings, or the Commission has found that the use of those services meets the definition of educational purpose, as defined in §54.500. When applying for category two support for eligible services to a non-instructional school building or library administrative building, the applicant shall allocate the cost of providing services to one or more of the eligible school or library buildings that benefit from those services being provided.

(d) *Funding year 2021 and beyond*. Schools, school districts, libraries, and library systems shall be eligible for support for category two services pursuant to the five-year budgets described in paragraphs (d)(1) through (6) of this section.

(1) *Fixed five-year funding cycle*. Beginning in funding year 2021, each eligible school, school district, library, or library system shall be eligible for a budgeted amount of pre-discount support for category two services over a five-year funding cycle that will reset in funding year 2026 and subsequently, after every five funding years. Each school, school district, library, or library system shall be eligible for the total available budget less the pre-discount amount of any support received for category two services in the prior funding years of that fixed five-year funding cycle.

(2) *School and school district multipliers*. Each eligible school district and schools operating independently of a school district shall be eligible for support for category two services up to a pre-discount price of $167 per student over a five-year funding cycle. The amount of support will be calculated at the time that the discount is calculated in the first funding year of the five-year cycle in which the applicant requests category two support, unless the school or school district elects to seek additional program support using updated enrollment numbers in subsequent funding years in the five-year cycle. School districts shall provide the total number of students within the school district. Independent charter schools, private schools, and other eligible educational facilities that operate under the control of a central administrative agency shall provide the total number of students under the control of that agency. Schools that are not affiliated financially or operationally with a school district or central administrative agency shall provide the total number of students in the school.

(3) *Library and library system multipliers*. Library systems and libraries operating independently of a system shall be eligible for support for category two services, up to a pre-discount price of $4.50 per square foot over a five-year funding cycle. The amount of support will be calculated at the time that the discount is calculated in the first funding year of the five-year cycle in which the applicant requests category two support, unless the library or library system elects to seek additional program support using updated square footage in subsequent funding years in the five-year cycle. Library systems shall provide the total area for all floors, in square feet, of all of its library outlets, including all areas enclosed by the outer walls of the library outlet and occupied by the library, including those areas off-limits to the public. Independent libraries shall provide the total area for all floors, in square feet, of all areas enclosed by the outer walls of the library outlet and occupied by the library, including those areas off-limits to the public.

(4) *Funding floor*. Each eligible school and library shall be eligible for support for category two services of at least a pre-discount price of $25,000 over five funding years.

(5) *Calculation increase.* Before funding year 2026 and every subsequent five-year funding cycle, the Wireline Competition Bureau shall announce the multipliers and funding floor as adjusted for inflation at least 60 days before the start of the filing window for the next five-year funding cycle. The Bureau shall use the last four quarters of data on the Gross Domestic Product Chain-type Price Index (GDP-CPI) compared with the equivalent quarters from the beginning of the five-year funding cycle. The increase shall be rounded to the nearest 0.1 percent and shall be used to calculate the category two budget multipliers and funding floor for that five-year funding cycle. The multipliers and funding floor shall be rounded to the nearest cent.

(6) *Non-instructional buildings.* Support is not available for category two services provided to or within non-instructional school buildings or separate library administrative buildings unless those category two services are essential for the effective transport of information to or within one or more instructional buildings of a school or non-administrative library buildings, or the Commission has found that the use of those services meets the definition of educational purpose, as defined in §54.500. When applying for category two support for eligible services to a non-instructional school building or library administrative building, the applicant shall deduct the cost of the non-instructional building's use of the category two services or equipment.

(e) *Eligible services list process*. The Administrator shall submit by March 30 of each year a draft list of services eligible for support, based on the Commission's rules for the following funding year. The Wireline Competition Bureau will issue a Public Notice seeking comment on the Administrator's proposed eligible services list. The final list of services eligible for support will be released at least 60 days prior to the opening of the application filing window for the following funding year.

3. Amend § 54.513 by revising paragraph (d) to read as follows:

§ 54.513 Resale and transfer of services

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(d) Eligible services and equipment components of eligible services purchased at a discount under this subpart shall not be transferred, with or without consideration of money or any other thing of value, for a period of three years after purchase, except that eligible services and equipment components of eligible services may be transferred to another eligible school or library in the event that the particular location where the service originally was received is permanently or temporarily closed, or is part of the same eligible school district or library system as the location receiving the eligible services or equipment components of eligible services. If an eligible service or equipment component of a service is transferred pursuant to this paragraph, both the transferor and recipient must maintain detailed records documenting the transfer and the reason for the transfer for a period of five years.

