

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

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

NOTICE OF PROPOSED RULEMAKING

Adopted: June 28, 2019

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Comment Date: (30 days after date of publication in the Federal Register)

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By the Commission: Commissioners Rosenworcel and Starks issuing separate statements; Commissioner O’Rielly approving in part, dissenting in part, and issuing a statement.

I. INTRODUCTION

1. The Commission’s E-Rate program¹ 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 propose to make permanent the approach adopted by the Commission in 2014 to fund these internal connections. In so doing, we seek to ensure that our nation’s students and library patrons have access to high-speed broadband and further the Commission’s goal of bridging the digital divide.

2. The 2014 approach, known as the “category two” budget approach, consists of five-year budgets for schools and libraries that provide a set amount of funding to support internal connections.³ The Commission also established a five-year test period (from funding year 2015 to funding year 2019) to consider whether the category two budget approach is effective in ensuring greater access to E-Rate discounts for internal connections.⁴

3. Our experience over the past few years suggests that these budgets have resulted in a broader distribution of funding that is more equitable and more predictable for schools and libraries. We also see clear improvements in the way in which funding for internal connections has been administered in the five-year period since adoption of the category two budget approach. Therefore, we now propose to make the category two budget approach permanent and seek comment on potential modifications that

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

² *Modernizing the E-Rate Program for Schools and Libraries*, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8894-95, para. 64 (2014) (*2014 First E-Rate Order*); *Modernizing the E-Rate Program for Schools and Libraries*, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538, 15539, paras. 1-2 (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-rateprogram> (proposing a budget approach for the E-Rate Program).

³ *2014 Second E-Rate Order*, 29 FCC Rcd at 15571, para. 82.

⁴ *Id.*

could simplify the budgets, decrease the administrative burden of applying for category two services, and thereby speed the deployment of Wi-Fi in schools and libraries across the country.

II. BACKGROUND

4. 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 are those services that provide connectivity *within* schools and libraries.⁵ Under the E-Rate program rules, funding is committed up to an annual Commission-established cap.⁶ If demand exceeds the cap, E-Rate funds are allocated according to rules of priority, so that funding for category one services is committed first and remaining funding is committed to category two services beginning with applicants eligible for a 90% discount and descending until the cap is reached.⁷

5. 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.⁸ 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.⁹ 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.¹⁰

6. In 2014, the Commission moved to a new budget approach for category two services. 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.¹¹ 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 2019.¹²

7. Under the current rules, schools are eligible to request E-Rate discounts on costs up to \$150 per student over five funding years,¹³ 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.¹⁴ 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.¹⁵ Before the start of each funding year, the

⁵ 47 CFR § 54.507(f), (g)(1)(ii).

⁶ See 47 CFR § 54.507(a), (f).

⁷ See *id.*

⁸ *Schools and Libraries Universal Service Support Mechanism*, 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*).

⁹ *2014 First E-Rate Order*, 29 FCC Rcd at 8894-95, para. 64.

¹⁰ *Id.* at 8912-13, para. 109.

¹¹ See *id.* at 8898-8922, Section IV.B.; *2014 Second E-Rate Order*, 29 FCC Rcd at 15571, Section III.A.

¹² *2014 First E-Rate Order*, 29 FCC Rcd at 8918-20, para. 123-30.

¹³ 47 CFR § 54.502(b)(2).

¹⁴ 47 CFR § 54.502(b)(3).

¹⁵ 47 CFR § 54.502(b)(4).

budget multipliers and funding floor are adjusted annually for inflation, but are not rounded.¹⁶ For example, in funding year 2019, the budget multiplier for schools is \$159.669053922 per student.¹⁷

8. 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.¹⁸ As a result, each school in a school 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.¹⁹ 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.²⁰ 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.²¹ 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.²²

9. 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 2015.²³ Under the current rules, the school's initial pre-discount budget for funding year 2015 would have been \$150,000.²⁴ 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.²⁵ 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

¹⁶ 47 CFR §§ 54.502(b)(1); 54.507(a)(1)-(2).

¹⁷ See *Wireline Competition Bureau Announces E-Rate and RHC Programs' Inflation-Based Caps for Funding Year 2019*, CC Docket No. 02-6, Public Notice, DA 19-170 (WCB Mar. 8, 2019) (2019 Inflation Public Notice).

¹⁸ 47 CFR § 54.502(b)(5).

¹⁹ See *id.*

²⁰ 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.").

²¹ 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.

²² See 2014 Second E-Rate Order, 29 FCC Rcd at 15573, para. 87.

²³ While we are aware that there are a small number of districts in the country with hundreds of thousands of students and more than 1,000 schools, we have chosen to use a simple example here for illustrative purposes.

²⁴ 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).

²⁵ 47 CFR § 54.502(b)(5). The district may divide the costs equally or provide USAC with another reasonable allocation, such as pro-rated based on student count.

at the school by the inflation-adjusted budget multiplier for that funding year,²⁶ and then subtracting the pre-discount amount of any category two funding previously received by that school.²⁷ If the school did not install some portion of an approved category two services funding request in a prior funding year, it 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.²⁸

10. 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.²⁹ Absent further Commission action, the category two budget rules will begin to sunset in funding year 2020, leaving applicants seeking category two services to navigate two sets of rules—the category two rules and the two-in-five rules—until funding year 2024.³⁰ The category two rules would apply to schools and libraries that requested funding for category two services in any funding year from funding year 2015 through funding year 2019 and remain in effect until the applicant completes its five-year budget cycle, which begins in the first year a school in a school district or a library in a library system received category two funding.³¹ As a result, school districts and library systems with a school or library that received category two funding in funding year 2016 through funding year 2019, but did not complete their five-year budget cycle by funding year 2020, would remain subject to the category two budget rules until they complete their budget cycle.³² On the other hand, in funding year 2020, school districts and library systems that did not receive category two funding in funding year 2015 through funding year 2019, or who have completed their five-year budget cycle, would revert back to seeking category two funding under the two-in-five rules.³³ In our example above, the school first received category two funding in funding year 2015; thus, its five-year funding cycle would end in funding year 2019. However, if the school did not first receive category two funding until funding year 2019, its five-year cycle would not end until funding year 2023.

11. When the Commission adopted the current category two rules, 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 2019.³⁴ On September 22, 2017, the Bureau released a

²⁶ 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*.

²⁷ 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, see *supra* n.20, 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.").

²⁸ See USAC, FCC Form 500 Filing (dated May 2018), <https://www.usac.org/sl/applicants/before-youre-done/500-filing.aspx> (last visited July 9, 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).

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

³⁰ 47 CFR § 54.502(b); see also *2014 Second E-Rate Order*, 29 FCC Rcd at 15571, para. 82; *2014 First E-Rate Order*, 29 FCC Rcd at 8911-12, paras. 106-07.

