Before the Federal Communications Commission  
Washington DC 20554

In the Matter of  

Wireline Competition Bureau Seeks Comment on  

Category Two Budgets  

Reply Comments of the Education & Libraries Networks Coalition (EdLiNC)

I. INTRODUCTION

The Education and Library Networks Coalition (EdLiNC)\(^1\), a group comprised of the leading public and private education associations and the American Library Association that was formed in 1995 to advocate for the interests of schools and libraries in the Telecommunications Act of 1996, is pleased to provide these reply comments to the Wireline Bureau’s Notice Seeking Comment on Category Two Budgets\(^2\). Since the enactment of the E-Rate as part of the Act, EdLiNC has pursued a mission of promoting and improving the E-Rate to fulfill its mission of accelerating the deployment of advanced telecommunications and information services in schools and libraries and has filed in every Commission rulemaking related to the program. EdLiNC also filed comments in the Commission’s recent Lifeline Modernization proceeding, focusing our proposals on elements of this rulemaking related to bridging the homework gap.

As is reflected in our comments below, EdLiNC believes: 1) The comment record reflects ample support for maintaining Category Two budgets during this initial five-year cycle as schools and libraries are relying on the availability of these formula funds, have used or plan to use their formula allotments, and have no other resources to meet their Wi-Fi and internal connections needs; 2) This request for data to analyze the “sufficiency of budgets for category two services” is premature and the 47-day comment cycle is wholly inadequate to produce useful and reliable data on which to base any decisions regarding Category Two; and 3) The Bureau should initiate a review of the sufficiency of budgets for category two services only upon the completion of the current funding cycle and using an independent data collection organization.

---

\(^1\) See Appendix A for complete list of EdLiNC members.  
II. EdLiNC ASSERTS THAT THE COMMENTS FILED IN THE RECORD CLEARLY SHOW WIDESPREAD APPLICANT SUPPORT FOR MAINTAINING CATEGORY TWO BUDGETS DURING THIS INITIAL FIVE-YEAR FUNDING CYCLE AS SCHOOLS AND LIBRARIES ARE RELYING ON THE AVAILABILITY OF THEIR FORMULA FUNDS, HAVE USED OR PLAN TO USE ALL OF THEIR FORMULA ALLOTMENTS, AND HAVE NO OTHER LOCAL, STATE OR FEDERAL RESOURCES TO MEET THEIR WI-FI AND INTERNAL CONNECTIONS NEEDS.

In the few weeks since the Commission issued this Public Notice, more than 400 individuals and organizations have filed comments urging the preservation of Category Two in its current form and providing details of their reliance on their Category Two allotments. Hundreds of librarians, school district superintendents and line educators have written everything from brief, threesentence comments to long, detailed comments expressing the importance of Category Two to their institutions, patrons and students. This is a testament to the value of E-Rate.

A. APPLICANTS BENEFIT AND RELY ON CATEGORY TWO SUPPORT

After years of most applicants having to do without Category Two E-Rate support because of the lack of funding available, the 2014 E-Rate modernization order, which raised the program’s annual cap by $1.5 billion and assured that all would receive funding for Category Two services, dramatically altered that picture. According to comments filed by CoSN, EducationSuperhighway and Funds for Learning, in the three years before the Commission adopted the E-Rate Modernization Order, “only 11% of schools received funding for internal connections...[i]n the three years following E-rate modernization, 78% of schools received E-rate funding for internal connections.”³ As the executive director of an education service agency in Salem, Oregon described his organization’s post-E-rate modernization experience: “The FCC has taken a funding source that had become almost unattainable by most districts, and turned it into one of the most reliable and beneficial aspects of the program.”⁴