APPENDIX B

LIST OF COMMENTERS

Comments

Commenter	Abbreviation
Acklin & Associates	Acklin & Associates
Adam Theis	Adam Theis
ADTRAN, Inc.	ADTRAN
AdvanEdge Solutions,Intelafunds	AdvanEdge
Alaska Department of Education and Early Development, Alaska State Library	Alaska DEED
American Library Association	ALA
ApplianSys	ApplianSys
Aruba, a Hewlett Packard Enterprise company	Aruba
Barry Behlen	Barry Behlen
Batesville School District	Batesville School District
Beaufort County School District	Beaufort County School District
Bergman School District	Bergman School District
Bob Mastrodonato	Bob Mastrodonato
Brandon Davies	Brandon Davies
Butte County Office of Education	Butte County
California Department of Education	CDE
California Educational Technology Professionals Association	CETPA
Cedar Ridge School District	Cedar Ridge School District
Central Arkansas Library System	Central Arkansas Library
Centralia Elementary School District	CESD
Ceres Unified School District	Ceres USD
Chino Valley Unified School District	Chino Valley USD
Cisco Systems, Inc.	Cisco
City of Boston MA	City of Boston
Clinton City Schools	Clinton City Schools
Columbia County Library	Columbia County Library
Cotter Public School District	Cotter Public School District
Council of the Great City Schools	CGCS
Cox Communications, Inc.	Cox
Doug Heitkamp	Doug Heitkamp
Economic Improvement Council	EIC
Education Innovations	Education Innovations
EducationSuperHighway	EducationSuperHighway
E-Rate & Educational Services, LLC	E-Rate & Educational Services
E-Rate Advantage	E-Rate Advantage
E-rate Expertise, Inc.	E-rate Expertise
E-Rate Management Professionals Association	E-mpa
Escondido Union School District	EUSD
eStem Public Charter Schools	eStem
Fayetteville Public Library	Fayetteville Public Library
Fortinet, Inc.	Fortinet
Frank Taylor	Frank Taylor
Funds For Learning, LLC	Funds For Learning

Gordon Howard	Gordon Howard
Hemet Unified School District	Hemet Unified School District
Howard Technology Solutions, a division of Howard Industries, Inc.	Howard Technology Solutions
i2i Technologies	i2i Technologies
Infinity Communications & Consulting Inc.	Infinity
Jacksonville North Pulaski School District	Jacksonville North Pulaski
Jason Buchanan	Jason Buchanan
Joe Buterbaugh	Joe Buterbaugh
John C. Fremont Library District	John C. Fremont Library District
Kellogg & Sovereign Consulting, LLC	KSLLC
Kentucky Department of Education	KDE
Kevin Calahan	Kevin Calahan
Knight Nets Inc.	Knight Nets
Linn Benton Lincoln ESD	Linn Benton Lincoln ESD
Mike Savic	Mike Savic
Modesto City Schools	MCS
Montgomery County Public Schools	MCPS
Mountain Home School District	MHSD
Nettleton School District	Nettleton School District
New Mexico Public School Facilities Authority	NMPSFA
North Little Rock School District	North Little Rock
North Scott Community School District	North Scott
NvLS Professional Services, LLC	NvLS
Oakland Unified School District	Oakland USD
Pennsylvania Department of Education	PADOE
Phil Thompson	Phil Thompson
Pulaski County Special School District	Pulaski County
Robert Allen	Robert Allen
Ryan Bahten	Ryan Bahten
Sandy Hill	Sandy Hill
Sara Gearhart	Sara Gearhart
Sean Valenti	Sean Valenti
South Butler County School District	South Butler County
State E-Rate Coordinators Alliance and Schools, Health & Libraries Broadband Coalition	SECA/SHLB
The New York City Department of Education	NYCDOE
The Pennsylvania Cyber Charter School	PCCS
The State of South Carolina	South Carolina
Thermalito Union Elementary School District	TUESD
Vallivue School District #139	Vallivue
Vector Resources Inc.	Vector
Vitech Consulting LLC	Vitech Consulting
West Virginia Department of Education	WVDOE
Willamette Education Service District	WESD