³¹ See 47 CFR § 54.502(b)(1).

³² See 47 CFR § 54.502(c). For example, an applicant that did not receive category two E-Rate support until funding year 2016 (i.e., funding year 2016 is the first year of its five-year budget cycle) would remain subject to the current category two budget rules through funding year 2020.

³³ See 47 CFR § 54.502(c).

³⁴ *2014 Second E-Rate Order*, 29 FCC Rcd at 15575, para. 93.

Public Notice seeking comment on the category two budget approach in preparation for the report.³⁵ In response, commenters expressed near-unanimous support for the category two budget approach,³⁶ and no commenter expressed a desire to return to the two-in-five rules.³⁷

12. On February 11, 2019, the Bureau released its report on the sufficiency of the category two budget approach.³⁸ 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.”³⁹

III. DISCUSSION

13. With the category two budget rules set to begin to expire for some applicants at the end of funding year 2019 and for all applicants at the end of funding year 2023, we are faced with a choice between continuing with the category two budget approach or returning to the two-in-five rules. Given our experience during the five-year test period and the Bureau’s findings in the *Category Two Budget Report*, we (1) propose amending our rules to make permanent the category two budget approach for all applicants; (2) propose and seek comment on ways to improve the category two budget approach; and (3) seek comment on how best to transition from the five-year test period to a permanent extension of this approach.

A. Permanent Extension of Category Two Budget Approach

14. First and foremost, we propose to permanently extend the category two budget approach and avoid reverting back to the two-in-five rules for all applicants. Doing so is consistent with the *Category Two Budget Report*, which generally found that the category two budget approach has provided schools and libraries with more certain and equitable funding for internal connections than under the two-in-five rules. In addition, making permanent the category two budget approach is also supported by the record received in response to the September 2017 *Public Notice*.⁴⁰ We, therefore, seek comment on our

³⁵ *Wireline Competition Bureau Seeks Comment on Category Two Budgets*, WC Docket No. 13-184, Public Notice, 32 FCC Rcd 7012 (WCB 2017) (*Public Notice*).

³⁶ 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”).

³⁷ 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 (imploping 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 Coalition Public Notice Comments at 2.

³⁸ *See generally Modernizing the E-Rate Program for Schools and Libraries*, Report, WC Docket No. 13-184, DA 19-71 (WCB 2019) (*Category Two Budget Report*). 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.* n.3.

³⁹ *Category Two Budget Report*, para. 42.

⁴⁰ *See supra* n.36; *see also* Letter from Debra M. Kriete, Chair, State E-rate Coordinators’ Alliance, to Chairman Ajit Pai, FCC, CC Docket No. 02-6, WC Docket No. 13-184, at 2 n.2 (filed Feb. 19, 2019) (SECA Feb. 19, 2019 Letter) (concurring with the Bureau’s conclusion that the category two budget approach has been more effective, equitable, and cost-effective for distributing category two funds across a wider array of applicants than the prior two-in-five-
(continued....)

proposal to make permanent the category two budget approach and on the Bureau's overall findings in the *Category Two Budget Report*.

15. In particular, the *Category Two Budget Report* found that, under the category two budget approach, applicants have had access to category two funding every year, and no requests have been denied due to insufficient funding.⁴¹ By contrast, under the two-in-five rules approach, a small number of applicants exhausted available funding, with most applicants receiving no funding.⁴² Additionally, 43% of schools and 23% of libraries each year now receive category two funding as compared to 10% of applicants under the two-in-five rules.⁴³ Moreover, the category two budget approach has generally resulted in a more equitable distribution of funding that better approximates the makeup of E-Rate applicants, in comparison to the distribution under the two-in-five rules approach where funding disproportionately went to urban schools.⁴⁴ Category two support has been disbursed in all fifty states and five territories and to applicants at all discount levels.⁴⁵ We seek comment on these and other findings in the *Category Two Budget Report* and on the proposal to permanently extend the category two budget approach.

16. We also seek comment on the costs and benefits associated with making permanent the category two budget rules. Do the benefits of the category two budget approach outweigh the burdens associated with administering them? We also seek comment more generally on the costs associated with the budgets overall and the appropriate path forward.

B. Potential Improvements to the Category Two Budget Approach

17. We propose extending several aspects of the current category two budget approach, including maintaining the eligibility of existing category two services and keeping the existing budget multipliers for schools and libraries. We also seek comment on other potential ways to improve the budget approach, including moving to district-wide budgets and simplifying the budget calculations. Finally, we seek general comment on ways to decrease the burden of applying for category two services and improve administration of category two budgets for both applicants and USAC.

18. *Eligible Services.* In 2014, the Commission made managed internal broadband services, caching, and basic maintenance of internal connections eligible for category two support under the category two budget approach through funding year 2019.⁴⁶ For each service, the Commission found that the budgets allayed concerns about wasteful spending and provided applicants with greater flexibility to determine their own needs.⁴⁷ Consistent with the Commission's determination in 2014 to make certain services eligible for category two support given the budgets' ability to prevent excessive spending, we propose extending the eligibility of managed internal broadband services, caching, and basic maintenance

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rules and urging the Commission to seek comment on the category two budget approach). To the extent that this letter met the requirements of a petition for rulemaking, we dismiss it as moot in light of this proceeding.

⁴¹ *Category Two Budget Report*, para. 8.

⁴² *Id.* at para. 10.

⁴³ *Id.* at paras. 17-18.

⁴⁴ *Id.* at para. 29.

⁴⁵ *Id.* at paras. 30-31 & Appendix B.

⁴⁶ See, e.g., 2014 First E-Rate Order, 29 FCC Rcd at 8918-20, paras. 123-30; see also SHLB Coalition Public Notice Comments at 4 (supporting the continued eligibility of managed Wi-Fi to give schools and libraries the option to use a third-party to install and manage Wi-Fi, which increases competition for category two services).

⁴⁷ See, e.g., 2014 First E-Rate Order, 29 FCC Rcd at 8919, para. 123-24.

of internal connections under the permanent category two budget approach we propose today.⁴⁸ We seek comment on this proposal. Further, are there additional services that we should make eligible for category two funding or any other issues regarding category two eligible services we should consider?

19. *Budget Levels.* In the *Category Two Budget Report*, the Bureau found that the category two budget approach appears to be sufficient for most schools and libraries with approximately half of schools and most libraries having used less than half of their allocated five-year budget and a supermajority of schools and libraries having used less than 90% of their budgets.⁴⁹ Based on this finding, we propose maintaining the existing budget multipliers for the category two budget approach. Specifically, over a five-year funding cycle, schools would be eligible to receive up to \$150 (pre-discount) per student and libraries are eligible to receive up to \$2.30 or \$5.00 (pre-discount) per square foot (depending on their Institute for Museum and Library Services (IMLS) locale codes). Entities with low student population or small square footage would receive a budget floor of \$9,200 over five funding years. We recognize that student count, building age, geography and other factors vary from entity to entity, and as such, no budget multiplier will perfectly fit the category two budget needs for every school and library in the country. Nevertheless, we expect that, on balance, maintaining the existing multipliers will fit the needs of the majority of applicants.

