



**CALIFORNIA DEPARTMENT
OF EDUCATION**

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August 7, 2019

Commission's Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Federal Communications Commission:

Subject: Notice of Proposed Rulemaking: Modernizing the E-Rate Program for Schools and Libraries

**COMMENTS OF THE CALIFORNIA DEPARTMENT OF EDUCATION REGARDING
PROPOSED UNIVERSAL SERVICE FUND CAT2 CHANGES**

The California Department of Education (CDE) provides support and leadership to over 6.2 million students enrolled in over 1,100 school districts and 11,000 public schools, 28 percent of which are small schools or schools in rural areas. The CDE supports the Federal Communications Commission's (FCC) proposal to make permanent and improve the "category two"(CAT2) budget approach of the E-Rate program.

The CDE concurs with the Wireline Competition Bureau findings¹ and submits these comments on the rulemaking proposals. The CDE's comments are intended to shape rules that will most efficiently provide low-income students with the connectivity needed to be properly educated and prepared for the future. The CDE's experience shows that the bottlenecks that limit student connectivity in schools are generally based on insufficient CAT2 or internal connections (LAN/Wi-Fi), rather than insufficient category one (CAT1) or external broadband access. Many Districts report that the best user experience for students occurred when districts have fully utilized both CAT2 funds along and local funds to deploy a well-planned local area network (LAN) with extensive Wi-Fi coverage as opposed to minimal Wi-Fi coverage. Some Districts even report that they didn't need as much broadband capacity once an effective LAN/Wi-Fi plan was fully deployed. Thus, the CDE supports internal connectivity planning that will remove uncertainty and make better use of CAT2 funding. The rules should also reflect the fact

¹ *Modernizing the E-Rate Program for schools and Libraries*, Report, WC Docket No. 13-184, DA 19-71 (WCB 2019) (*Category Two budget Report*), para. 42.

that CAT2 investments, such as routers, physical connectors and other Wi-Fi equipment are point-in-time purchases that have maintenance, wear and technological obsolescence demands that are much different than the recurring monthly costs needed to obtain fiber-optic, microwave and other broadband connections CAT1 funds. The different timing and nature of these costs justifies a different approach to funding. Finally, the rules should recognize that most CAT2 investment costs are based on geographical considerations such as linear feet, square footage, building materials and other physical impediments, rather than user counts. For example, the exact same Wi-Fi router may be needed regardless of whether there are 5 students in a classroom or 25 students in that classroom. Furthermore, the LAN/WiFi system needed to serve a particular building will not vary significantly, despite wide variance and fluctuation in the student population served by the building. However, some per student costs also exist or per student costs may become more critical with new technology. Therefore, E-rate funding multipliers and limits must have flexibility to help all schools, including smaller, rural schools, address their remaining broadband shortfalls as well as planned internal connection maintenance and upgrades.

PROPOSAL TO AMMEND RULES TO MAKE A PERMANENT EXTENSION OF CATEGORY TWO BUDGET APPROACH

The uncertain future of CAT2 in the past year to 18 months was the greatest challenge associated with districts developing efficient, multi-year CAT2 LAN and Wi-Fi plans, with many districts opting instead to taking a sub-optimal “use it or lose it” approach. Therefore, it is critical to make the CAT2 budget approach permanent and certain over each five-year cycle, to allow multi-year planning. It is also imperative that the CAT2 budget approach allows funds to be used to refresh and upgrade the LAN and Wi-Fi system and components. Permanent flexibility in the allowance of replacements, upgrades and new connectivity technology will make the budgeting going forward proceed more smoothly with less administrative burden.

POTENTIAL IMPROVEMENTS TO THE CATEGORY TWO BUDGET APPROACH

The CDE is well-aware of the challenges to the administration of the CAT2 system and the application process. The process has improved with increased stability at USAC and clear communication with reviewers, however much room for improvement remains.

Eligible Services. The CDE supports the proposal by the FCC to support managed internal broadband services, caching and basic maintenance. Furthermore, the CDE encourages the FCC to adopt changes that would allow even greater flexibility in order to allow schools to take advantage of new technology as it evolves without requiring additional rulemakings. Additionally, the CDE recognizes the role that planning has in well deployed networks. For this reason, the CDE recommends that planning costs be added as eligible services the year that LAN/Wi-Fi upgrades are deployed. Finally,

newly developed connectivity products and services should be eligible, as long as they actually support internal connections to students.

Budget Levels. The CDE believes that the current budget levels of CAT2 create an insufficient incentive to offset the higher costs for highly desirable and robust LAN/Wi-Fi solutions. Thus, despite the fact that schools are using only a portion of their allocated five-year budget, the CDE believes that there should be an increase of the multiplier, particularly if a LAN/Wi-Fi solution is purchased in accordance with a multi-year plan. The CDE believes the utilization rates will increase if the multiplier is increased.

The CDE also believes that neither per student nor per square foot multipliers work in every case and each can cause hardships on certain schools. Therefore, the CDE recommends that the Commission allow schools to choose between a per square foot and a per student multiplier, whichever would provide greater funding, in order to ensure each school is able to obtain the funding that it requires.

The CDE agrees that the budget floor is too low for small schools and supports an increase in the budget floor to \$30,000, in order to get a higher rate of school participation in the CAT2 program.

