



EDUCATION AND WORKFORCE DEVELOPMENT CABINET
Kentucky Department for Libraries & Archives

Steven L. Beshear
Governor

PO Box 537
300 Coffee Tree Road
Frankfort, KY 40602-0537
(502) 564-8300
Fax: (502) 564-5773
http://kdla.ky.gov

Joseph U. Meyer
Secretary

Wayne Onkst
State Librarian

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In the Matter of)
Modernizing the E-rate) W.C. Docket No. 13-184
Program for Schools and Libraries)

COMMENTS OF THE KENTUCKY DEPARTMENT FOR LIBRARIES AND ARCHIVES

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Introduction

The Kentucky Department for Libraries and Archives (KDLA) is grateful for the opportunity to submit comments on this far-reaching public notice. KDLA strongly supports the three program goals proposed by the Federal Communications Commission (FCC).

KDLA is in favor of connecting 99% of students through next-generation broadband in the next five years. Kentucky's public libraries support and enhance learning for students of all ages through public access computing, digital literacy training, library collections, and partnerships with local school systems, Adult Education offices, colleges, universities and

other community partners. Students and other public library customers would greatly benefit from increased E-rate support for broadband and digital learning.

Background

KDLA actively supports public library service in all 120 counties in the Commonwealth of Kentucky. These public libraries serve the state's population of 4.37 million residents. Kentucky public libraries are extremely diverse. The largest public library system in the state serves an urban population of 750,828 with a budget of \$16.4 million and a staff of 267. The smallest system currently participating in the E-rate program serves a rural population of 7,780 with a budget of \$32,000 and a staff of one¹.

Kentucky's public libraries provide essential services to some of the Commonwealth's most vulnerable populations. 27% of the state's children live below the poverty level², a full 5 percentage points above the national average. Educational attainment is also a focus, with only a third of the population over 25 having graduated from high school, and 21% having a bachelor's degree or higher³. The unemployment level in Kentucky is also higher than the national average. In July, the statewide level was 8.5%, but in some counties, such as rural Magoffin County, the unemployment level was much higher, at 18.5%⁴.

Demand for public library service is at near-record levels. Public library attendance has increased by 11% in the past 5 years, while the state's population increased by 4%⁵. Public libraries are managing this demand with declining budgets. KDLA has provided direct aid to public libraries since 1952. However, the amount of state aid has decreased by nearly one-third (32%) since 2008⁶. Local support for public libraries has also declined or plateaued in the past 5 years⁷. Public libraries rely on federal grants and other programs to make up the difference. E-rate participation among the state's public libraries has increased 53% since 2008. Currently, 76% of public libraries participate in the E-rate program.

These comments are informed by KDLA's experience as the prime recipient of a Broadband Technology Opportunities Program (BTOP) Public Computing Center (PCC) grant. Combined with support from the Bill and Melinda Gates Foundation, \$1.74 million in grant funds enabled 46 public library sub-recipients to purchase over \$1 million in much-needed network and end-user equipment. Once equipment was installed, sub-recipients delivered formal computer training to 16,190 people, and provided 37,308 hours of informal computer assistance to 129,507 people in their communities. 78% of sub-recipients increased their connectivity during the project.

Connectivity Goals

¹ See Kentucky Department for Libraries and Archives, Statistical Report for Kentucky Public Libraries: Fiscal Year 2011-2012, *available at* <http://kdla.ky.gov/librarians/plssd/Documents/KDLA1112.pdf> (last visited September 13, 2013).

² See Annie E. Casey Foundation, KIDS Count Data Center: Child Poverty Rate (Single Year Estimates), *available at* <http://datacenter.kidscount.org/data#KY/2/0> (last visited September 15, 2013).

³ See United States Census Bureau, American Fact Finder: Educational Attainment: 2011 American Community Survey 1-Year Estimates, *available at* <http://factfinder2.census.gov/rest/dnldController/deliver?ts=397323832864> (last visited September 15, 2013).

⁴ See Bureau of Labor Statistics, Local Area Unemployment Statistics: Current Unemployment Rates for States and Historical Highs/Lows Seasonally Adjusted, *available at* <http://www.bls.gov/web/laus/lausthl.htm> (last visited September 13, 2013) and Press Release, Kentucky Office of Employment and Training, County jobless rates released for June 2012 to June 2013 (July 25, 2013), *available at* <http://www.kylmi.ky.gov/gsipub/index.asp?docid=488> (last visited September 15, 2013).