The lack of Category Two funding prior to 2014 was by no means confined to schools; libraries saw little to no money from Category Two, as well. The Arkansas Public Library in Little Rock reported that: “Arkansas libraries had not received funding for Priority 2 services since the early years of the program. Unless libraries qualified for a 90% discount rate, it was assumed that there would be no funding left after all Priority I requests were funded. Most Arkansas public libraries qualify for an 80% discount. Since E-Rate Modernization, over $265,000 has been committed for Category 2 requests for Arkansas public libraries. Fifteen library systems have used their money to upgrade their internal connections to support robust patron Wi-Fi.”⁵ The Arkansas State Library’s experience is not unusual. The State Library of Kansas tells a similar story in its comments: “To the best of our determination, prior to [2014], fewer than 3% of Kansas libraries applied for priority 2 services. At this writing, 14%, or 50 legally established public libraries have Category Service 2 requests on file. The $55,000 committed to date, while

³ Comments of CoSN, EducationSuperhighway and Funds for Learning (October 23, 2017), pp. 2-3.
seemingly a small amount, represents a significant step forward in the ability of libraries to plan, implement, and carry out the improvements E-rate makes possible.”

Comments filed by numerous schools and libraries further underscore the importance of these funds:

- **Matthew John Kuhns of Lakewood, Ohio:** “The wifi at my local public library in Lakewood is an invaluable service, for me and for the community. When the remains of Hurricane Sandy knocked out phone or power lines in much of Lakewood, our library provided a lifeline for people including me, for days, while utilities worked to restore services to homes. Every time I visit our library, I see people making use of the wifi service. Young and old, alike. Lakewood is fortunate to have this service. With the commitment of the FCC to ensure a library budget of $2.30 ($5.00 for a selected category of larger urban and suburban libraries) per square foot, other libraries can finally upgrade outdated equipment or plan for new construction. They can have confidence that desperately needed support will be there. I encourage the FCC to maintain secure funding through the full five-year budget period as adopted during the 2014 Modernization.”

- **Joe Griego, Chief Technology Officer, Mono County Office of Education, Mammoth Lakes, CA:** “We are unique because our office manages both public schools and public libraries. Because of our rural county, several of our school libraries ARE the public libraries as well, so we serve both students and the general public. The capacity we have been able to afford using erate allows all of our schools to provide electronic curriculum, Advanced Placement curriculum, to provide professional development (we were able to host a CUE conference in our county because of the bandwidth available), and also to provide remote learning opportunities for our rural kids that would never be cost effective otherwise.”

- **Larry Jones, Greeneville, TN:** “The Greeneville City Schools is almost completely wireless. Almost all of our clients are wireless. Our district is also a one-to-one district. It is VITAL that this funding remain in place so that we may continue to educate our children.”

- **Joshua Miller, Technology Director, Elmira City Schools, NY:** “The Elmira City School District is a public school district located in Chemung County in the Southern Tier of New York State providing a free and public education for approximately 6,500 students. We are considered a small city school district and all of our schools are Title I schools. We have a population mix of urban, suburban, and rural students. The E-Rate program has been critical in providing access for students from poor urban neighborhoods where Internet is not affordable to our rural families who do not have the option of an Internet

---

carrier. This access has unlocked worlds for students that would not otherwise have the opportunity. The Elmira City School District has leveraged E-Rate Category 2 funds to build the necessary back-end infrastructure to support classroom technology by improving network stability for daily classroom instructional use and computer based testing. New wireless equipment installed this year has made a one to one device program feasible and has allowed our students access to technology to achieve college and career readiness in the 21st century."\(^{10}\)

