

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

In The Matter Of)	
)	
Modernizing the E-rate Program)	WC Docket No. 13-184
For Schools and Libraries)	
)	

**COMMENTS OF THE
AMERICAN LIBRARY ASSOCIATION**

April 7, 2014

Table of Contents

I. SUMMARY AND RECOMMENDATIONS	2
II. FOCUS ADDITIONAL SHORT-TERM FUNDING ON INCREASING BROADBAND CAPACITY FOR LIBRARIES AND SCHOOLS	7
a. <u>Upgrading library broadband capacity: two types of projects</u>	7
• <i>School-library wide area network partnerships</i>	10
• <i>Scalable technologies deployment program</i>	13
b. <u>Advancing cost-effective library network development</u>	15
• <i>Network diagnostics and technical support</i>	15
c. <u>Deploying broadband within libraries based on a principle of certainty</u>	18
• <i>Local area network and WiFi trends in libraries</i>	18
• <i>Rethinking Priority 2</i>	19
d. <u>Addressing broadband capacity for tribal libraries</u>	22
III. RESPONSIBLY PHASING DOWN SUPPORT FOR VOICE SERVICES	23
IV. ADDITIONAL WAYS TO IMPROVE LIBRARY PARTICIPATION IN THE E-RATE PROGRAM	24
a. <u>Using library locale codes for determining rurality</u>	25
b. <u>Revisiting the method that libraries use to determine discount</u>	25
c. <u>Recurring costs must be based on reasonable rates</u>	25
d. <u>Technology plans should be locally designed</u>	26
e. <u>Streamlining administration of the E-rate program</u>	26
V. CONCLUSION.....	27

**Comments of the American Library Association
in response to Public Notice
Seeking focused comment on E-rate modernization
(WC Docket No. 13-184)**

I. Summary and Recommendations

The American Library Association (ALA) is the largest library association in the United States, and, in fact, is the largest library association in the world, with more than 57,000 members. The ALA has provided leadership for nearly 140 years in connection with the development, promotion, and improvement of library and information services and the profession of librarianship in order to greatly benefit, in innumerable ways, students, educators and people of all ages and backgrounds in communities of all sizes across the country. The federal E-rate program is essential to meeting the critical missions of our nation's public libraries, which, among other things, leverage internet access and networks to empower library users and provide indispensable support for their education, employment and entrepreneurship-related needs.

As Lynn Meeks, director of the Cambria County Library in Pennsylvania, succinctly stated: "Our public library is the only game in town for patrons with computer usage needs. The bottom line is much of what public libraries do these days and much of what is expected we do these days, as evidenced by all the referral from other agencies, is dependent on strong broadband connectivity."

There are an endless number of examples of the support libraries provide community residents. One such case comes from the Kettleson Memorial Library in Sitka, Alaska. A patron recently shared the library's videoconferencing has meant for her family. *"I have had the opportunity to train for over six hours with doctors, nurses, and medical company specialists*

regarding my nine year old foster son's medical conditions. He is living with... Type 1 Diabetes. He must use an insulin pump, which is connected to him at all times, along with other medical devices, and I needed the training from the specialists so that I could help him safely live his life here in Sitka. Going to Anchorage or Seattle was not an option.”

Another example emphasizes the ways in which libraries support education. At the East Athens Resource Center, of the Athens Regional Library System (Georgia), a mother of twin girls came to the library for help as she was concerned they would not pass the state assessment tests. After failing the practice tests available through the library, the library helped secure volunteer tutors who continued to use library online study tools with the girls until they ultimately passed the assessments. *“The beauty of this story is that the computers and the library and the volunteers all worked together to help address the literacy issues and test phobias the twins had.”*

It’s clear that broadband access through our libraries brings opportunity for all, and that this access is currently inadequate in most cases. A substantial majority of public libraries report they need to increase their bandwidth,¹ and, in fact, 88 percent of state library agencies say that a majority of their libraries will need bandwidth upgrades within the coming two years.²

For all these reasons and more, ALA appreciates this further opportunity to provide input on improving the effectiveness of the E-rate program. We support the Commission’s effort to examine the program with the goal of increasing the focus on the elements essential to bringing scalable, high-capacity broadband to libraries and schools.

¹Preliminary findings from [Digital Inclusion Survey](#) conducted by the University of Maryland Information Policy and Access Center for the American Library Association. Full national report to be released in late June 2014.

² Preliminary finding from January 2014 survey of State Library Agencies by the ALA Office for Research & Statistics. Full report forthcoming in 2014.

The E-rate program has been a success up until now, and it needs to continue to be a success. So far it has helped to connect more than 100,000 libraries and schools to the internet to support education and learning nationwide. Today virtually all libraries provide free public access to wired and wireless networks to their communities. Though the hallmarks of the E-rate program remain valid,³ technological advancements have markedly influenced educational pedagogies and workforce requirements, as well as most every aspect of today's society. The record in this proceeding overwhelmingly demonstrates that a basic internet connection is not enough; the program must be focused on supporting high-capacity broadband in all our libraries and schools.