Reply Comments

Commenter	Abbreviation
American Library Association	ALA
Atlanta Public Library	Atlanta Public Library
Consortium for School Networking, AASA, The School Superintendents Association, Association of School Business Officials International	CoSN/AASA/ASBO
Council of Chief State School Officers	CCSSO
CSM Consulting	CSM
Education & Libraries Networks Coalition	EdLiNC
Education Networks of America, Inc.	ENA
EducationSuperHighway	EducationSuperHighway
E-Rate Management Professionals Association	E-mpa
Fortinet	Fortinet
Funds For Learning, LLC	Funds for Learning
Illinois Department of Innovation & Technology	ILDOIT
Iowa Department of Education	Iowa DOE
Kellogg & Sovereign Consulting, LLC	KSLLC
Nebraska Department of Education	NEDOE
Ohio Information Technology Centers	OITC
Oregon Department of Education	ODE
South Carolina State Library	SCSL
State Educational Technology Directors Association	SETDA
State E-Rate Coordinator Team - Florida	FL E-Rate Team
Tim Jones	Tim Jones
Western Governors' Association	WGA
Wisconsin Department of Public Instruction	Wisconsin DPI

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980 (RFA),[154] as amended, the Federal Communications Commission (Commission) included an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the *2019 Category Two Notice* in WC Docket No. 13-184.[155] The Commission sought written public comment on the proposals in the *2019 Category Two Notice*, including comment on the IRFA. The Commission did not receive any relevant comments in response to this IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.[156]

A. Need for, and Objectives of, the Report and Order

2. The Commission is required by Section 254 of the Communications Act of 1934, as amended, to promulgate rules to implement the universal service provisions of Section 254.[157] On May 8, 1997, the Commission adopted rules to reform its system of universal service support mechanisms so that universal service is preserved and advanced as markets move toward competition.[158] Specifically, under the schools and libraries universal service support mechanism, also known as the E-Rate program, eligible schools, libraries, and consortia that include eligible schools and libraries may receive discounts for eligible telecommunications services, Internet access, and internal connections.[159]

3. Taking steps to close the digital divide is a top priority for the Commission. The E-Rate program provides a vital source of support to schools and libraries, ensuring that students and library patrons across the nation have access to high-speed broadband and essential communications services. In this *Order*, we permanently extend the category two budget approach and adopt several proposals that will reduce the burden on small entities, such as a move to district-wide or library-system wide budgets and fixed budget cycles to allow careful planning from E-Rate applicants. We also extend the five-year test period for the category two budget approach for a sixth year to include funding year 2020 to provide funding for applicants in funding year 2020 while the Commission and USAC implement permanent rules for funding year 2021. During this funding year, with limited exceptions, the existing category two budget rules will continue to be in effect. Permanent rules for the category two budget approach to go into effect in funding year 2021.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

4. There were no comments filed that specifically address the rules and policies proposed in the IRFA.

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[154] 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, has been amended by the Contract with America Advancement Act of 1996, Public Law No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

[155] *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, 34 FCC Rcd 5406 (rel. July 9, 2019) (*2019 Category Two Notice*).

[156] *See* 5 U.S.C. § 604.

[157] *See generally* 47 U.S.C. § 254.

[158] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776 (1997) (*Universal Service First Report and Order*).

[159] 47 CFR § 54.502.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

5. Pursuant to the Small Business Jobs Act of 2010,[160] which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rule(s) as a result of those comments.[161] The Chief Counsel did not file any comments in response to the proposed rule(s) in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

6. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules, as adopted.[162] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[163] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[164] A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[165]

7. *Small Businesses, Small Organizations, Small Governmental Jurisdictions*. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.[166] First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA's Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.[167] These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.[168]

8. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[169] Nationwide, as of August 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).[170]

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[160] 5 U.S.C. § 604(a)(3).

[161] *Id*.

[162] 5 U.S.C. § 604(b)(3).

[163] 5 U.S.C. § 601(6).

[164] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632(a)). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[165] Small Business Act, 15 U.S.C. § 632.

[166] *See* 5 U.S.C. § 601(3)-(6).

[167] *See* U.S. Small Business Administration, Office of Advocacy, *Frequently Asked Questions*, (June 2016), https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf.

[168] *Id.*

[169] 5 U.S.C. § 601(4).

[170] Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total

(continued….)

9. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[171] U.S. Census Bureau data from the 2012 Census of Governments[172] indicate that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.[173] Of this number there were 37,132 General purpose governments (county[174], municipal and town or township[175]) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts[176] and special districts[177]) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category show that the majority of these governments have populations of less than 50,000.[178] Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of "small governmental jurisdictions."[179]

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revenues of less than $100,000. Of this number, 326,897 entities filed tax returns for 65,113 registered nonprofits reporting total revenues of $50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of $100,000 or less on another version of the IRS Form 990 within 24 months of the August 2016 data release date. *See* National Center for Charitable Statistics, *National Taxonomy of Exempt Entities (NTEE) Codes*, http://nccs.urban.org/sites/all/nccs-archive/html//tablewiz/tw.php (last visited Oct. 11, 2019). The report showing this data can be generated by selecting the following data fields: Report - "The Number and Finances of All Registered 501(c) Nonprofits"; Show - "Registered Nonprofits"; By - "Total Revenue Level (years 1995, Aug to 2016, Aug)"; and For - "2016, Aug" and selecting "Show Results" to display the report.

[171] 5 U.S.C. § 601(5).

[172] *See* 13 U.S.C. § 161. The Census of Government is conducted every five years compiling data for years ending with "2" and "7." *See also* U.S. Census Bureau, *Program Description Census of Governments*, https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.COG# (last visited Oct. 11, 2019).

[173] *See* U.S. Census Bureau, *2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG02.US01 (last visited Oct. 11, 2019). Local governmental jurisdictions are classified in two categories—general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts).

[174] *See* U.S. Census Bureau, *2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01 (last visited Oct. 11, 2019). There were 2,114 county governments with populations less than 50,000.

[175] *See* U.S. Census Bureau, *2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States – States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01 (last visited Oct. 11, 2019). There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

[176] *See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State*: 2012 - United States-States, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01 (last visited Oct. 11, 2019). There were 12,184 independent school districts with enrollment populations less than 50,000.

[177] *See* U.S. Census Bureau, *2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01 (last visited Oct. 11, 2019). The U.S. Census Bureau data did not provide a population breakout for special district governments.

[178] *See* U.S. Census Bureau, *2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01 (last visited Oct. 11, 2019); U.S. Census Bureau, *2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States–States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01 (last visited Oct. 11, 2019); U.S. Census Bureau, *2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States*, https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01 (last

(continued….)

1. Schools and Libraries

10. As noted, a "small entity" includes non-profit and small government entities. Under the schools and libraries universal service support mechanism, which provides support for elementary and secondary schools and libraries, an elementary school is generally "a non-profit institutional day or residential school that provides elementary education, as determined under state law."[180] A secondary school is generally defined as "a non-profit institutional day or residential school that provides secondary education, as determined under state law," and not offering education beyond grade 12.[181] A library includes "(1) a public library, (2) a public elementary school or secondary school library, (3) an academic library, (4) a research library [] and (5) a private library, but only if the state in which such private library is located determines that the library should be considered a library for the purposes of this definition."[182] For-profit schools and libraries, and schools and libraries with endowments in excess of $50,000,000, are not eligible to receive discounts under the program, nor are libraries whose budgets are not completely separate from any schools.[183] Certain other statutory definitions apply as well.[184] The SBA has defined for-profit, elementary and secondary schools and libraries having $6 million or less in annual receipts as small entities.[185] In funding year 2017, approximately 104,500 schools and 11,490 libraries received funding under the schools and libraries universal service mechanism. Although we are unable to estimate with precision the number of these entities that would qualify as small entities under SBA's size standard, we estimate that fewer than 104,500 schools and 11,490 libraries might be affected annually by our action, under current operation of the program.

2. Telecommunications Service Providers

11. *Incumbent Local Exchange Carriers (LECs).* Neither the Commission nor the SBA has developed a size standard for small incumbent local exchange carriers. The closest applicable NAICS Code category is Wired Telecommunications Carriers.[186] Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.[187] U.S. Census Bureau data for 2012 indicate that 3,117 firms operated the entire year.[188] Of this total, 3,083 operated with fewer than 1,000 employees.[189]

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visited Oct. 11, 2019). While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments, then the majority of the 38,266 special district governments have populations of less than 50,000.

[179] *Id.*

[180] 47 CFR § 54.500.

[181] *Id.*

[182] *Id.*

[183] 47 CFR § 54.501.

[184] 47 CFR § 54.500.

[185] 13 CFR § 121.201; NAICS codes 611110 and 519120 (NAICS code 519120 was previously 514120).

[186] *See* 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017, the U.S. Census Bureau definition shows the NAICs code as 517311 for Wired Telecommunications Carriers. *See* U.S. Census Bureau, *2017 NAICS Definition*, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017 (last visited Oct. 11, 2019).