20. We seek comment on this proposal or, in the alternative, whether to change these per-student or per-square foot budget multipliers, particularly for entities that may have participated at a lower rate or that may face higher costs for internal connections. For instance, we seek comment on whether the minimum budget floor should be increased and, if so, what the appropriate budget floor level should be to address the needs of smaller entities and increase their participation in the program.⁵⁰ Would, for example, increasing the budget floor to \$25,000 as some commenters suggested in response to the 2017 *Public Notice* be a more appropriate budget floor?⁵¹ Based on requests from funding years 2015 to 2018, schools with an enrollment of 190 students or more participate at an 80% rate, which corresponds to a pre-discount budget of approximately \$30,000, roughly three times the current funding floor, compared with those at the funding floor, which participate at a 48% rate.⁵² Would raising the budget floor to correspond with schools that participate at a higher rate be an appropriate budget floor level?

21. Similarly, we seek comment on whether to adjust the budget multipliers for entities that may experience higher costs due to their geographic location. For example, the current budget multipliers appear to disadvantage rural libraries, leaving them with less than half the category two budget support per square foot than their urban counterparts despite often smaller square footage. Should we maintain the increased budget multiplier for libraries in urban areas (i.e., \$5.00 per square foot), or should we set a higher budget multiplier for rural libraries, which is currently \$2.30 per square foot?⁵³ Commenters should submit specific data and models to support their arguments that additional funding is necessary,

⁴⁸ See, e.g., *id.* at 8921, para. 131. Notwithstanding our proposal, we clarify that these three category two services (i.e., managed internal broadband services, caching, and basic maintenance of internal connections) remain eligible to applicants still operating under their five-year budget cycles, the last of which will end in funding year 2023 absent Commission action. See *id.*

⁴⁹ *Category Two Budget Report*, para. 43.

⁵⁰ See, e.g., AdvanEdge Solutions Public Notice Comments at 4 (arguing that the current budget floor is inadequate for smaller sites); see also *Category Two Budget Report*, paras. 32, 44 (showing that entities at the current budget floor participate at a lower rate).

⁵¹ See AdvanEdge Solutions Public Notice Comments at 4; Janice Meyers Educational Consulting Public Notice Comments at 2; Claire O’Flaherty Public Notice Comments at 1.

⁵² See, e.g., *Category Two Budget Report*, Appendix A: Data Sources; see also *Category Two Budget Report*, para. 44 (finding that only 48% of entities at the funding floor request category two funding).

⁵³ See 2014 Second E-Rate Order, 29 FCC Rcd at 15573, para. 28.

including the relative importance of any particular factors such as rural or remote geography, building age, or low student population. For example, to the extent that entities in remote or Tribal areas or communities face higher category two costs, we seek data to assist the Commission in determining the appropriate budget multipliers.

22. *District-Wide or Library System-Wide Budget Calculations.* We seek comment on moving from a per-school or per-library budget to a per-district or per-system budget for category two services. In 2014, the Commission adopted per-entity budgets, requiring districts to calculate budgets for each school in the district based on the number of students in the school, and for library systems to calculate budgets for each of its library outlets based on the square footage of that outlet.⁵⁴ Stakeholders have consistently commented on the administrative difficulties associated with managing these per-entity budgets. For instance, many school districts have buildings of different ages or construction materials, and therefore some entities end up with too large of a budget, while others end up with an insufficient budget.⁵⁵ As such, stakeholders have recommended moving to a district-wide or library system-wide budget that is calculated using the total number of students in the district or all of the buildings in the library system.⁵⁶ Under this approach, a district would calculate its category two budget and then decide how and where category two E-Rate support should be directed.

23. There are several potential benefits to this approach. First, as commenters contended in response to the 2017 *Public Notice*, moving to a district-wide calculation would streamline the application process for category two services from start to finish, simplifying the budget calculations,⁵⁷ the FCC Form 471 application,⁵⁸ the PIA reviews of those applications,⁵⁹ and the FCC Form 500 cancellation process.⁶⁰ Such a calculation could also simplify some of the more complicated issues that applicants face when seeking E-Rate support. For example, a district-wide budget calculation could largely eliminate the number of applicants that estimate student counts at new schools if the number of students in the district is unchanged despite a new school being built.⁶¹ Similarly, would a district-wide budget calculation simplify the application process by eliminating the need for school districts to count part-time students

⁵⁴ 47 CFR § 54.502(b).

⁵⁵ See, e.g., State of New Mexico Public School Facilities Authority Public Notice Comments at 3-4 (providing data from one school district upgrading the switches in nine schools, where a district-wide budget would cover 81% of the cost of the project, but the entity-level budget left three schools with just over half of their expenses covered); SHLB Coalition Public Notice Comments at 5 (citing factors such as building size and construction materials as variables that can lead to one school requiring more support than another).

⁵⁶ See, e.g., CoSN, EducationSuperHighway, & Funds for Learning Public Notice Comments at 8; Pennsylvania Department of Education Public Notice Comments at 4; SECA Public Notice Comments at 5-8.

⁵⁷ See, e.g., SECA Public Notice Comments at 8-11 (describing the challenges associated with making the school-by-school calculations).

⁵⁸ *Id.* at 12 (describing a California applicant with a 798-page FCC Form 471).

⁵⁹ *Id.* (discussing how applicants elect to file separate FCC Forms 471 per school, creating more PIA reviews, funding commitments, and deadlines to track).

⁶⁰ The FCC Form 500 is filed to, among other things, cancel or reduce the amount of a category two funding commitment that was unspent in one funding year, to allow the applicant to request that amount in a subsequent year. Commenters have stated that a district-wide calculation would simplify the FCC Form 500 cancellation process when there is a commitment for equipment shared by two entities. See, e.g., Pennsylvania Department of Education Public Notice Comments at 7.

⁶¹ We expect that newly created, independent schools would still need the ability to estimate enrollment. See 47 CFR § 54.502(b)(2) (setting per-student budgets for category two funding and allowing new schools to estimate enrollment).

given that they would have the flexibility to allocate funding as they see fit?⁶² Moreover, a district-wide calculation should simplify the review of applications where there are shared services by E-Rate eligible entities. Under the current approach, cost allocation between the budgets of the entities sharing the service is required, adding to the applicant burden.⁶³ Finally, calculating budgets on a district-wide basis would afford local entities that are familiar with the needs of their schools the opportunity to leverage that knowledge in making determinations about the efficient and effective allocation of E-Rate funds in fulfillment of the program's objectives and goals.⁶⁴ We seek comment on each of these potential benefits and how they would impact applicants. What are the other potential benefits that could be realized in using district-wide budgets?