Simply put, no one should be satisfied just meeting yesterday's needs. E-rate 2.0 and President Obama's ConnectED initiative, as well as simple common sense, demand that we design future-proof networks to support real-time interactive learning environments, streaming media and digital collections, high-definition videoconferencing and telepresence, digitizing and sharing local history, tele-health and access to electronic health records, and many more services yet to be imagined. This is not a time or a place for the U.S. to get behind the curve. The time it takes to download or upload content should be measured in split seconds, not minutes—or hours!—as is now too often the case.

As a result, ALA proposes library broadband capacity goals that support these already emerging services. These goals should be based on library legal service areas as this largely bounds local funding support and patron use. This service area is defined at the administration (or system) level by the Institute of Museum & Library Services (IMLS), but can be further

³Among these are the principles of technology neutrality, universal access to advanced telecommunications services and program prioritization and discount levels based on financial need/levels of poverty and rurality.

defined at the building level for libraries with more than one outlet.

ALA strongly believes that as soon as reasonably practical—preferably by 2015 and certainly no later than 2017—all libraries with a service area of less than 50,000 people should have broadband capacity of at least 100 Mbps, and libraries with a service area of 50,000 people or greater should have 1 Gbps speeds. ALA envisions all libraries achieving at least 1 Gbps service by 2018, if not sooner. To achieve these goals, ALA supports reconfiguring the E-rate program to focus on significantly reducing the barriers to library participation, advancing broadband deployment over other services, enhancing local area network (LAN) and WiFi networks in library and school facilities, and maximizing the cost-effectiveness of program investments to ensure the best use of public funds.

Achieving the library vision

To substantially move libraries toward these important goals for our country as quickly as possible, ALA recommends that the Commission focus the recently identified funding (roughly \$2 billion) in three areas.

- A considerable portion of the funds should be designated toward demonstration projects that test approaches and provide evidence to inform any future program changes to better meet connectivity needs of libraries and schools. These projects should demonstrate how the Commission may increase program participation; significantly raise applicants' capacity to support public access and broadband-enabled services; and use public funds most effectively. Additionally, these projects are expected to increase broadband capacity for many of the participants.
- Secondly, ALA supports a temporary infusion of considerable funds targeted toward bringing affordable and scalable high-capacity broadband to libraries (and schools) where it is currently unavailable or where it may be available but program barriers inhibit libraries from taking advantage of it (see ¶ 27). A targeted program will also lead to data that will ensure these funds lead to best practices to determine future deployment rules

and guidelines (see ¶ 58). This (and the proposed deployment demonstration) could yield a “Two-for-One” gain by providing significant, simultaneous benefit for both the applicant and the Commission—and may actually result in a Three-for-One investment as these demonstration support the goals regarding Universal Service Fund (USF) reforms more broadly.

- Lastly, a portion of the funds should be used to increase access to what has traditionally been designated as “Priority Two” funding so that all applicants have equitable and reliable access to services necessary to bring the broadband from the door to the device.

ALA also uses this opportunity to provide additional comment on the Commission’s proposal to reduce support for those services not critical to high-capacity broadband deployment.

Finally, although ALA supports the current strategic review of the E-rate program, it cannot be ignored that applicant demand in the 2014 funding window that just closed is again more than double available funding.⁴ We fully expect that improvements developed through this Public Notice and the earlier Notice of Proposed Rule Making (NPRM) will result in responsible cost savings, strategic reallocation of funds, and greater program efficiencies. However, while these improvements are very important, it is unrealistic to believe that these changes alone will be sufficient to fully address the chronic underfunding in the program. **The simple truth is that the E-rate program also must be sized so that U.S. libraries and schools are leaders rather than left behind in the increasingly competitive global environment.** Having said that, the Commission should not only raise the cap as soon as practicable to address the shortfall, but it should also simultaneously take all reasonable steps necessary to ensure the funds are properly and efficiently employed. In short, many have vehemently argued that more funding is needed,

⁴ Universal Service Administrative Company (USAC), Update on Demand Estimate Preparation, March 27, 2014. <http://usac.org/sl/tools/news/default.aspx>.

while others have claimed that at times funding needs to be more efficiently spent, but the truth is that both of those groups are right.

II. Focus additional short-term funding on increasing broadband capacity for libraries and schools

ALA appreciates the opportunity laid forth in the Public Notice (§ 56) to identify specific demonstration projects that bring concrete benefit to applicants while allowing the Commission to investigate a variety of solutions for the toughest issues in modernizing the E-rate program. It is our goal that these demonstrations encourage a diversity of practices to help all applicants sufficiently increase broadband capacity. We propose three types of projects that will address the most difficult challenges for libraries in closing the gap of where the majority are in relationship to capacity goals.

In contemplating which projects have merit, ALA respectfully suggests that the Commission develop evaluation metrics and criteria for adopting program modifications or rule changes based on findings and experiences from any demonstration it elects to implement. Project evaluations and summary findings, along with any data gathered should be made publicly available at logical points during the projects and in comprehensive form at the close of projects, so that all stakeholders may learn from the demonstrations

Brief Description of the Reasons the Types of Demonstration Projects Proposed in the Next Section Below are Necessary Followed by Recommended Types of Demonstration Programs

a. Upgrading library broadband capacity: two types of projects

Throughout this E-rate proceeding, ALA has sought input from our members via the ALA E-rate Task Force; state librarians; library IT staff, and library leaders focused on future trends for library services. These ALA members represent libraries in different geographical regions, as well as libraries serving rural and urban communities. We found overwhelming need

for a focus on those libraries furthest behind the library capacity goals of 100 Mbps to 1 Gbps to ensure that they are able to provide the critical services described above that their communities depend on. These needs cut across libraries in rural and urban communities though there are unique challenges for each.