- **Chandra McPherson, Director, Heritage County Library, New Kent, VA:** “Our regional system consists of two counties that are rural and truly illustrate the challenges of the “last mile.” Our patrons depend on the library to get internet access, period. Because access at home is lacking, they often come to rely on devices other than the traditional desktop computer for online tasks. This is why WiFi is especially important to offer our community. WiFi is a technology equalizer. Regardless of whether the patron needs to update apps on their phone, use a Windows OS laptop for work or is downloading from Zinio to their iPad, the WiFi works. We can only offer patron machines formatted one way for their use, but they are unlimited in how they can operate with our WiFi and their own devices. Moreover, they can use it when the library is closed by parking near a branch. Our patrons can truly say their library is a 24-7 resource. My system includes a county that was the very last in the state to have a public library. We are underfunded and struggling to stay visible and relevant to the decision-makers that can help us grow. WiFi is one service that is used by nearly everyone who enters our branches. It is not just a public service; it draws people in to whom we can promote our literacy mission. It helps keep us relevant and visible. Without Category 2 funding, we could not deliver our WiFi connectivity to our community. Please maintain secure funding through the full five year budget period as adopted during the 2014 Modernization.”\(^{11}\)

- **David Smith, Elmhurst CUSD 205, Elmhurst, IL:** “E-rate modernization has helped Elmhurst CUSD 205 students in a number of ways. With the help of C2 E-rate funds, students connect to the Internet via WiFi access points in all of our 13 schools; we upgraded our Internet router to allow increased bandwidth; and we upgraded network closet battery backup systems to ensure continuity of access during power outages. I would strongly urge the FCC to protect the funding provided for school connections, including maintaining the five year planning and funding window.\(^{12}\)

- **Lucinda Nord, Executive Director, Indiana Library Federation:** “Indiana residents rely on the internet supported by Category 2 WI-FI and internal connections funding, as many libraries offer access to this Wi-Fi around the clock. In this last round of funding, Indiana residents in the service areas of 74 branches of 20 public libraries benefited from over $811,000 of Category 2 funding. Access to high-speed internet is critical for

---


student success, for skilling up in employment through online training or distance education, for finding and applying for jobs, for completing government transactions and for participating in the modern economy.”

B. APPLICANTS HAVE USED OR EXPECT TO USE ALL OF THEIR CATEGORY TWO FORMULA ALLOTMENTS

The comments filed to date also show clearly that, by and large, schools and libraries have already or expect to use all of their Category Two formula allotments during this first five-year funding cycle. On a macro scale, schools and libraries have already requested $3.39 billion in Category Two support during the first three years of this five-year funding cycle, according to data provided by the CoSN, EducationSuperhighway and Funds for Learning filing. Further, these groups “expect that the vast majority of the $2.3 billion in remaining Category Two funds will be used in the coming two years.”

This macro data is buttressed by comments filed in this record by states, school districts and libraries. The State of Pennsylvania’s Department of Education, for example, indicates in its comments that “82% of our public school districts have utilized some of their Category 2 funding in the first three funding years, with 23% of public school districts having spent every dollar of their five-year budget.” Comments filed by education service agencies that support multiple districts also provide useful data:

- **Chris Moddelmog. Executive Director, Smoky Hill Education Service Center, Hays, KS:**
  “We are an educational service center comprised of Kansas school districts and private schools. As a part of our mission to support Kansas schools, we provide consulting and assistance for the E-Rate program. Currently, we consult with 52 Unified School Districts (151 school buildings) and 18 private schools. At this time, districts and private schools that are a part of the Smoky Hill Education Center’s E-Rate program have a total pre-discount budget of $4,990,286.39. Of this amount, Category 2 funds of $2,250,764.48 have been requested throughout the 2015/2016, 2016/2017, and 2017/2018 funding years. Of the 169 buildings that have available Category 2 funds, only 9 buildings have not applied for Category 2 while 15 buildings have no C2 funds remaining. The greater percentage of these districts and private schools are located in rural areas and often they have difficulty providing the necessary bandwidth for student/staff use.”

- **Dave Novotney, Superintendent, Willamette Education Service District, Salem, OR:**
  “Willamette Valley e-Rate applicants have obtained $5,867,560.78 (and counting) in Category 2 funding since its inception in 2015. The funding has been crucial in allowing our schools to create a robust and equitable learning environment. Teachers have...”