[187] *Id.*

[188] *See* U.S. Census Bureau, *2012 Economic Census of the United States,* Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms for the U.S.:* 2012, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110 (last visited Oct. 11, 2019).

[189] *Id.*

(continued….)

Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our actions. According to Commission data, one thousand three hundred and seven (1,307) Incumbent Local Exchange Carriers reported that they were incumbent local exchange services.[190] Of this total 1,307 an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.[191] Thus, using the SBA's size standard the majority of incumbent LECs can be considered small entities.

12. We have included small incumbent LECs in this RFA analysis. A "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[192] The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[193] We have, therefore, included small incumbent carriers in this RFA analysis, although we emphasize that this RFA action has no effect on the Commission's analyses and determinations in other, non-RFA contexts.

13. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to IXCs. The closest NAICS Code category is Wired Telecommunications Carriers.[194] The applicable size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.[195] U.S. Census Bureau data for 2012 indicate that 3,117 firms operated for the entire year.[196] Of that number, 3,083 operated with fewer than 1,000 employees.[197] According to internally developed Commission data, 359 companies reported that that their primary telecommunications service activity was the provision of interexchange services.[198] Of this total, an estimated 317 have 1,500 or fewer employees.[199] Consequently, the Commission estimates that the majority of interexchange service providers are small entities.

14. *Competitive Access Providers (CAPs)*. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to CAPs. The closest applicable definition

(Continued from previous page)

190 *See* Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service, 5-5, Table 5.3 (WCB 2010) (*Trends in Telephone Service*).

191 *Id.*

192 5 U.S.C. § 601(3).

193 *See* Letter from Jere W. Glover, Chief Counsel for Advocacy, U.S. Small Business Administration, to William E. Kennard, Chairman, Federal Communications Commission, CC Docket No. 98-147 et al., at 2 (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 CFR § 121.102(b).

194 *See* 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. U.S. Census Bureau, *2017 NAICS Definition*, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017 (last visited Oct. 11, 2019).

195 *Id*.

196 *See* U.S. Census Bureau, *2012 Economic Census of the United States,* Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms:* 2012 NAICS Code 517110, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110 (last visited Oct. 11, 2019).

197 *Id*.

198 *Trends in Telephone Service*, 5-5, Table 5.3.

199 *Id*.

under the SBA rules is for Wired Telecommunications Carriers.[200] Under the SBA size standard a Wired Telecommunications Carrier is a small entity if it employs no more than 1,500 employees.[201] U.S. Census Bureau data for 2012 show that 3,117 firms operated during that year.[202] Of that number, 3,083 operated with fewer than 1,000 employees.203 According to Commission data, 1,442 CAPs and competitive local exchange carriers (competitive LECs) reported that they were engaged in the provision of competitive local exchange services.[204] Of these 1,442 CAPs and competitive LECs, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.[205] Consequently, the Commission estimates that most providers of competitive exchange services are small businesses.

15. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services.[206] The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.[207] For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year.[208] Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.[209] Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

16. *Wireless Telephony*. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite).[210] Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.[211] For this industry, U.S. Census Bureau data for

[200] *See* 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICs code as 517311 for Wired Telecommunications Carriers. *See* https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017.

[201] *Id.*

[202] *See* U.S. Census Bureau, *2012 Economic Census of the United States,* Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms:* 2012 NAICS Code 517110 https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

[203] *Id*.

[204] *Trends in Telephone Service*, Table 5.3, page 5-5.

[205] *Id.*

[206] U.S. Census Bureau, 2012 NAICS Definitions, 517210 Wireless Telecommunications Carriers (Except Satellite), https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2012+NAICS+Search.

[207] 13 CFR § 121.201, NAICS code 517210.

[208] U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

[209] *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

[210] U.S. Census Bureau, 2012 NAICS Definitions, 517210 Wireless Telecommunications Carriers (Except Satellite), https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2012+NAICS+Search.

[211] *Id*.

2012 show that there were 967 firms that operated for the entire year.[212] Of this total, 955 firms had fewer than 1,000 employees and 12 firms had 1,000 employees or more.[213] Thus under this category and the associated size standard, the Commission estimates that a majority of these entities can be considered small. According to Commission data, 413 carriers reported that they were engaged in wireless telephony.[214] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[215] Therefore, more than half of these entities can be considered small.