Libraries play a unique and vitally important role in providing internet access for people of all ages, all backgrounds and all types of need. Approximately 62 percent of libraries report they provide the only free access to computers and the internet in their communities.⁵ Internet access at the public library is particularly important for the roughly 30 percent of people lacking home broadband and other at-risk populations (people with disabilities, older adults, etc.).⁶

Unfortunately, most libraries do not have sufficient broadband capability to serve the needs of their communities today. Most libraries have about the same amount of broadband bandwidth as the average home, yet the “average” library has 16 library-owned computers⁷ AND must support patron-owned devices, as well, through free public WiFi access. Libraries also have much more sophisticated needs (firewalls, security, quality of service, etc.) than residential users. Evidence of the need to upgrade libraries’ internet capacity is as follows:

- Nearly two-thirds of libraries have a 10 Mbps or less connection to the internet;⁸
- 88% of state library agencies report the majority of libraries in their states need to increase bandwidth capacity within the next 24 months;⁹

⁵ Hoffman, Judy, John Carlo Bertot, and Denise M. Davis. Libraries Connect Communities: Public Library Funding & Technology Access Study 2011-2012. Digital supplement of *American Libraries* magazine, June 2012. Available at <http://viewer.zmags.com/publication/4673a369>.

⁶ National Telecommunications and Information Administration, *Exploring the Digital Nation*, June 7, 2013. See <http://www.ntia.doc.gov/report/2013/exploring-digital-nation-americas-emerging-online-experience>. Public libraries are the top access point for internet users lacking home computers.

⁷ Ibid.

⁸ Ibid.

⁹ Preliminary finding from January 2014 survey of State Library Agencies by the ALA Office for Research &

(continued...)

Libraries will need even greater broadband capacity in the future. The overall demand for internet access continues to grow by leaps and bounds. Libraries that do not upgrade their internet capacity to support continuing technological innovation will fall further behind.

Some examples of market trends are as follows:

- The tablet market is exploding;¹⁰
- Wireless (WiFi) access to the internet will continue to expand;¹¹ and
- Video traffic is projected to grow to 69% of all internet traffic by 2017.¹²

Libraries themselves are deploying new technologies and services that require additional bandwidth. Emerging library services demand greater broadband capacity and quality of service. Among these services are:

- The development of digital media labs in which community members create, as well as consume, digital media;
- Informal learning activities that include computer programming, 3D modeling and other STEM-related activities; and videoconferencing and telepresence services that support distance education and employment needs.

Congress created the E-rate program to ensure all libraries (and schools) “should have access to advanced telecommunications and information services.”¹³ Section 254(h) of the Communications Act directs the FCC to “enhance . . . access to advanced telecommunications

(Continued from previous page) _____
Statistics. Full report forthcoming in 2014.

¹⁰ “Forrester predicts tablet sales will continue their rocket-like growth trajectory in the coming years, with a projected compound annual growth rate of 25.6% between 2012 and 2017.”

<http://techcrunch.com/2013/08/06/forrester-tablets/>.

¹¹ Cisco® Visual Networking Index (VNI) Forecast (2012-2017), May 29, 2013.

<http://newsroom.cisco.com/release/1197391/>.

¹² Ibid.

¹³ Section 254 of the 1996 Telecommunications Act. Available, <http://transition.fcc.gov/learnnet/254.html>.

and information services for all . . . libraries.”¹⁴ The statutory mandate to address the needs of “all” libraries is particularly significant, because many rural and small libraries face particular challenges in providing sufficient internet access to their communities.

- Small and rural libraries make up the majority of public library systems in the United States (80.5%).¹⁵ Over half of all rural libraries have internet speeds of 4 Mbps or less (the equivalent of many home broadband connections) and only 17% of rural libraries have speeds greater than 10 Mbps.¹⁶

Unfortunately, libraries often have difficulty obtaining the high-quality broadband connections, equipment and services that they need to serve their communities. Broadband networks may not be available, the bandwidth may be too expensive (even with E-rate support), or libraries may lack dedicated IT staff to best plan and manage network configurations.

To address these concerns, ALA proposes allocating a considerable portion of the \$2 billion toward several demonstration programs described below.

School-library wide area network partnerships

E-rate applicants now may apply for build-out deployment costs under specific circumstances.¹⁷ ALA proposes a modest expansion of this provision to better enable school-library partnerships. Specifically, this proposed program would take advantage of the synergies where a school has high-capacity broadband but the nearby library does not. In numerous instances it would be more cost-effective for the nearby library to leverage the school’s broadband capacity than for the library to obtain its own broadband capacity, completely

¹⁴ Ibid.

¹⁵ See http://www.imls.gov/assets/1/AssetManager/Brief2013_05.pdf.

¹⁶ Hoffman, Judy, John Carlo Bertot, and Denise M. Davis. Libraries Connect Communities: Public Library Funding & Technology Access Study 2011-2012. Digital supplement of *American Libraries* magazine, June 2012. Available at <http://viewer.zmags.com/publication/4673a369>.