24. We also seek comment on the costs of moving to district-wide budgets, including with respect to the allocation and distribution of category two funding. For instance, under a district-wide budget approach, there is a risk that fewer entities will receive category two E-Rate support if school districts elect to request funding only for certain schools.⁶⁵ For example, in some states, charter schools are considered a part of a school district, while in others, they are independent from the district. For charter school applicants that are subject to school district administration, are there risks that category two E-Rate support requested by the school district will be unfairly distributed among the schools in the district? We seek comment on these risks and whether any safeguards could be used to ensure that funding is available for all eligible schools.

25. We also seek comment on how a district-wide budget approach should be administered. For example, how should applicants and USAC determine which entities are part of a district for purposes of applying for and setting district-wide category two budgets? In particular, some parochial schools and charter schools apply as a group for purposes of calculating a district-wide discount rate under the Commission's rules.⁶⁶ Should we consider using a similar approach when setting district-wide budgets for these entities? Further, what would happen if districts combine or separate during the five-year budget cycle? Are there other issues we should consider, including any rules or procedures that would need to be modified, under a district-wide category two budget approach?

26. We also seek comment on whether the same approach is appropriate for library systems. In general, would library systems benefit from a system-wide budget in the same way schools might? Our rules also provide two budget multipliers for libraries (i.e., \$2.30 or \$5.00 per square foot), depending on the library's IMLS locale code.⁶⁷ Would this require a modification in order for all library outlets in a system to share the same locale code? If so, what is the best method for determining the locale code for a system? Are there any other administrative issues to consider in using a system-wide budget for libraries?

⁶² 2014 Second E-Rate Order, 29 FCC Rcd at 15573, para. 87. See, e.g., Florida E-rate Coordinator Public Notice Reply Comments at 3-4 (noting the potential elimination of the cumbersome task of counting part-time students).

⁶³ 2014 First E-Rate Order, 29 FCC Rcd at 8915, para. 115. We note that discounts are still generally not available for non-instructional facilities (NIFs) or administrative buildings of a library, but the shared costs of a piece of equipment could more easily be handled in a district-wide category two budget.

⁶⁴ See, e.g., Pennsylvania Department of Education Public Notice Comments at 4 (noting that a district-wide budget is in keeping with the common framework of local control from which district officials can best decide how funding is allocated to its schools, as acknowledged by the Commission in 2014 during its move to district-wide discounts).

⁶⁵ See, e.g., USTelecom Public Notice Comments at 3.

⁶⁶ 47 CFR § 54.505 (providing that "[i]ndependent charter schools, private schools, and other eligible educational facilities should calculate a single discount percentage rate based on the total number of students under the control of the central administrative agency").

⁶⁷ See 2014 Second E-Rate Order, 29 FCC Rcd at 15573, para. 28.

27. Finally, if we move to district-wide budgets, should we also consider easing the equipment transfer rules within a district?⁶⁸ With the move to district-wide discounts and district-wide category two budgets, the original concerns that led to the adoption of a prohibition on 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—would no longer be relevant.⁶⁹ We note, at the same time, that 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.⁷⁰

28. *Budget Calculations.* We seek comment on simplifying the budget calculations generally. For example, should the student count and square footage in the first year of a five-year cycle be used for all five years to ease administration of the budgets?⁷¹ The ability to obtain additional funding if there is a student population increase or new library building was designed to provide flexibility, but applicants have raised concerns about the difficulty of updating this information during the application review process. Would having a set pre-discount budget for five years make the review process easier because applicants would only have to verify this information once? Or are there significant advantages to having the budgets rise (or fall) depending on student population or square footage each year? If so, are there other ways to ease the review process for verifying student counts and square footage if we keep entity-level budgets on an annual basis? Should we establish a presumption that the student counts verified in one of the last four funding years are still accurate for the purposes of setting a category two budget, absent an effort by the applicant to increase the student count? Such a presumption could result in waste of funding if a school’s student population dropped significantly, for example, due to migration of students to a new school. How could such an outcome be avoided if we were to adopt such a presumption?

29. Similarly, we propose to codify rounding the inflation calculation to two decimals for the category two multipliers in funding year 2020.⁷² This approach will simplify the calculation for USAC and applicants and is consistent with other Commission rules that establish rounding.⁷³ We seek comment on this proposal. Recognizing that applicants do not always know the inflation adjustment before the filing window, we also seek comment on whether there is a better way to adjust for inflation, such as adjusting the budgets just once every five years.⁷⁴

30. *Application and Administration.* We also seek comment on other ways to make the application process for category two services and the administration of category two budgets simpler and more efficient. What administrative changes would have the greatest impact on applicants and USAC? For example, we seek comment on whether there are ways to simplify how applicants request category two services on the FCC Form 471 and on whether the Commission should provide guidance on using

⁶⁸ 47 CFR § 54.513(d). See, e.g., Pennsylvania Department of Education Public Notice Comments at 7 (arguing that the equipment transfer rules are unnecessary under a district-wide category two budget).

⁶⁹ *Third Report and Order*, 18 FCC Red at 26923-24, paras. 25-26.

⁷⁰ 47 CFR § 54.516(a).

⁷¹ See SECA Feb. 19, 2019 Letter at 2, n.2 (recommending a set level for the full five-year cycle).

⁷² For example, if the school multiplier was \$156.23 in FY2019 and the inflation adjustment is 1.5%, in FY2020, the rounded school multiplier would be \$158.57. Currently, USAC calculates that multiplier to be \$158.57345.

⁷³ See, e.g., 47 CFR § 54.507(a)(2) (rounding to the tenth).