The CDE supports a higher budget multiplier for rural schools, due to the higher CAT2 cost due to their geographic location. Rural areas tend to experience higher CAT2 costs, but often have lower numbers of low-income students, which adversely impacts their discount rate² and is a barrier for districts to fully utilize CAT2 funding. In addition, the CDE believes that a higher budget multiplier should be used for older, brick, mortar and cement buildings, because the implementation costs are much higher. The CDE reviewed CAT2 applications for the 2015-19 school years for 8608 schools. Data showed that 527 schools had not utilized the CAT2 opportunity and 32 schools were at the baseline of \$9,500.

District-wide Budget Calculations. The CDE does not support a district-wide budget calculation at this time. Any such change must be preceded by processes and procedures that will ensure that students that need it most and have the highest economic challenges are provided the LAN/Wi-Fi they need for their digital learning. While a district wide approach might be simpler administratively, the underlying purpose of the program may be lost in the simplification. The disadvantages of an entity approach, such as differences in buildings, should be directly addressed by an increased multiplier as discussed above. Also, some improvements can be made without changing per entity budgets. For example, the application could be made district wide with separate budgets for each school, in order to ensure that funds are allocated to schools based on enrollment of low-income students. The remaining benefits do not justify any inequitable reallocation of funding that will inevitably occur in some districts.

² https://www.usac.org/_res/documents/sl/pdf/samples/Discount-Matrix.pdf

Budget Calculations - The CDE supports and applauds the efforts of the FCC to simplify the budget calculations, but reiterates that certainty is more important than simplicity or flexibility. The uncertainty of the program future led to some districts to either not apply or maybe apply for all CAT2 at once. Moreover, each LAN/Wi-Fi system is designed for a range of student populations. Unlike many other school costs, which vary incrementally with each additional student, the costs of LAN/Wi-Fi systems do not increase or decrease incrementally with each student, but rather are based on providing full coverage throughout the school building. Therefore, an annual adjustments to funding based on enrollment are not based on the reality of system costs in our schools. With respect to when/how often students counts should be completed, the CDE generally supports the recommendation. In particular, the CDE recommends that certainty be provided to applicants by basing funding on the first year of a five-year cycle, with increases or decreases based on good faith projections. The rules could require that the projections be based on historical trends and/or extraordinary factual findings unique to that district. Student counts would still be necessary to calculate the discount percentage, but may not be needed for establishing the budget if budgeting is done on a per square foot basis. The projections will allow a new school in a rapidly developing community to project and receive adequate funding for a system that is appropriately sized for its anticipated growth. Moreover, any difference between the projections and actual enrollment can be addressed by funding adjustments (and restrictions in projections for) the subsequent five-year funding cycle. This gives the district funding certainty during a five-year planning window, with minimal administrative burden, but also provides for remediation of any inequity that was created due to inaccurate enrollment projections. Also, an obligation (with non-compliance consequences) could be created to self-report and adjust funding for any unprojected, significant downward deviation in student enrollment (i.e., less than 90 percent of the projection). There should also be rules about how to address natural disasters such as fires, hurricanes and tornados that can displace student populations for a year or more, but where the students are expected to eventually return.

Application and Administration - The CDE believes that the administrative burdens largely due to high rates of turnover by reviewers and their managers, leading to inefficiency and confusion. For example, the CDE receives many calls from reviewers seeking confirmation of school status, because they are unaware that the information requested is readily available from the California School Directory or the Free and Reduced-priced Meals list. The CDE recommends that: (i) an administrative manual with processes be developed for reviewers to follow; (ii) that additional, specialized training be provided to the reviewers, as many issues seem to be related to misunderstanding of the CAT2 program and each specific states situation; and (iii) that incentives be developed to retain reviewers and their managers.

TRANSITION TO PERMANENT EXTENSION OF CATEGORY TWO BUDGET APPROACH

The CDE supports the fixed five-year cycle because it provides greater certainty and reflects the economic reality of purchasing a LAN/Wi-Fi system in a school. To avoid cash flow issues and wasteful spending, the five-year periods should be staggered, as spending is often highest in the first year. The CDE would also support allowing some rollover at the end of the five-year cycle, if the district used it to implement a LAN/Wi-Fi system plan during the subsequent period, as opposed to ad hoc spending.

A permanent implementation of CAT2 budget approach will be a great assistance to schools. The CDE recommends that the FCC consider industry recommended refresh cycles for LAN/Wi-Fi equipment. Additionally, current costs of LAN/Wi-Fi equipment should be considered when setting the per-student figure as well as the baseline for small rural schools. For example, a study should be completed periodically to estimate the actual cost of a robust LAN/Wi-Fi project in both a small rural and a larger school and in historic masonry buildings. Then those figures could be used as a reference for setting budgets and to help identify new eligible services and technology that should be considered in appropriate circumstances. The Commission should consider other technical support that can be offered to schools and libraries in support of CAT2 funding.

CONCLUSION

The CDE appreciates the significant efforts on behalf of the FCC to modernize E-Rate and support schools. E-Rate is an essential program that, even with its bumps/challenges, has connected students to the world beyond the four walls of their classroom. The CDE looks forward to continuing to work with the FCC and other states to connect all students.

Sincerely,



Stephanie Gregson, Ed.D., Deputy Superintendent
Performance, Planning, and Technology Branch

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