3. Internet Service Providers (ISPs)

17. *Internet Service Providers (Broadband)*. Broadband Internet service providers include wired (e.g., cable, DSL) and VoIP service providers using their own operated wired telecommunications infrastructure fall in the category of Wired Telecommunication Carriers.[216] Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.[217] The SBA size standard for this category classifies a business as small if it has 1,500 or fewer employees.[218] U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year.[219] Of this total, 3,083 operated with fewer than 1,000 employees.[220] Consequently, under this size standard the majority of firms in this industry can be considered small.

18. *Internet Service Providers (Non-Broadband)*. Internet access service providers such as Dial-up Internet service providers, VoIP service providers using client-supplied telecommunications connections and Internet service providers using client-supplied telecommunications connections (e.g., dial-up ISPs) fall in the category of All Other Telecommunications.[221] The SBA has developed a small business size standard for All Other Telecommunications which consists of all such firms with gross annual receipts of $32.5 million or less.[222] For this category, U.S. Census Bureau data for 2012 shows

[212] U.S. Census Bureau, *2012 Economic Census of the United States,* Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210 .

[213] *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

[214] *Trends in Telephone Service* at Table 5.3, page 5-5.

[215] *Id*.

[216] *See* 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition show the NAICs code as 517311. *See* https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017.

[217] *Id.*

[218] *Id.*

[219] *See* U.S. Census Bureau, *2012 Economic Census of the United States,* Table No. EC1251SSSZ5, Information: Subject Series - Estab & Firm Size: Employment Size of Firms*:* 2012 NAICS Code 517110, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

[220] *Id*.

[221] *See* U.S. Census Bureau, 2017 NAICS Definitions, NAICS Code "517919 All Other Telecommunications", https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517919&search=2017+NAICS+Search&search=2017.

[222] 13 CFR § 121.201; NAICS Code 517919.

that there were 1,442 firms that operated for the entire year.[223] Of these firms, a total of 1,400 had gross annual receipts of less than $25 million.[224] Consequently, under this size standard a majority of firms in this industry can be considered small.

4. Vendors of Internal Connections

19. *Vendors of Infrastructure Development or "Network Buildout."* The Commission has not developed a small business size standard specifically directed toward manufacturers of network facilities. There are two applicable SBA categories in which manufacturers of network facilities could fall and each have different size standards under the SBA rules. The SBA categories are "Radio and Television Broadcasting and Wireless Communications Equipment" with a size standard of 1,250 employees or less[225] and "Other Communications Equipment Manufacturing" with a size standard of 750 employees or less."[226] U.S. Census Bureau data for 2012 show that for Radio and Television Broadcasting and Wireless Communications Equipment firms 841 establishments operated for the entire year.[227] Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees and 6 establishments operated with 2,500 or more employees.[228] For Other Communications Equipment Manufacturing, U.S. Census Bureau data for 2012 shows that 383 establishments operated for the year.[229] Of that number 379 operated with fewer than 500 employees and 4 had 500 to 999 employees. Based on this data, we conclude that the majority of Vendors of Infrastructure Development or "Network Buildout" are small.

20. *Telephone Apparatus Manufacturing*. This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment.[230] These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways."[231] The SBA size standard for

[223] *See* U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, Information: Subject Series – Estab & Firm Size: Employment Size of Firms: 2012 NAICS Code 517919, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~517919.

[224] *Id.*

[225] 13 CFR § 121.201, NAICS Code 334220. *See also* U.S. Census Bureau, 2012 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing" *https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.334220#*.

[226] 13 CFR § 121.201, NAICS Code 334290. *See also* U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334220, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334220.

[227] U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334220, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334220.

[228] *Id.*

[229] U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334290, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334290.

[230] *See* U.S. Census Bureau, 2017 NAICS Definition, NAICS Code 334210 "Telephone Apparatus Manufacturing," https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=334210&search=2017%20NAICS%20Search.

[231] *Id.*

Telephone Apparatus Manufacturing is all such firms having 1,250 or fewer employees.[232] U.S. Census Bureau data for 2012 show that there were 266 establishments that operated for the entire year.[233] Of this total, 262 operated with fewer than 1,000 employees.[234] Thus, under this size standard, the majority of firms can be considered small.

21. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing*. This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment.[235] Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.[236] The SBA has established a small business size standard for this industry of 1,250 employees or less.[237] U.S. Census Bureau data for 2012 show that 841 establishments operated in this industry in that year.[238] Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees and 6 establishments operated with 2,500 or more employees.[239] Based on this data, we conclude that a majority of manufacturers in this industry are small.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

22. We expect that the rules adopted in the Report and Order will result in modified reporting, recordkeeping, or other compliance requirements for small or large entities. The Report and Order takes two major actions. First, it permanently extends the existing category two budget approach for all entities, while adopting a number of steps to simplify how applications for category two services are filed, reviewed, and ultimately invoiced beginning in funding year 2021. These changes will result in modifications to information collections that decrease the compliance costs for small entities. And, second, it adopts rules extending the current five-year funding cycle for one additional year into for funding year 2020 to ensure that support for category two services is available and funding for other services are not delayed. For the funding year 2020 rules, both small and large entities will apply for category two funding in the same manner as in previous years with no changes to reporting, recordkeeping, or other compliance requirements. We do not believe that small entities will have to hire attorneys, engineers, consultants, or other professionals to comply.

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[232] 13 CFR § 121.201, NAICS code 334210.

[233] U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334210.

[234] *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,250 or fewer employees; the largest category provided is for firms with "1000 employees or more."

[235] The NAICS Code for this service is 334220. 13 CFR 121.201. *See also* U.S. Census Bureau, , 2012 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing", https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.334220#.

[236] *Id*.

[237] 13 CFR § 121.201, NAICS Code 334220.

[238] U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334220, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334220.

[239] *Id*.

F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

23. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."[240]

24. In the Report and Order*,* we have taken steps to minimize the economic impact on small entities with the rule changes that we have adopted by permanently extending the category two budget approach and working to simplify the administration of the budgets. Below we outline many of the adopted simplifications that will aid small entities in compliance.

25. *District-Wide or Library System-Wide Budgets.* We adopt a rule providing that school districts and library systems shall calculate their budgets for the entire district or system, allowing applicants to use funds efficiently at the schools and libraries that need the funding. This dramatically reduces the requirements for the application review process, including, but not limited to, eliminating reporting of part-time students, eliminating complicated cost allocations for equipment that is shared by members of a district or system, and overall simplification of the application process from start to finish.

26. *Modification of the Equipment Transfer Rule.* In addition to the district- and system-wide budgets, we amend our rule allowing districts and systems to transfer equipment among their own schools and libraries and eliminating the need to report such transfers to USAC. This removes a reporting requirement for all applicants, but keeps rules in place that requires schools and libraries to maintain asset inventories of all E-Rate supported equipment.

27. *Modification of the Library Budget Multiplier.* We amend our rules to have a single library budget multiplier. Currently, there are two multipliers, depending on the urban status of the library. A single multiplier allows for a simpler calculation of the library budgets, streamlining the application and its review.

28. *Increase of the Funding Floor.* We adopt an increase in the funding floor, which is aimed at encouraging participation by small entities. Many commenters argued that the burden of program compliance outweighed the benefit of receiving the current funding floor, which was also inadequate to meet their needs. Increasing the funding floor and simplifying the category two budget approach will allow more small entities to participate.

29. *Simplification of the Budget Calculation.* We adopt fixed, five-year budgets that refresh every five years, eliminating the need for applicants and USAC to calculate the budgets annually with a series of different variables including inflation, changing student counts, and funding years at issue. This dramatically decreases the burden on applicants to calculate the budget and apply for E-Rate support.

30. The Report and Order also extends the five-year test period for the category two budget approach into a sixth year and sets out the budget calculation in the Report and Order to simplify how to calculate the amount of funding available to applicants in advance of the funding year 2020 filing window. While stakeholders advocated for a faster transition to the new rules as an alternative to rules for one funding year, we find that this approach causes the least disruption to the overall program and provides the Commission and USAC with sufficient time and resources to successfully implement the many permanent changes we adopt for funding year 2021. We take steps to minimize the burden of the funding year 2020 rules by simplifying the budget calculation slightly and otherwise maintaining current

[240] 5 U.S.C. § 603(c)(1) – (4).

category two budget rules. As a result, there is no additional burden or cost to small entities because the program rules that are familiar to them are unchanged. Further, absent the rule changes in the Report and Order, the category two budget rules would begin to sunset in funding year 2020, meaning that small entities would have to navigate two sets of rules. The rule changes in the Report and Order prevent this sunsetting from taking place, thus preventing a potential source of burden and cost to small entities.

G. Report to Congress

31. The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.[241] In addition, the Commission will send a copy of the Report and Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register.[242]

[241] 5 U.S.C. § 801(a)(1)(A).

[242] *See id*. § 604(b).

STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY

Re: *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order

While I would have been open to a much more fundamental review of our E-Rate budgetary framework and disfavor the decision to casually endorse expenditure formulae that were fundamentally flawed when created, I will nonetheless support this item's efforts to provide applicants with stability and predictability in seeking funds for internal connections. At the same time, I would reiterate the need to weigh ratepayers' interests just as carefully whenever we increase or make changes to our USF spending. Unlike the E-Rate community, consumers don't have powerful lobbyists advocating on their behalf before the Commission to control costs, even though they're ultimately the ones who foot the bill for our subsidy programs. Those who constantly seek to increase spending, including certain individuals in regard to this item, seem to forget that funding isn't unlimited and comes out of the pockets of hardworking consumers.

Further, I acknowledge that some commenters in this proceeding supported the inclusion of network security features and products within the Eligible Services List. While that request won't be fulfilled in the current item, I am open to discussing the possibility of including such services in the future. My willingness to consider such inclusion, however, does not mean I favor vast new laundry lists of permissible expenditures. Instead, it reflects the simple recognition that without proper diligence, these systems could be extremely vulnerable to mischief, causing extensive harm to users and others while wasting our investments in the process.

STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL,
CONCURRING

Re: *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order

The E-Rate program is a powerful force for digital equity. For more than two decades, it has provided support to schools and libraries across the country, helping them connect to broadband and the internet.

But great programs like E-Rate do not thrive without continuous attention and care. So two years ago, at my urging the Federal Communications Commission set out to update E-Rate for the digital age. This new iteration of the program—call it E.Rate 2.0—has produced extraordinary results. Tens of millions of more students now have the broadband and internet access they need in their classrooms. Libraries have seen dramatic increases in support. And rural schools and libraries have been the most prominent beneficiaries. These results are by and large due to changes that put a new premium on fostering Wi-Fi access through what is known as category two funding.

With this decision, the agency takes steps to strengthen the program by cementing in place essential E.Rate 2.0 reforms. Specifically, we extend our category two funding approach to give schools and libraries certainty about future funding available for Wi-Fi. In addition, we improve flexibility and administration by allowing schools and libraries to budget at the school district or library system level instead of on a site-by-site basis. These are smart adjustments that will improve the program.

Though we get the broad outlines of these changes right, I think the agency misses the mark on some key details. To this end, I am concerned that the record before us supports a greater per pupil allowance than what is adopted in this decision. While I appreciate the effort to maintain the status quo, the evidence suggests that some schools hold back because it is impractical to seek Wi-Fi support at current levels. In addition, I am concerned that the decision to adjust this program for inflation only once every five years is akin to a stealth cut. It should be done annually. I also believe that while some libraries may find additional funding opportunities for Wi-Fi are available due to adjustments to their per square footage funding, urban libraries will see their funding levels cut. This is not right and could limit access to the internet in libraries in some of our most populated communities nationwide. Because I think in these respects today's decision misses the mark, I choose to concur.

When it comes to E-Rate, the details matter. While we have made great strides as I note above, there is still work to do. At present only 38 percent of school districts report that they have met the E.Rate 2.0 connectivity goal of 1 Gbps per 1000 students. In other words, the small choices we make as we amend this program can have big impact.

Finally, it is important to note that we need to keep a close watch on emerging cyber vulnerabilities affecting schools and libraries. The sad truth is that civic institutions nationwide have become targets for attack. Over the last four years, there have been over 700 reported K-12 cyber incidents. These include an attack earlier this year in Louisiana on multiple school districts, forcing the governor to issue a declaration of emergency. In Houston County, Alabama, a cyberattack was purportedly the reason for a delay in the start of the school year. As these problems grow more common, it is appropriate to consider what practices can help prevent school and library networks avoid the inconvenience and harm that follows in the wake of these attacks. So I am pleased that my colleagues agree that the agency should be open to learning more about these challenges. I hope this will help inform policies that across the board will ensure that school and library networks remain strong and secure in the future.

STATEMENT OF
COMMISSIONER GEOFFREY STARKS,
CONCURRING

Re: *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order

The E-Rate program is a vital tool in fighting internet inequality. In 2018 alone, it distributed over $2.1 billion in support to connect schools and libraries across the country to broadband. While today's Order takes meaningful steps towards ensuring the efficient distribution of E-Rate support, we still have work to do. Five years ago, the Commission established a goal of 1 Mbps internet access per student. Unfortunately, 62 percent of school districts still do not meet that standard. I look forward to working with my colleagues to achieve that goal.

Many thanks to the staff of the Wireline Competition Bureau for their work on this item.