14 Comments of CoSN, EducationSuperhighway and Funds for Learning (October 23, 2017), p. 7.
15 Ibid.
16 Comments of Dr. David W. Volkman (October 23, 2017), p. 3.
access to digital learning tools and are empowered to create engaging and interactive curricula that can be delivered almost anywhere in our region...The Category 2 budget formula has proven to be one of the most successful and well implemented changes to emerge from the e-Rate Modernization Order of 2014. We expect to utilize all available funding in this first 5 year cycle. However, the need for updated hardware and wiring will not end in 2020 and neither should the Category 2 budget formula. Many schools in our region and beyond still have need of updated equipment, and changes to Internet security and the bandwidth availability being facilitated by Special Construction funding will no doubt require our network infrastructure to be more closely monitored and refreshed in order to keep-up. We urge the Commission to continue the Category 2 funding formula through 2025 and beyond.”

- **Amy Sharp, IT & PD Coordinator, Jefferson County Schools, TN:** As the Instructional Technology and Professional Development Center Coordinator for Jefferson County Schools, a mid-sized rural public school district in East Tennessee and a resident of Knoxville, Tennessee, I implore you to reject any suggestions to transfer, redistribute, or in any way, minimalize the E-Rate Category 2 funds for schools. These funds are essential to the success of our students. The Jefferson County Schools District has already used some or all of its E-Rate Category 2 allotment for the following items: Additional CAT 6 cabling, updated POE switches, updating older model access points with the newest 802.11ac wireless access points. The connectivity provided by these Category 2 items has improved our school or district’s educational experience in the following ways: ability to begin a 1:1 classroom solution using laptops which connect through our enterprise wireless network. Our School District expanded from 35 mobile carts two years ago, to our current count of 131 mobile carts with 30 computers in each cart. This has allowed students in classrooms to have access to technology without the burden of adding additional buildings, as like most other School Districts, we utilize every square foot of floor space. In addition, we have begun moving to an online curriculum and the importance of connecting to the “cloud” has never been greater. As more and more SaaS (Software as a Solution) solutions are implemented in our District, we are relying heavily on our wireless connections. The Jefferson County Schools District plans to use all of its E-Rate Category 2 allotment by 2020 for the following items: Additional CAT 6 cabling, updated POE switches, updating older model access points with the newest 802.11ac wireless access points. We anticipate that the connectivity provided by these Category 2 items will improve our school or district’s educational experience in the following way: Continued increase in the quantity of access points and quality of wireless access is essential to our 20/20 Vision for Blended and Personalized Learning.”

In addition to these comments, information provided to EdLiNC by the Archdiocese of Los Angeles indicates that private schools are also making great use of Category 2 formula dollars.

---

According to the Archdiocese: “To date, the Archdiocese of Los Angeles has completed the installation of new network infrastructure at 145 school locations and have E-Rate grant applications for another 28 schools pending. We intend to apply for a 2018 E-Rate Consortium Infrastructure Project for our remaining schools, possibly 35-40 schools, that need infrastructure work.” The 173 Los Angeles Catholic schools participating thus far have applied for or already received up to $3.184 million in Category Two dollars.

C. APPLICANTS HAVE NO OTHER RESOURCES AVAILABLE TO THEM TO REPLACE CATEGORY TWO

Finally, many commenters stated that they have no other funding sources available to them that could replace Category Two E-Rate dollars. Numerous studies and reports bear them out. One year ago, the Center on Budget and Policy Priorities issued a report that concluded:

“Public investment in K-12 schools — crucial for communities to thrive and the U.S. economy to offer broad opportunity — has declined dramatically in a number of states over the last decade. Worse, most of the deepest-cutting states have also cut income tax rates, weakening their main revenue source for supporting schools. At least 23 states will provide less “general” or “formula” funding — the primary form of state support for elementary and secondary schools — in the current school year (2017) than when the Great Recession took hold in 2008, our survey of state budget documents finds. Eight states have cut general funding per student by about 10 percent or more over this period. Five of those eight — Arizona, Kansas, North Carolina, Oklahoma, and Wisconsin — enacted income tax rate cuts costing tens or hundreds of millions of dollars each year rather than restore education funding. Most states raised general funding per student this year, but 19 states imposed new cuts, even as the national economy continues to improve. Some of these states, including Oklahoma, Kansas, and North Carolina, already were among the deepest-cutting states since the recession hit.”