¹⁷ See http://www.universalservice.org/_res/documents/about/pdf/fcc-orders/2000-fcc-orders/FCC-00-354.pdf.

separate from the schools.¹⁸ We do not expect such proposed arrangements, as described in more detail below, to always be superior and thus a goal of the demonstration program in this area is to identify the parameters for the highest likelihood of success while also immediately benefiting libraries and schools that are part of this program. We believe that the program may have the greatest benefit for smaller or rural libraries, although we recommend including libraries of a variety of sizes and locations to ensure that the Commission gain the maximum practical amount of information.

To understand this proposed program, it is helpful to describe an example to show how it would work in practice. Consider a library that is within several blocks of a school, but the library and school are on separate WANs. The library connects to a library WAN between branches and the main library (or administrative unit) and the library receives speeds lower than what are available to the school at often much higher costs. In one example, one state has libraries that have a T1 (1.5 Mbps) and pay \$320 per month. The school across the street is connected to the district WAN through a Gigabit connection. The district has a 250 Mbps shared internet pipe for the same unit cost as the library, but including firewall and filtering software. In this instance, if the library were part of the school district WAN, for about the same cost the library could go from 1.5 Mbps to a share of 250 Mbps.

Building on the concept introduced by the Commission in the Sixth Report and Order¹⁹ that allows community use of the school broadband after school hours, a library in close proximity to a school (e.g., within several blocks) could connect to the school WAN rather than duplicate a circuit to the internet point of presence for likely higher costs and inferior service.

¹⁸ In principle, the reverse situation is also applicable: the library has high-capacity broadband and the nearby school district does not—though we believe this situation to be rare.

¹⁹ FCC Sixth Report and Order, September 2010. Available, http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-175A1.pdf.

There would be no or minimal burden to the school (and any minimal burden would be reimbursed by the library and/or the E-rate program) and, in fact, may build more community broadband opportunities than has occurred through the rule changes in the Sixth Report & Order. For example, the school capacity is in primary use during school hours but lies dormant after 3 p.m. At 3:01 library internet usage spikes. During the summer when the school capacity is used significantly less, the library also typically sees a dramatic rise in usage. Rather than the school incurring greater costs to accommodate community use (e.g., janitorial services, security costs, heating and cooling and/or electrical costs), the library is usually open, and services would only improve with the robust broadband the school could provide. The library and school would effectively create a “mini consortium.” While there are a few communities where this currently occurs, it is not common.

Such a coordinated approach has several benefits for the library. That is, the library will often pay less, and yet get far more—a win-win situation for both the library and the E-rate program. Additionally, many small libraries do not have dedicated information technology (IT) staff to manage their networks and could take advantage of the school district’s network management as a member of the WAN. Finally, treating the library as another building on the school district’s application simplifies the application process and could encourage E-rate participation, particularly for small libraries. In addition to direct benefit to libraries, the collaboration also supports Commission goals related to consortia and cost efficiency, and reducing administrative burden. This approach could ultimately result in a net cost saving for the E-rate program as the library would pay less in recurring costs for higher quality bandwidth. The Commission should consider a modest incentive for those schools or school districts that enter into an agreement with a library. Finally, a school-library collaboration would lead to non-E-rate

benefits for the library, the school, and ultimately the families they both serve. Secondary benefits might develop such that libraries and schools might share online resources or develop other opportunities for bulk purchasing that could result in savings for the entire community.

ALA agrees with the school/library consortium benefits outlined by the State E-rate Coordinators Alliance (SECA) in their April 2 filing²⁰ and supports the development of a demonstration project to investigate the potential long-term benefits to the E-rate program. ALA recommends the Commission review its current rules related to special construction and adapt them to allow for the necessary build-out between the library and nearby school for the purposes of this program.

Scalable technologies deployment program

Another important demonstration program that the Commission should utilize, and which is consistent with the discussion in paragraphs 24-25 of the Public Notice, would involve another “Two-for-One” concept. The Commission should support a short-term program focusing on libraries in close proximity to broadband providers that can ensure scalable broadband at affordable initial construction charges and recurring costs after the deployment is complete. The goal of this project is to leverage existing network resources of already constructed broadband infrastructure, similar in concept to the leveraging the school-library collaboration. Special construction would again be limited, drawing fewer resources from the E-rate program. If successful, this demonstration would show that investments in construction between libraries (and schools) to providers in relatively close proximity would lead to long-term savings for the E-rate program. This demonstration could be structured such that in the first year (FY15) a representational group of applicants would be eligible to receive funding and in the second year

²⁰ See SECA filing at: <http://apps.fcc.gov/ecfs/document/view?id=7521096681> (p. 24).

(FY16), based on experiences from the first year, the Commission could elect to open the program more broadly, with preference given to certain classes of libraries:

- Applicants that are significantly below the library capacity goal
- Rural or small libraries;
- Urban libraries that serve a low-income population; and
- Libraries that have developed a special educational program or innovative technological training program, such as media production labs, maker spaces, or implementing other cutting-edge technologies.

The Commission would base its decisions on which program rules should be restructured to further enable other applicants to benefit from a deployment project. These demonstrations directly respond to the Commission’s concern—one that we share as well—that deployment alone does not address the need to ensure recurring costs are affordable after the deployment is completed (§ 27).