⁵ KDLA, Statistical Report for Kentucky Public Libraries, Fiscal Year 2011-2012.

⁶ Email message from Charlene Davis, Acting Director, Field Services Division of KDLA received on August 9, 2013.

⁷ Email message from Jay Bank, State Data Consultant, KDLA received on August 12, 2013.

KDLA applauds the FCC for recognizing the need for increased investment in broadband connectivity to promote digital learning. The ALA survey cited in ¶16 indicated that 9% of public libraries nationwide reported connection speeds greater than 100 Mbps, 62% of libraries reported speeds of 10 Mbps or less, and 25% of libraries reported speeds of 1.5 Mbps or less.

A recent survey of Kentucky public libraries participating in the E-rate program (91 libraries total) revealed that four public libraries have connections at or above 100 Mbps. Only one library, the largest in the state with 18 locations, has plans to upgrade to a Gigabit connection in the next several years. The average connection speed for the remaining public libraries is 14.2 Mbps. In addition, 45% of Kentucky public libraries reported connection speeds of 10 Mbps or less, and 3 libraries reported connection speeds at 1.5 Mbps or below⁸.

Overall, in Kentucky 3.3% of the state's public libraries report connection speeds of 100 Mbps or greater, and 0% of public libraries report Gigabit connectivity.

In ¶25, comment is sought on bandwidth targets for public libraries. The State Library of Kansas recommends a target of 1 Gbps by 2020. KDLA suggests that any bandwidth targets be flexible and responsive to the needs of individual public libraries and their communities. Gigabit connectivity is an appropriate goal for some of the state's largest urban public libraries. However, Kentucky's small and rural public libraries face numerous challenges, including absence of service provider competition, difficult terrain, and a lack of knowledgeable IT staff.

Bandwidth targets aligned with population and the rural or urban status of an entity would be achievable and sustainable. A blanket mandate to achieve Gigabit connectivity regardless of an entity's location or service population will not succeed.

Additional Funds

KDLA strongly advocates for increasing program funding to achieve connectivity goals. Funds to support hardware acquisition are unlikely to come from any other source. State aid to public libraries has decreased by 32% since 2008, and local support has declined or plateaued in the same time period. These connectivity targets will not be met without increased support from the E-rate program, especially for Priority 2 hardware requests. As cited in ¶19, demand for E-rate funds has exceeded the funding cap every year since the beginning of the program. Additional funds, in combination with program reforms, are necessary to preserve and strengthen the E-rate program and its mandate to promote equity of access.

A significant hardware investment would be necessary for Kentucky's public libraries to upgrade their connection speeds from an average of 14.2 Mbps to 100 Mbps or 1 Gbps. In ¶83, comment is sought on the percentage of libraries that do not have the equipment necessary to provide high-capacity broadband connectivity, and the potential cost of acquiring such equipment. An estimated 64% of the state's public libraries do not have in-house IT staff. These public libraries may be unable to independently verify whether their equipment is capable of supporting 100 Mbps or 1 Gbps connectivity. KDLA invited several public library IT managers to provide data on the potential costs of upgrading their equipment.

The Warren County Public Library, located in the state's third largest city, is a system with 4 locations. One facility opened in 2012, and was constructed with future technology needs in mind. The other 3 locations would need significant

⁸ Email messages from staff at 80 public library E-rate participants, received between August 8 and September 13, 2013.

hardware and cabling upgrades to handle Gigabit connectivity. Their Systems Administrator estimated that an investment of at least \$55,000 for hardware and cabling would be necessary to upgrade the three older locations⁹.

The Goodnight Memorial Library is located in Franklin, the county seat of rural Simpson County, population 17,538. The library has one location that was constructed in 2002. The library employs a dedicated IT staff person, a rarity for its size. The library's IT Manager estimated that an investment of at least \$20,000 in updated equipment, cabling, installation, and possible construction costs would be necessary to achieve speeds of 1 Gbps¹⁰.

Both the Warren County Public Library system and the Goodnight Memorial Library enjoy well-maintained computing environments controlled by on-site IT staff. Nearly two-thirds (64%) of public libraries are this fortunate; the estimated \$20,000 cost could be much higher in smaller public libraries employing occasional consultative service during emergencies.