⁷⁴ See, e.g., Pennsylvania Department of Education Public Notice Comments at 8; Nebraska Department of Education Public Notice Comments at 9. In funding year 2019, the filing window closed on March 27, 2019, just two and a half weeks after the inflation factor was published. See Funds for Learning PN Supplemental Comments at 4 (noting challenges calculating category two budgets related to the announcement of the inflation factor in the middle of the filing window); see also *2019 Inflation Public Notice*.

master contracts for category two services.⁷⁵ Additionally, are there changes to the FCC Form 500 cancellation process that would simplify the category two budget process?⁷⁶

C. Transition to Permanent Extension of Category Two Budget Approach

31. We seek comment on the five-year budget cycles and how best to transition from the existing category two budget rules following the five-year test period. The category two budget rules currently contemplate rolling budgets; that is, each year applicants calculate the pre-discount budget based on the current funding year student counts and budget multipliers, and then subtract the pre-discount amounts on the commitments received in the prior four funding years.⁷⁷ For instance, assume a hypothetical school with 1,000 students that first received category two funding in funding year 2015; its budget in funding year 2015 would be \$150,000.⁷⁸ If there is no change in student count, in funding year 2016, the school's budget would be \$151,500, minus the pre-discount amount of any funding received in funding year 2015. In funding year 2017, the budget would be \$153,469.50, minus the pre-discount amount of any funding received in funding years 2015 and 2016, and so forth through funding year 2019. If not for the five-year test period established in the *2014 Second E-Rate Order*, in funding year 2020, the school's budget would be the student count multiplied by the funding year 2020 budget multiplier, minus the pre-discount amount of any funding received in funding years 2016, 2017, 2018, and 2019; funding received in funding year 2015 would not count against the school's budget in funding year 2020. In this manner, the budgets were designed to be rolling, and an applicant could determine its budget by looking to its current student count, the current inflation-adjusted per-student budget multiplier, and the amount of funding received in the prior four funding years. The goal of this rolling approach is to provide applicants with greater certainty about whether funding would be available after the end of a five-year budget cycle and thus prevent unnecessary spikes in spending in the last year of such a cycle.

32. The five-year test period adopted in 2014, however, makes it such that no applicant is able to request funding in a sixth year under the category two budget approach, and thus although the budgets were designed to be rolling, in practice they are not. We seek comment on using rolling budgets as originally intended. Under this approach, in funding year 2020, applicants would calculate their five-year budgets based on their student counts, inflation-adjusted per-student budget multipliers, and any funding committed in in funding years 2016, 2017, 2018, and 2019 (but not funding year 2015). What are the other benefits of this rolling approach? What are the costs of this approach? For example, is it administratively burdensome to calculate budgets in this way?

33. As an alternative to a rolling five-year cycle approach, we seek comment on moving to a fixed five-year cycle from funding year 2020 through funding year 2024, with a new fixed five-year budget starting for all applicants every five years.⁷⁹ Would a fixed five-year cycle be a more efficient

⁷⁵ See, e.g., Montana State Library Public Notice Comments at 3 (supporting efforts to simplify the process, including the use of master contracts to ease the procurement burdens); see also 47 CFR § 54.500 (defining "master contract").

⁷⁶ See, e.g., SHLB Coalition Public Notice Comments at 6 (suggesting that USAC calculate the amount of the commitment that was not used, rather than requiring applicants to list the items that were not purchased and seek cancellation).

⁷⁷ When the Commission adopted the category two budget rules, however, it stated that any internal connections funding received prior to funding year 2015 would not count against an applicant's category two budget. See 47 CFR 54.502(b)(1). Thus, in funding year 2015 for example, an applicant's budget would be the student count times the budget multiplier, with no prior funding years to subtract.

⁷⁸ In funding year 2015, 1,000 students x \$150 = \$150,000. The budget multiplier is further adjusted for inflation annually. See USAC, Category Two Budgets, <https://www.usac.org/sl/applicants/step03/category-two-budget.aspx> (last visited July 9, 2019) (providing the budget multipliers adjusted for inflation each funding year).

⁷⁹ See SECA Feb. 19, 2019 Letter at 2 n.2 (recommending a fixed five-year cycle from funding year 2020 through funding year 2024).

and/or an easier-to-administer system than a rolling five-year cycle approach? How can applicants be incentivized to avoid wasteful spending at the end of a fixed cycle by requesting funds solely because the funds are scheduled to expire? What are the other costs and benefits of rolling and fixed budget cycles? We seek comment on these approaches and any alternatives.

34. If we were to use a rolling budget approach, should we consider modifying the rolling budgets to smooth the amount of support available over a five-year cycle by providing some funding each funding year? For instance, should we consider a system where an additional 20% is added to the applicant budget each year while still having a maximum budgeted amount that can be spent each year? Continuing with the illustration above of a school with 1,000 students, in the first year the school received funding, its budget would be \$150,000. In the following year, the school's budget would be \$151,500, minus the pre-discount amount of any funding received in the prior funding year, plus \$30,300, which is 20% of the school's \$151,500 budget. Under this additive approach, a school would be able to roll unused funding from year to year; however, applicants would not be permitted to request more than \$150 per student (adjusted for inflation) in any given funding year.⁸⁰ This approach would both allow applicants to either seek funding each year or carry the budget forward to the next year, and ensure that applicants always have access to at least some funding in every year. Because student counts can fluctuate, an applicant that sees a large decline in student population in one funding year could have a much smaller category two budget than previously anticipated. Using this additive approach of providing some portion of funding to the school each funding year could smooth that fluctuation.⁸¹ However, it could make tracking budgets more challenging. Specifically, under the current system, applicants calculate budgets using three variables (i.e., their current student count, the inflation-adjusted per-student budget multiplier, and the amount of funding received in the prior four funding years) while applicants would have to track the added 20% each year, adding a fourth variable to their calculations each year. We seek comment on this additive approach, its costs and benefits, and any alternatives to smooth out the amount of support available under a rolling five-year budget approach while minimizing administrative burdens on applicants and USAC.

35. Further, we seek comment on how to transition from the existing category two budget rules to any modified category two budget rules. As described above, if we simply extend the current rules, in funding year 2020, an applicant's budget calculation would take into account funding requested in funding years 2016 through 2019. For administrative efficiency, however, we seek comment on starting fresh in funding year 2020 and resetting all applicant budgets, to allow applicants a new opportunity to track their category two budgets and ease the transition's impact on all E-Rate program stakeholders.⁸² We recognize, however, that some applicants have not requested all of their category two budgets from funding year 2015 through 2019, while others will have used all of their budgets for those years. We, therefore, also seek comment on whether there is an administratively feasible way to take previous category two funding commitments into account when transitioning all applicants in funding year 2020.

36. Alternatively, depending on the timing of the new rules and the extent of the changes, should we consider using funding year 2020 as a bridge to transition to the final rules we adopt in this proceeding? For example, should we consider extending the existing rules for one funding year without

⁸⁰ The same would be true of the \$2.30 and \$5.00 per square foot budget multipliers for libraries, and the \$9,200 funding floor, all of which would be adjusted for inflation.

⁸¹ For example, if the student count dropped from 1,000 in funding year 2015 to 750 in funding year 2016, the category two budget would be \$113,625. If the applicant had already received at least that amount in funding year 2015, there would be no funding available in funding year 2016. However, if 20% was added annually, \$22,725 would be available in funding year 2016 if needed. Alternatively, the school could roll forward unused funding to the next funding year.