Key Provisions

1. Any library that can demonstrate that a) it does not have sufficient broadband capacity to serve its community and b) a nearby service provider can provide high-capacity broadband solutions to at least the minimal stated program goal, is eligible to apply for support. A library or library system can make a prima facie demonstration of need by referring to a national or statewide broadband benchmark, by comparing itself to other similarly-situated libraries, or by other means.²¹
2. Projects can start a certain period prior to the E-rate funding year and may have an additional period for completion following the end of the fiscal year.
3. Libraries and library systems that apply for deployment support may also apply for traditional E-rate support for recurring costs.

²¹ For instance, for libraries that are seeking to upgrade their external broadband connection, rural libraries can make a prima facie showing of need if they have less than a 20 Mbps connection, and non-rural libraries can make this showing if they have less than a 100 Mbps connection.

This program shall include the following provisions:

- Funding support is provided for deployment of high-capacity, scalable, last-mile broadband from the library building to the first point of interconnection to a high-capacity network. Projects must provide services on the scale of the stated capacity goals of a minimum of 100Mbps to 1Gbps as applicable, and recurring costs must be reasonable after the initial deployment is completed;
- Funding should be technology-neutral, but the underlying technology deployed should be scalable (“future-proof”) to be usable for the long-term;
- To comply with the statutory requirement to be “competitively neutral,” funding should be provider-neutral, including commercial, non-commercial, and governmental entities;
- Projects must adhere to state or local procurement requirements;²²
- Libraries may participate in consortia with other non-eligible entities if the costs to the library are not higher, and if cost allocation ensures that E-rate will only pay for the libraries’ share of the cost of the project;
- Broadband deployment costs over \$500,000 per site must be amortized over 3-5 years.

This program should have a separate application process.

- It should be administered by USAC under direction of the FCC,
- USAC should have a separate unit dedicated to processing applications.
- The existing E-rate support program will continue to support monthly recurring expenses

b. Advancing cost-efficient library network development

Network diagnostics and technical support

In its July 2013 NPRM, the Commission asked a series of questions related to technical assistance and increasing the efficiency and effectiveness of applying for E-rate funding in

²² ALA also supports forgoing E-rate procurement rules in favor of state and local rules for the traditional E-rate program if the applicant so chooses. See ALA NPRM comments, September 2013: <http://apps.fcc.gov/ecfs/document/view?id=7520944024>.

libraries and schools.²³ Based on conversations with state library agency staff, technology consultants and local library staff, ALA believes a demonstration project related to library network diagnostics and technical support in procuring E-rate eligible services could assist many of our smallest libraries that lack dedicated IT staff, as well as many libraries that rely on city or county IT staff to support their internet access and network needs. Thus, it would meet the Commission’s guidance for demonstration projects in providing “needed services and equipment to E-rate participants” as well as test the concept that this kind of support can “maximize cost-efficient use of E-rate funding.”

State library agencies (SLAs) are well-positioned to bridge deep local knowledge of their libraries with an understanding of state/regional contracting and federal policy priorities. For example, SLAs manage the Library Services and Technology Act (LSTA) funding, administered by IMLS, submitting five-year strategic plans and ensuring that the funds are invested to support critical and transformational library service needs. SLAs routinely work with peer state agencies and departments, such as those for Labor, Education, and Economic Development to align library programs and partnerships with state priorities.

In a November 8, 2011, study completed by Parthenon Consulting for 13 states, technical assistance was the SLA service that local libraries identified as the most valuable and an area where they needed more support.²⁴ As defined in that study, technical assistance included strategic planning for technology, technology standardization, and bandwidth coordination. SLAs are poised to coordinate a program to increase the effectiveness of the federal E-rate investment while improving local partnerships and improving the consistency and quality of library services

²³ See Federal Communications Commission Notice of Proposed Rulemaking, paragraphs 198-201, July 23, 2013: <http://www.fcc.gov/document/fcc-launches-update-e-rate-broadband-schools-and-libraries>.

²⁴The Parthenon Group, [SLA Strategic Assessment Process for Public Libraries and Key Learnings](#), internal report presented to COSLA presented November 8, 2011.

in local communities.

ALA proposes a portion of the \$2 billion identified by the Commission be designated for a network assessment and technical support demonstration project. Such a project could provide significant information that would inform both practice and policy in purchasing and implementing network equipment and internet access to meet community needs. The project would support implementation through a number of state library agencies (10-15) to support:

- Site visits and network evaluation at a significant number of libraries without dedicated IT staff and substandard bandwidth;
- Local reports from the site visits on findings from data collection and recommendations for capacity (internet access or internal connections) to local libraries and SLAs for consideration;
- Interim reports to the Commission aggregating findings from across the state and listing planned interventions (e.g., bulk purchasing) at the local and state levels;
- Implementation of intervention in E-rate funding year 2016;
- Evaluation of intervention(s) results in context for program objectives (e.g., increased quality for same E-rate funds; reduced E-rate costs; improved processes in terms of efficiency); and
- Final reports documenting findings with recommendations for future action by the Commission or other entity supporting local libraries.