The report’s findings on the consequences of low state education funding for school technology infrastructure are similarly alarming: “States and localities use capital spending to build new schools, renovate and expand facilities, and equip schools with more modern technologies. In most states capital spending fell sharply after the recession hit... Elementary and high schools nationally cut capital spending by $28 billion or 37 percent between fiscal years 2008 and 2014 (the latest year available), after adjusting for inflation.”

Echoes of these fiscally dire times for schools and libraries can be heard in many comments:


21 Ibid, p. 17.
• **Marcy Lamb, West Whitehall, MT:** “We are a small school in Montana. Our free and reduced numbers are about 65%. We have benefitted greatly from the E-Rate Category 2 funding in the last 3 years. We are K-12 and I am able to service my campus with a single backbone and infrastructure. I have used my funding to replace/upgrade my wireless internet distribution, upgrade/update my firewall and backbone Switches. I was also able to add a Caching Server that allows us to optimize the bandwidth available to my school system. As in other budget areas, technology budgets are very thin and we are trying to serve our population as effectively as possible. This funding is instrumental in being able to keep the essential infrastructure current and functional. Please continue to fund the E-Rate Category 2 allocation for schools and rural areas.”

• **Dr. Frank Hewins, Superintendent, Franklin Pierce Schools, Tacoma, WA:** “The Franklin Pierce School District is a suburban/urban community in unincorporated Pierce County, just south of the City of Tacoma, Washington. We are a high-poverty (75% FRL) majority-minority public school district of 8,000 PK-12 students with over 60 home languages spoken. Without any major industry, large businesses, or local government to assist us with our increasing technological needs for our students, we must rely heavily on the federal E-Rate dollars to provide our students with the necessary infrastructure allowing them to be competitive for the future world they will face. Without that help, the playing field becomes increasingly uneven for our children. The E-Rate program is a program succeeding in its mission. As the FCC moves forward with this public notice, it is prudent to remain focused on the fact that E-Rate is a program that works.”

• **Chris Moddelmog, Executive Director, Smoky Hill Education Service Center, Hays, KS:** “The assistance from the E-Rate program is vital as state and district budgets decline. We urge the FCC to continue the assistance to schools across the United States as demands for internet accessibility become more important to the education of our next generations.”

• **Jerome Cummins, CIO, Casey County Schools, Liberty, KY:** Casey County School District is a rural school district of 2263 students of which 2149 are NSLP eligible –that’s nearly 95% (94.96%). **Casey County does not have a large tax base or abundant industry financial support, hence we rely heavily on federal and state flow-through dollars and grants to provide quality education for students living in our county.** Despite our socio-economic situation, Casey County Schools is proud to be a top-10 performing district among Kentucky’s 173 school districts. E-rate funding is critical to student success. Our at-risk students are afforded online credit recovery, we have STEM classes at every level that rely heavily on technology, and we use a mixture of lab based computers and mobile devices on a robust wireless network to provide the connectivity for a collaborative rich environment, the same type environment our students will have

---

23 Comments of Dr. Frank Hewins (October 18, 2017), p. 1.
24 Comments of Chris Moddelmog, at p. 1.
to compete in the workplace. All of our efforts rely on technology infrastructure and bandwidth to provide necessary services. Fees for our annual leased fiber service that provide our students a quality educational experience is $47,400. Without E-rate that money would necessarily reduce the student services we could afford to provide.25

III. EdLiNC ASSERTS THAT THE BUREAU’S REQUEST FOR DATA TO ANALYZE THE “SUFFICIENCY OF BUDGETS FOR CATEGORY TWO SERVICES” IS PREMATURE AND THE SHORT COMMENT CYCLE WHOLLY INADEQUATE TO PROVIDE USEFUL AND RELIABLE DATE ON WHICH TO BASE ANY DECISIONS REGARDING CATEGORY TWO.