⁸² See SECA Feb. 19, 2019 Letter (recommending resetting the budgets in funding year 2020).

any modifications? This approach could allow applicants that received support in funding year 2015 and have completed the five-year cycle, or applicants still within their five-year cycles with funds remaining in their budgets, to request support and allow for a smoother transition to the new rules. Should we permit applicants who have completed a five-year cycle to nevertheless access any unused funds in funding year 2020, in what would be a sixth year? Similarly, should any particular restrictions apply to applicants that did not receive category two support in funding year 2015 through 2019? Should we further provide some additional category two support to the existing five-year budgets, for example, \$30 per student or 20% of the library budget of \$2.30 or \$5.00? Commenters supporting this alternative are encouraged to also address what category two funding opportunities, if any, should be made for those E-Rate eligible entities who have already depleted their respective category two budgets. Or should we consider having a second, later filing window for category two service requests in funding year 2020? How can we best reduce applicant confusion and provide for simplified administration of the category two budgets as we move beyond funding year 2019?⁸³ We seek comment on other alternatives that would afford a smooth and effective transition to the category two rules we adopt in the context of this proceeding.

IV. PROCEDURAL MATTERS

37. *Initial Regulatory Flexibility Analysis.*—As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁸⁴ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) relating to this NPRM. The IRFA is set forth in Appendix B.

38. *Paperwork Reduction Act.*—The NPRM may result in revised information collection requirements. If the Commission adopts any revised information collection requirement, the Commission will publish a notice in the *Federal Register* inviting the public to comment on the requirement, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. §§ 3501-3520). In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4), the Commission seeks specific comment on how it might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

39. *Ex Parte Rules.*—This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.⁸⁵ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt,

⁸³ *See, e.g.*, SECA Public Notice Comments at 5.

⁸⁴ *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

⁸⁵ 47 CFR §§ 1.1200 *et seq.*

searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

40. *Filing Comments and Reply Comments.*—Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
 - Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

41. *People with Disabilities:* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

42. *Contact Person.*—For additional information on this proceeding, contact Joseph Schlingbaum, of the Telecommunications Access Policy Division, Wireline Competition Bureau by email at Joseph.Schlingbaum@fcc.gov.

V. ORDERING CLAUSES

43. Accordingly, IT IS ORDERED that, pursuant to the authority found in sections 1 through 4, 201-202, 254, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151 through 154, 201 through 202, 254, and 303(r), this Notice of Proposed Rulemaking IS ADOPTED.

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**Proposed Rules**

For the reason discussed in the preamble, the Federal Communications Commission proposes to amend 47 C.F.R. Part 54, Subpart F, as follows:

PART 54—UNIVERSAL SERVICE**Subpart F—Universal Service Support for Schools and Libraries**

1. Amend § 54.502 by revising paragraph (b)(1)-(7) as follows, deleting paragraph (c), and redesignating current paragraph (d) as new paragraph (c):

§ 54.502 Eligible Services.

* * * * *

(b) Category Two Budgets. Libraries, schools, or school districts with schools that receive funding for category two services pursuant to paragraphs (b)(1) through (7) of this section.

(1) Five-year budget. 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. Excluding category two support committed prior to funding year 2020, each school or library shall be eligible for the total available budget less the pre-discount amount of category two services commitments in the prior four funding years. The category two budget levels and the funding floor shall be adjusted for inflation annually in accordance with § 54.507(a)(2). Beginning in funding year 2020, the dollar amount shall be rounded to two decimal points. The increase shall be rounded to the nearest 0.01 by rounding 0.005 and above to the next higher 0.01 and otherwise rounding to the next lower 0.01.

(2) School budget. Each eligible school shall be eligible for support for category two services up to a pre-discount price of \$150 per student (adjusted for inflation since funding year 2015) over a five-year funding cycle. Applicants shall calculate the student count per district at the time 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 (adjusted for inflation since funding year 2015) over a five-year funding cycle. 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 (adjusted for inflation since funding year 2015) over a five-year funding cycle. Applicants 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 up to at least a pre-discount price of \$9,200 (adjusted for inflation since funding year 2015) over a five-year funding cycle.

(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. If an

applicant requests less than the maximum budgeted category two support available for a school or library, the applicant may request the remaining balance in a school's or library's category two budget in subsequent funding years of the five-year funding cycle. 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.

(c) Eligible service 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.

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this 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 this *Notice of Proposed Rulemaking (NPRM)*. Written comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM. The Commission will send a copy of the *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

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 254.⁴ 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.⁵ 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.⁶

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. The rules we propose in the *NPRM* seek to make permanent the category two budget approach for all E-Rate applicants beyond funding year 2019. We seek comment in the *NPRM* on streamlining and simplifying the administration of the E-Rate program for applicants, service providers, and the Universal Service Administrative Company. In addition, the rules that we propose or seek comment on in the *NPRM* would eliminate confusion over how to apply for category two services which provide connectivity within schools and libraries and include internal connections, basic maintenance of internal connections, and managed internal broadband services. We seek comment on our proposals as well as comments on other ways to lessen the administrative burden on participating schools and libraries within the framework of the category two budget approach.

B. Legal Basis

4. The proposed action is authorized pursuant to sections 1 through 4, 201-205, 254, 303(r), and 403 of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. §§ 151 through 154, 201 through 205, 254, 303(r), and 403.

¹ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601–612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ See generally 47 U.S.C. § 254.

⁵ *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*).

⁶ 47 CFR § 54.502.

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

5. 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 proposed rules, if adopted.⁷ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁸ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁹ 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).¹⁰

6. *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.¹¹ 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.¹² These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.¹³

7. 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.”¹⁴ 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).¹⁵

8. 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

⁷ 5 U.S.C. § 603(b)(3).

⁸ 5 U.S.C. § 601(6).

⁹ 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.”

¹⁰ Small Business Act, 15 U.S.C. § 632.

¹¹ See 5 U.S.C. § 601(3)-(6).

¹² See SBA, Office of Advocacy, Frequently Asked Questions, Question 1 – What is a small business?” (June 2016), https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf.

¹³ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 2- How many small businesses are there in the U.S.?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

¹⁴ 5 U.S.C. § 601(4).

¹⁵ 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 revenues of less than \$100,000. Of this number 326,897 entities filed tax returns with 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 some other version of the IRS Form 990 within 24 months of the August 2016 data release date. See <http://nccs.urban.org/sites/all/nccs-archive/html/tablewiz/tw.php> where 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” then selecting “Show Results”.

districts, with a population of less than fifty thousand.”¹⁶ U.S. Census Bureau data from the 2012 Census of Governments¹⁷ indicate that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.¹⁸ Of this number there were 37, 132 General purpose governments (county¹⁹, municipal and town or township²⁰) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts²¹ and special districts²²) 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 50,000.²³ Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”²⁴

1. Schools and Libraries

9. 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.”²⁵ A secondary

¹⁶ 5 U.S.C. § 601(5).