In addition to directly benefitting the E-rate program and its applicants, we believe there is great likelihood of community benefits by increasing local knowledge and capacity among library staff and the city/county IT departments that often are involved in procuring and supporting public library technology access.

ALA proposes that this demonstration—and all FCC demonstration projects—be designed with rigorous evaluation that considers both the program impact (e.g., outputs such as broadband capacity, number of upgrades, E-rate submissions, costs per Mbps) and institutional

performance (e.g., processes and outputs at State Library Agencies and USAC). Evaluation reports should be actionable, open, and useful to the Commission, USAC, E-rate participants, and analysts and advocates for planning and evidence-based improvements to the E-rate program.

c. Deploying broadband within libraries based on a principle of certainty

Local Area Network and WiFi trends in libraries

With public WiFi access in libraries approaching ubiquity, libraries increasingly report that patrons use their own devices to access the internet through the library's WiFi network. In the beginning of the E-rate 2.0 discussions, we estimated that for every three library devices there was one patron-owned device. In recent anecdotal polling of both large urban library systems and small individual library branches, librarians report a definite shift in the formula where we expect that by the end of this proceeding, many libraries will be similarly situated to schools in a 1:1 setting and in some instances see a reversal to 1:2 where patron-owned devices outnumber those owned by the library.

As the Commission reviews the changing nature of WiFi access in the context of the E-rate program, ALA respectfully reminds the Commission of the variety of ways that libraries are configured to provide WiFi access to their patrons. Small libraries may be one open public space that only requires one access point. Libraries may have designated program spaces (e.g., meeting rooms, teen spaces, after school program areas, reading rooms, and computer labs) that require a separate access point in each program space, in addition to access points in a main space. Larger libraries with several floors report access points on each floor in addition to access points in specific program spaces. In an informal poll, libraries plan for, on average, two access points per 1500 square feet.

As libraries rethink the design of their public areas to accommodate collaborative work spaces and other interactive use models, ensuring sufficient, enterprise-grade WiFi access points will become increasingly important to library services. However, ALA still maintains that internet access external to the library should remain the top priority to ensure scalable, affordable capacity from the library door to the public internet.

Rethinking Priority 2

ALA appreciates the Commission's focus on ameliorating the historically inequitable distribution of Priority 2 (P2) funding. In the extreme, we know of at least one state where libraries have not received funding for P2 requests since 1999. In another only the largest library system at the 90% discount level has received P2 funding since 1999. We understand that applicants below the 85% discount level routinely do not apply for internal connections support because of lack of E-rate funding after P1 requests have been fulfilled. To ensure more libraries are able to upgrade internal connections, it is important to fund applicants at the lower discount levels that have not historically received or applied for funding and to create greater certainty for future funding years.

ALA supports moving forward cautiously before making permanent changes to the P2 funding mechanism. We are confident that the Commission will carefully analyze the impact of changes made during the course of the additional and separate allocation of funds to inform changes for the program, which includes clearly identifying funding required to address P2 services.

We believe that the most sustainable solution combines elements of the three options proposed by the Commission to support certainty, fairness, keenly targeted eligible services (e.g.,

eliminating funding for ongoing maintenance and services beyond essential equipment) and simplicity in application requirements and processes (e.g., removing the requirement for technology plans).

ALA proposes the following model predicated on the Commission allocating a substantial portion of the identified \$2 billion toward funding P2 services. This P2 funding proposal is a combination of the 1 in 5 year proposal (§14-16) and the rotating eligibility proposal (§17-19). It seeks to provide some timeframe certainty on when applicants will be eligible to receive funding (1 in 5) with the certainty that all applicants will receive P2 funding (rotating eligibility). The 20-90% discount matrix should also be lowered to help ensure that more entities may receive some support—and especially those that have not received any P2 discounts in recent years. This proposal is also based on the following assumptions:

- The current Eligible Services List will be narrowed to focus P2 eligibility on services supporting broadband connectivity (See §11 for suggested services);
- The current 20-90% discount matrix would be reduced for P2 applications *only*;
- The rotating system would begin with those applicants in the highest discount band that was not funded in 2012.

An important component of ALA's recommendation is that libraries and schools who have NOT received P2 discounts in the past five years (i.e., funding years 2009-2013) will receive priority for funding under the identified \$2 billion. After these entities have received consideration, other entities may be considered if funds remain.

For the 2013 E-rate year, 77% of all P2 requests are at a 90% discount and 20% are between an 80-89% discount. In other words, 97% of all P2 requests are at an 80% discount and above. However, this is likely because applicants under 85% typically do not apply for funding. ALA finds it difficult to predict what impact lowering the discount band would have on

increasing funding available other than to assume that doing so would create a larger pool of applicants at the highest discount level. ALA suggests that before permanently changing the discount matrix for P2, the Commission determine the effect of front-loading P2 from the \$2 billion on the number of applications it receives.

In the rotation model, applicants submit P2 applications timed to their school lunch eligibility. It is assumed that Year 1 begins July 1, 2015. Note that the formula below combines two discount bands into each funding year.