EdLiNC is surprised that the Bureau has elected to seek from applicants Category Two usage and sufficiency data at this time and in this needlessly rushed and truncated fashion. To be sure, the Commission’s Second E-rate Modernization Order specifically called for the Bureau to “provide a report on [Category Two applicant budgets’] sufficiency to the Commission” in order “to ensure that the applicant budget remains effective at accomplishing our goal of ensuring affordable access to high-speed broadband sufficient to support digital learning.”26 However, this Order did not countenance the Bureau submitting such a report until “before the opening of the filing window for funding year 2019,”27 which is at least 15 months from now. It seems clear to us that the Commission did not choose this date arbitrarily. Indeed, we assert that the Commission chose it to allow the Bureau to have the benefit of data and information from four funding cycles before delivering its report to the Commission. Therefore, we submit that this current information request from the Bureau is premature and is unlikely to yield the amount and level of data needed to accurately reflect the sufficiency of Category Two budgets.

Further, EdLiNC does not understand the need to gather this data in only 47 days. Schools and libraries have a great deal on their plates during the school year and responding to a data request such as that made by the Bureau takes time and effort. This is particularly true for schools and libraries that serve large populations and utilize many buildings. While the current comment period has led to applicants filing over 400 substantive comments, many of which are replete with useful and usable data, this number of comments falls far, far short of the actual number of schools and libraries that make use of the E-Rate and Category Two. Moreover, the comments filed represent a very unscientific sampling of E-Rate applicants, with only those aware of this request and with adequate time to respond to it constituting the entire data set. As a result, we are concerned that whatever data is gleaned from this exercise will not adequately and accurately represent the true state of Category Two usage and need.

27 Ibid.
IV. EdLiNC PROPOSES THAT THE BUREAU UNDERTAKE AN INDEPENDENT SURVEY TO GAIN A TRUE PICTURE OF THE SUFFICIENCY OF CATEGORY TWO BUDGETS.

EdLiNC believes that in order for the Commission to receive an accurate picture of how and how much applicants use of their Category Two allotments and whether those allotments are sufficient to meet their actual needs, it should undertake an independent, scientifically-valid survey of all applicants. Precedent exists for such a survey: in the second year of the program, the Urban Institute and the Department of Education conducted a survey of E-Rate applicants that reported on, among other things, who received E-Rate dollars, who applies for E-Rate dollars, what does E-Rate fund and what level of connectivity do schools and libraries enjoy currently. While we do not believe that a 231 page report is necessary in this instance, we do believe a serious, scientific look at Category Two is warranted and 15 months seems an adequate amount of time to carry out such a survey.

V. Conclusion

EdLiNC appreciates the opportunity to file comments on this Public Notice and stands ready to further assist the Bureau on these issues.

---

Appendix A

EdLiNC Member Organizations

AASA: The School Superintendents Association
American Federation of Teachers (AFT)
Association of Educational Service Agencies (AESA)
Association of School Business Officials International (ASBO)
American Library Association (ALA)
Consortium for School Networking (CoSN)
International Society for Technology in Education (ISTE)
National Association of Independent Schools (NAIS)
National Association of Secondary School Principals (NASSP)
National Catholic Educational Association (NCEA)
National Education Association (NEA)
National PTA (PTA)
National Rural Education Association (NREA)
National Rural Education Advocacy Coalition (NREAC)
National School Boards Association (NSBA)
United States Conference of Catholic Bishops (USCCB)