¹⁷ See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Program Description Census of Governments <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.COG#>

¹⁸ 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>. 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).

¹⁹ 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>. There were 2,114 county governments with populations less than 50,000.

²⁰ 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>. There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

²¹ 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>. There were 12,184 independent school districts with enrollment populations less than 50,000.

²² 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>. The U.S. Census Bureau data did not provide a population breakout for special district governments.

²³ 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>; U.S. Census Bureau, American Factfinder, 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>; 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>. 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 the majority of the 38,266 special district governments have populations of less than 50,000.

²⁴ *Id.*

²⁵ 47 CFR § 54.500.

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 12.²⁶ 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.”²⁷ 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.²⁸ Certain other statutory definitions apply as well.²⁹ The SBA has defined for-profit, elementary and secondary schools and libraries having \$6 million or less in annual receipts as small entities.³⁰ 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

10. 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.³¹ Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.³² U.S. Census Bureau data for 2012 indicate that 3,117 firms operated the entire year.³³ Of this total, 3,083 operated with fewer than 1,000 employees.³⁴ 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.³⁵ Of this total 1,307 an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.³⁶ Thus, using the SBA’s size standard the majority of incumbent LECs can be considered small entities.

11. 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

²⁶ *Id.*

²⁷ *Id.*

²⁸ 47 CFR § 54.501.

²⁹ 47 CFR § 54.500.

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

³¹ 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>

³² *Id.*

³³ 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.

³⁴ *Id.*

³⁵ See Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*).

³⁶ *Id.*

communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.”³⁷ 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.³⁸ 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.

12. *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.³⁹ The applicable size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.⁴⁰ U.S. Census Bureau data for 2012 indicate that 3,117 firms operated for the entire year.⁴¹ Of that number, 3,083 operated with fewer than 1,000 employees.⁴² According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.⁴³ Of this total, an estimated 317 have 1,500 or fewer employees.⁴⁴ Consequently, the Commission estimates that the majority of interexchange service providers are small entities.

13. *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 under the SBA rules is for Wired Telecommunications Carriers.⁴⁵ Under the SBA size standard a Wired Telecommunications Carrier is a small entity if it employs no more than 1,500 employees.⁴⁶ U.S. Census Bureau data for 2012 show that 3,117 firms operated during that year.⁴⁷ Of that number, 3,083 operated with fewer than 1,000 employees.⁴⁸ According to Commission data, 1,442 CAPs and competitive local

³⁷ 5 U.S.C. § 601(3).

³⁸ 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).

³⁹ 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>

⁴⁰ *Id.*

⁴¹ 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.

⁴² *Id.*

⁴³ *Trends in Telephone Service*, Table 5.3, page 5-5.

⁴⁴ *Id.*

⁴⁵ 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>.

⁴⁶ *Id.*

⁴⁷ 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.

⁴⁸ *Id.*

exchange carriers (competitive LECs) reported that they were engaged in the provision of competitive local exchange services.⁴⁹ 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.⁵⁰ Consequently, the Commission estimates that most providers of competitive exchange services are small businesses.

14. 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.⁵¹ The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.⁵² For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year.⁵³ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.⁵⁴ Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

15. 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).⁵⁵ Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁵⁶ For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year.⁵⁷ Of this total, 955 firms had fewer than 1,000 employees and 12 firms had 1,000 employees or more.⁵⁸ 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.⁵⁹ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.⁶⁰ Therefore, more than half of these entities can be considered small.

⁴⁹ *Trends in Telephone Service*, Table 5.3, page 5-5.

⁵⁰ *Id.*

⁵¹ 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>.

⁵² 13 CFR § 121.201, NAICS code 517210.

⁵³ 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.

⁵⁴ *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.”

⁵⁵ 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>.

⁵⁶ *Id.*

⁵⁷ 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.

⁵⁸ *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.”

⁵⁹ *Trends in Telephone Service* at Table 5.3, page 5-5.

⁶⁰ *Id.*

3. Internet Service Providers (ISPs)

16. 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.⁶¹ 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.⁶² The SBA size standard for this category classifies a business as small if it has 1,500 or fewer employees.⁶³ U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year.⁶⁴ Of this total, 3,083 operated with fewer than 1,000 employees.⁶⁵ Consequently, under this size standard the majority of firms in this industry can be considered small.

17. 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.⁶⁶ 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.⁶⁷ For this category, U.S. Census Bureau data for 2012 shows that there were 1,442 firms that operated for the entire year.⁶⁸ Of these firms, a total of 1,400 had gross annual receipts of less than \$25 million.⁶⁹ Consequently, under this size standard a majority of firms in this industry can be considered small.

4. Vendors of Internal Connections

18. 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 less⁷⁰ and “Other Communications Equipment Manufacturing” with a size standard of 750

⁶¹ 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>.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ 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.

⁶⁵ *Id.*

⁶⁶ 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>.

⁶⁷ 13 CFR § 121.201; NAICS Code 517919.

⁶⁸ 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.

⁶⁹ *Id.*

⁷⁰ 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”

(continued....)

employees or less.”⁷¹ 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.⁷² 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.⁷³ For Other Communications Equipment Manufacturing, U.S. Census Bureau data for 2012 shows that 383 establishments operated for the year.⁷⁴ 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.

19. *Telephone Apparatus Manufacturing.* This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment.⁷⁵ 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.⁷⁶ The SBA size standard for Telephone Apparatus Manufacturing is all such firms having 1,250 or fewer employees.⁷⁷ U.S. Census Bureau data for 2012 show that there were 266 establishments that operated for the entire year.⁷⁸ Of this total, 262 operated with fewer than 1,000 employees.⁷⁹ Thus, under this size standard, the majority of firms can be considered small.

20. *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.⁸⁰ Examples of products made by these

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<https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.334220#>.

⁷¹ 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/bkml/table/1.0/en/ECN/2012_US/31SG2//naics~334220.

⁷² 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/bkml/table/1.0/en/ECN/2012_US/31SG2//naics~334220.

⁷³ *Id.*

⁷⁴ 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/bkml/table/1.0/en/ECN/2012_US/31SG2//naics~334290.

⁷⁵ *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>.

⁷⁶ *Id.*

⁷⁷ 13 CFR § 121.201, NAICS code 334210.

⁷⁸ 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/bkml/table/1.0/en/ECN/2012_US/31SG2//naics~334210.

⁷⁹ *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.”

⁸⁰ 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”,

(continued....)

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.⁸¹ The SBA has established a small business size standard for this industry of 1,250 employees or less.⁸² U.S. Census Bureau data for 2012 show that 841 establishments operated in this industry in that year.⁸³ 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.⁸⁴ Based on this data, we conclude that a majority of manufacturers in this industry are small.