- Year 1: 50%-100% school lunch eligible
- Year 2: 20%-49% school lunch eligible
- Year 3: less than 1%-19% school lunch eligible

Once all P2 applicants are funded, the cycle starts over again. ALA recognizes and appreciates that the Commission is seeking a system that no longer requires a system of priority. We acknowledge, however, that while the Commission determines the necessary amount of P2 funding it will need to make available, there would likely be more demand for funds than available funding, as is the case today. It may become necessary to adopt a prioritization system such that in any given funding year if all the applicants cannot be funded, the first discount band should be fully funded and the second band will move to the top of the line in the subsequent funding year. Based on outcomes during this limited time period, the Commission could then modify the model to best ensure sustainability of critical internal connections services.

ALA does not recommend the P2 proposal as a template for the traditional Priority 1 category. Additionally, ALA respectfully suggests that the Commission carefully review the impact of changing the discount matrix to determine if the change did in fact provide funding to more applicants such that over the course of the funding cycle, all applicants receive funding.

At this time, ALA has concerns with an allocation model for P2 funding, though we appreciate that the approach could improve certainty of funding. Depending on how the Commission responds to these and similar questions, it would help ALA consider the proposal more fully:

- If an applicant did not need the allocated amount of funds, would the applicant “return” the unused portion into the current funding year or would the unused portion be rolled over into the following funding year?
- Should an allocation model include a threshold to ensure that smaller applicants are not inadvertently disadvantaged?
- When in the E-rate funding year could the Commission realistically determine the total funds available, which will necessarily be affected by applicant demand in a given year?

Finally, we urge the Commission to consider ways to help smaller libraries, especially those in rural areas, to fully participate in this P2 opportunity. For example, the likelihood of P2 funding may provide some incentive for new libraries to apply for E-rate discounts and upgrade their broadband capabilities. In our initial comments filed in September 2013, we discussed a number of ways the Commission could improve the application process which, again, would help all applicants but would be of significant assistance to smaller libraries.²⁵

Another way to improve program participation for smaller libraries could be for USAC to extend its outreach services, such as applicant training, to more locations, perhaps using video conferencing to expand its reach.

d. Addressing broadband capacity for tribal libraries

ALA does not presume to suggest specific solutions for tribal libraries but rather takes

²⁵ ALA supports improving the review process for consortia applications, creating an “ever-green” form 470 for multi-year applications, and allowing direct disbursement of funds for applicants using the BEAR form. See ALA NPRM comments, September 2013: <http://apps.fcc.gov/ecfs/document/view?id=7520944024>.

this opportunity to call attention to an area where we urge the Commission to take action. It is well documented that much of Indian Country is a whole order of magnitude further behind in reaching the President's ConnectED goals and ALA's own library capacity goals than non-tribal areas.²⁶ ALA appreciates that the Commission asks questions specific to tribal libraries and schools as it has done in other USF proceedings, and we are aware of the different efforts the Commission has already undertaken to ameliorate the disparity in Indian Country.²⁷ ALA supports a targeted initiative involving the appropriate tribal entities and respectfully suggests that the tribal library is included in discussions about how to develop program rules, whether permanently or as a specific limited-term demonstration that supports tribal applicants. There are likely circumstances for tribal libraries and schools that are unique, worthy of targeted funds, and that would not necessarily be appropriate for other applicants.

To that end, ALA routinely convenes meetings of topical experts to develop policy and could extend that role with the Commission. Specifically, the American Indian Library Association (an affiliate of ALA), the Association of Tribal Libraries Archives and Museums, and IMLS entities all have expert knowledge on the needs and challenges of tribal libraries.

III. Responsibly phasing down support for voice services

ALA is already on record for supporting a planned phase out of voice services to focus the E-rate program on high-capacity broadband services. It remains our position, though we wish to refresh the record to include additional recommendations.

Since our initial comments on the matter in response to the 2010 NPRM, the Commission has undertaken an extensive IP transition review, which we hope will address many of our

²⁶ See for example, *New Media, Technology and Internet Use in Indian Country*. Available, http://www.atalm.org/sites/default/files/NPM-NAF_New_Media_Study_2009_small.pdf.

²⁷ Refer to the Office for Native Affairs and Policy's 2012 annual report. Available, <http://transition.fcc.gov/cgb/onap/ONAP-AnnualReport03-19-2013.pdf>.

concerns in phasing out support for voice and associated legacy services.²⁸ ALA suggests that the phase-out process for the E-rate program align with decisions informed through the IP transition experience.²⁹ We continue to support an automatic exemption for applicants where alternatives to voice are not available, reliable, or available at reasonable costs. To ease administrative burden, ALA proposes that applicants self-determine based on criteria developed by the Commission whether they are eligible for an exemption. Acknowledging that in due course, most locations will have a voice alternative, the Commission should revisit an exemption clause periodically to determine if such a requirement is still necessary. For very remote areas (e.g., Tribal lands and some parts of Alaska) an indefinite exemption may be necessary.

ALA strongly urges the Commission to phase out support for voice over time such that applicants can adjust tight budgets accordingly. We favor a full year notice prior to the initiation of a phase out process and therefore recommend the Commission does not change current eligible services until at least FY 2015. At that time, we support including in the phase out P2 services related to P1 voice services.³⁰

IV. Additional ways to improve library participation in the E-rate program

The Commission asks if there are ways in which library connectivity needs are different than schools and implies that this Notice is an opportunity for the library community to highlight differences where program structure may be altered to significantly improve library connectivity and/or library participation in the E-rate program. As the voice for more than 16,000 eligible

²⁸ ALA comments from 2013 highlight challenges for rural and remote areas where an alternative to voice is not affordable, reliable, or available. Additionally since that time, libraries also have raised a concern about being able to complete calls during emergencies and as their role as centers for disaster relief and first responders the need for a back-up to VoIP.

²⁹ See <http://www.fcc.gov/document/fcc-oks-voluntary-experiments-testing-impact-technology-transitions-0>.

³⁰ See para 95 in 2013 NPRM for specific services that could be included in the phase out of voice services. *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, 28 FCC Rcd 11304 (2013).

libraries, ALA appreciates this tremendous opportunity and looks forward to continued engagement with the Commission on addressing challenges library applicants have in fully benefitting from the program. To that end, ALA refreshes the record on several key issues that we believe would have significant positive impact on library applicants.

Using library locale codes for determining rurality

In our initial comments for the NPRM in this proceeding we directed the Commission to the Institute of Museum and Library Services' (IMLS) analogous version of the geocoding National Center for Education Statistics (NCES) created for schools that provides urban-centric locale codes for library outlets.³¹ ALA continues to support using this method for determining library rurality as the model that most accurately reflects library location.

Revisiting the method that libraries use to determine discount

Similarly, ALA has long maintained that the discount determination for poverty does not accurately reflect the demographics of individual library buildings. While the national school lunch program remains the most granular measure for poverty, basing the library discount on an entire school district prevents libraries that serve the highest poverty populations from claiming the highest discount band. We repeat our willingness to work with the Commission to determine the model that results in the least administrative burden but that more accurately reflects the demographics the library serves and is analogous to the school discount determination method.

Recurring costs must be based on reasonable rates

ALA is on record for and still supports the enforcement of the Lowest Corresponding

³¹ See ALA NPRM comments, September 2013: <http://apps.fcc.gov/ecfs/document/view?id=7520944024>. "The IMLS locale codes define rural as "rural, fringe;" rural, distant" and "rural, remote." ALA recommends using these IMLS locale code designations for "rural" areas along with "town, remote" and "town, distant" to define "rural" for purposes of the E-rate program to ensure greater funding to libraries in truly rural areas and communities distant from urban cores." IMLS data files and documentation available at: http://www.ims.gov/research/pls_data_files.aspx.

Price rule. We maintain our concern that recurring costs for broadband services inhibit libraries from seeking higher capacity when it is available or entering into deployment projects because construction alone does not ensure that recurring costs will be affordable. We urge the Commission to continue to develop methods for ensuring prices offered for broadband services are transparent.

Technology plans should be locally designed

ALA commends the Commission for removing the technology plan requirement for Priority 1 services. We have long maintained³² that requiring technology planning by the Commission does not reflect locally driven technology planning. ALA supports the development of technology plans to ensure that libraries are “smart purchasers” of services but that these plans are most effective if designed at the local and state level rather than requirements determined by the E-rate program. ALA proposes that the E-rate technology plan requirement also be removed for Priority 2 services and that all technology planning be done at the state and local levels. We are especially concerned that with the likely Priority 2 reforms—which will potentially allow all libraries to receive P2 funds—that the current P2 technology plan requirement will limit the number of libraries receiving P2 funds."

Streamlining administration of the E-rate program

One of the greatest barriers libraries report is the complexity of the E-rate application process. To this point, we reiterate and reaffirm our requests to: replace E-rate program procurement rules with those of the applicable state or locality; allow applicants to receive their E-rate funds directly from USAC; and eliminate the Form 470 and allow applicants to file an

³²ALA comments filed, July 2010. Available, http://www.ala.org/offices/sites/ala.org.offices/files/content/oitp/publications/officialfilings/pdfs/erate_7_9_2010.pdf.

“evergreen” Form 471 for multi-year contracts.³³

V. Conclusion

ALA recognizes that the scope of this Public Notice does not necessarily reflect “the full universe” of what might constitute a final order by the Commission, and we appreciate the further opportunity to provide comment on issues raised in the Public Notice. We believe that the comments here directly support the Commission’s original goals set forth in the E-rate Modernization NPRM of (1) ensuring that schools and libraries have affordable access to 21st Century broadband that supports digital learning; (2) maximizing the cost-effectiveness of E-rate funds; and (3) streamlining the administration of the program.³⁴

ALA proposals assist the Commission’s effort to provide high-capacity broadband to and within libraries and schools and aid in identifying opportunity to assess better ways to prioritize and distribute program funding at support levels higher than the current program cap. For these reasons ALA urges the Commission to move forward quickly and adopt rules commensurate with our comments here and in response to the initial NPRM. We look forward to submitting comments during the reply period and welcome further opportunities to work with the Commission during the E-rate modernization process.

Respectfully submitted,



Emily Sheketoff
Executive Director
ALA Washington Office



Marijke Visser
Asst Director, Office for Information Technology Policy
ALA Washington Office

³³ ALA comments filed, September 2013. Available, http://www.ala.org/offices/sites/ala.org.offices/files/content/oitp/publications/officialfilings/ala_e-rate_comments_9_16_2013.pdf

³⁴ *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, 28 FCC Rcd 11304 (2013).