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

21. The proposals under consideration in the NPRM, if adopted, may result in new and/or modified reporting, recordkeeping and other compliance requirements for both small and large entities. At this time, the Commission cannot quantify the cost of compliance with the potential rule changes in the NPRM, but we anticipate that the result of any rule changes will produce requirements that are equal to or less than existing requirements, and we do not believe small entities will have to hire attorneys, engineers, consultants, or other professionals in order to comply. Moving from a per-school or per-library budget to a per-district or per-system budget for category two services, for example, would streamline the application process for category two services from start to finish, simplifying the calculation, the FCC Form 471 application, Program Integrity Assurance (PIA) reviews, and the FCC Form 500 cancellation process. Moreover, adopting this approach may also simplify some of the more complicated issues that applicants face when seeking E-Rate support. Additionally, to find other ways to reduce any administrative processes which could impact compliance costs, we have sought comment on how the application process for category two services can be made simpler and more efficient. Regarding our proposal to amend our rules to make permanent the category two budget approach beyond funding year 2019 in five-year funding cycle increments, we have sought comment on whether the benefits associated with making permanent the category two budget rules outweigh the cost of compliance associated with administering them.

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

22. 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.”⁸⁵

23. In the NPRM, we have taken steps to minimize the economic impact on small entities

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<https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.334220#>.

⁸¹ *Id.*

⁸² 13 CFR § 121.201, NAICS Code 334220.

⁸³ 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.

⁸⁴ *Id.*

⁸⁵ 5 U.S.C. § 603(c)(1) – (4).

with the rule changes that we have proposed. Under the current E-Rate program, the category two budget rules will begin to sunset in funding year 2020. Absent a rule change, applicants seeking category two services will have to navigate two sets of rules until funding year 2024. We have therefore proposed amending the rules to make permanent the category two budget approach for all applicants beyond funding year 2019, which, if adopted, will remove the burden and the cost to small entities of having to navigate and comply with two different sets of rules. This proposal will also lessen the reporting requirements on small entities thereby lessening their administrative costs for report preparation. To further reduce the reporting and administrative requirements for small entities, we seek comment on moving to a district-wide or system-wide budget, rather than a school entity or library entity budget. We anticipate that permitting school districts and library systems to calculate a district-wide budget, rather than maintaining records and allocating costs between budgets for each school and library, may simplify the current application process by reducing the number of applications filed, reducing the paperwork burden for reporting student counts, and reducing the complexity of the budgets overall. The Commission expects to more fully consider ways to minimize the economic impact and explore alternatives for small entities following the review of comments filed in response to the *NPRM*.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

24. None.

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY,
APPROVING IN PART AND DISSENTING IN PART**

Re: *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking

This rulemaking seeks to establish a more permanent and predictable category two budget approach for E-Rate applicants, and I approve of it to the extent that it would not disrupt the status quo. Nonetheless, I strongly objected to certain components of the five-year budgets adopted in 2014, as did many others, and I cannot endorse maintaining the elements that I have always considered problematic, including the flatly absurd idea devised by the previous Chairman to allocate libraries' E-Rate support on a square foot basis. We certainly could have pursued a rulemaking exploring the overall budget approach without having to endorse objectionable policies.

That being said, my misgivings over our category two approach pale in comparison to my concerns over our "special construction" policy. As I warned back in 2014, insufficient guardrails had the potential to create major USF-supported overbuilding problems, and this consequence has clearly been borne out. With recent examples of E-Rate-funded special construction builds directly competing against USF-funded fiber networks, we now know that flawed E-Rate rules are directly threatening rural broadband investment and robbing USF ratepayers of their hard-earned investments. Damage has already been done, and it is high time that we fix the gaping hole in our rules that has allowed for such inefficiency and waste. While I partially approve of our action today, this item missed an opportunity to take corrective steps. I am hopeful our next action with respect to E-Rate will be laser-focused on eradicating USF-funded overbuilding.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking

The E-Rate program is a cherished part of our universal service system. That's for good reason. Thanks to E-Rate, schools and libraries in communities in every state across the country are connected to the internet. In fact, E-Rate is the nation's largest educational technology program.

But just a few years ago, E-Rate was stuck in the dial-up era. So, at my urging, this agency embarked on a process to bring E-Rate up to speed for the digital age. Call it E-Rate 2.0. This new iteration of the program 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. Rural schools and libraries have been among the most prominent beneficiaries. These results are by and large due to changes that put a new premium on fostering Wi-Fi access through the "category two" funding that is the subject of this rulemaking.

In this rulemaking, the agency seeks to sustain and extend the impact of these Wi-Fi policies for future generations of students and library patrons. Specifically, we seek comment on how to continue the category two funding approach adopted in earlier reforms. We also seek comment on changes to improve program flexibility and administration. This includes asking about how schools and libraries may budget for Wi-Fi at the school district or library system level instead of on a site-by-site basis. This is a worthy rulemaking and it has my support. I look forward to the record that develops and the steps this agency takes to ensure that E-Rate 2.0 continues to thrive.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking

The E-Rate Universal Service program is a critical source of support for schools and libraries. It's on the front lines of the fight against internet inequality – enabling schools and libraries to provide high-speed broadband connections to students and communities. These connections bring a world of educational opportunities into classrooms so that students in rural, urban, Tribal and other areas of the U.S. have the same access and opportunity to succeed as students anywhere else.

Five years ago, the Commission began an experiment that simplified the process for schools and libraries to receive E-Rate support for “internal connections,” which, in many cases, means Wi-Fi networks. Wi-Fi is crucial to bringing a school's or library's broadband connection right to a student or library user's individual tablet, smartphone, laptop computer, or connected device.

As a result, many more schools and libraries have received support over the past five years for Wi-Fi network projects than was possible under the prior system. In fact, under the prior system, our funding methodology prioritized other types of connections – meaning that in some years we were able to fund few or no applications that sought to deploy Wi-Fi networks. What's more, the lack of certainty of funding under the prior methodology discouraged schools and libraries from applying for funding for Wi-Fi networks.

Today's NPRM takes steps toward solidifying the improvements in the E-Rate program based on what we learned during the experiment. I support these steps – the data gathered over the past five years is compelling – and I note that during this time no applications for Wi-Fi network support were denied due to insufficient funding. Many more schools and libraries have requested and received Wi-Fi funding, and the overall funding for internal connections has dramatically increased. These are all good signs that the experiment worked. I look forward to reviewing the record that we receive in response to this NPRM and taking additional steps toward making these improvements to the E-Rate program permanent.

Many thanks to the staff of the Wireline Competition Bureau for their work and for preparing this NPRM. It has my support.