The average Kentucky public library building was built in 2000, and a third of the state's buildings were constructed in 1999 or earlier¹¹. These older structures could require additional investments that exceed the \$20,000 estimate for smaller libraries. If this estimate was applied to all public library locations built in 2002 or earlier, the estimated cost to prepare them for Gigabit connectivity is \$1,760,000. This amount is more than one and a half times the amount committed to the state's public libraries in FY2012.

An increase in the E-rate cap is mandatory to ensure high-capacity broadband connectivity within Kentucky public libraries. KDLA encourages the FCC to concentrate additional funds on Priority 2 services, and other services supporting connectivity upgrades. Participants should not be limited to only one category of applicants, such as regional consortia. As detailed below, Kentucky public libraries are not currently part of regional consortia. Restricting access to much-needed funds would contradict the proposed goal of ensuring libraries have access to 21st Century broadband.

Access to Priority 2 Funding

KDLA strongly encourages the FCC to determine an efficient and equitable method of distributing Priority 2 funds. Kentucky's public libraries would benefit greatly from increased availability of Priority 2 funding. Between FY2007 and FY2012, the funding commitments for the state's public libraries totaled \$4,844,717.17. During the five-year same period, \$20,311.06 was committed for Priority 2 services, or less than 1% of the total. If barriers to Priority 2 funding were removed and funds were available below the 90% discount level, the adoption rates for high-speed broadband would increase significantly.

One small example of the potential benefits can be seen in rural Menifee County, population 6,220. The Menifee County Public Library has an annual budget of \$164,000, and is located in a school district with 87% participation in the National School Lunch Program. The library received a 90% E-rate discount in FY2012, and was able to qualify for Priority 2 funding for a switch. The county seat of Frenchburg had invested in fiber to be deployed to all government entities, but the library's switch could only support speeds of 4 Mbps. Without improved hardware, the library was unable to benefit from the increased connection speed. E-rate funds enabled the library to upgrade the switch without sacrificing essential programs and services¹².

⁹ Email message from Systems Administrator, Warren County Public Library, 1225 State Street, Bowling Green, KY 42101 received September 11, 2013.

¹⁰ Email message from IT Manager, Goodnight Memorial Library, 203 South Main Street, Franklin, KY 42134 received September 11, 2013.

¹¹ Email message from State Construction Consultant, KDLA, received September 12, 2013.

¹² Email message from Director, Menifee County Public Library, 1585 Main Street, Frenchburg, KY 40322 received March 22, 2013.

Streamlining the Application Process

KDLA recommends a two-pronged approach to streamlining the E-rate application process. First, KDLA strongly supports the proposal in ¶241 to allow public libraries with multi-year contracts to file a single Form 471 and go through the full review process just one time. The three-year time frame proposed may be too restrictive, especially for the larger projects necessary to upgrade connectivity in rural areas. A five-year limit without voluntary extensions is recommended.

Second, KDLA encourages the FCC to eliminate the Form 470 in favor of reliance on existing state and local procurement law. Kentucky public libraries already comply with rigorous state and local procurement guidelines. The state Auditor's Office cited public libraries as exemplars of transparency and accountability in a 2012 report¹³. KDLA believes that the state's public libraries have either adopted the Kentucky Model Procurement Code as encoded in Kentucky Revised Statute (KRS) 45A¹⁴ or more stringent local codes.

As an alternative to eliminating the Form 470, KDLA supports the de minimus exemption proposal in ¶206. KRS 424.260(1)¹⁵ mandates that public agencies not make a contract involving an expenditure of more than \$20,000 without first making newspaper advertisement for bids. KRS 424.130(1)(d)¹⁶ mandates that newspaper advertisements be published at least once, but may be published two or more times, provided that one publication occurs not less than seven days nor more than twenty-one days before the event. In FY2012, the \$20,000 limit would have applied to 7 out of 261 funding requests, or less than 3% of the total.

Kentucky public libraries already comply with mandated state procurement procedures that mirror the E-rate process. State law mandates a competitive bidding process with built-in waiting periods and public access to bids. Relying on existing regulations and eliminating the Form 470 would reduce the administrative burden on Kentucky public library applicants and USAC's School and Libraries Division.

Additional Bidding Requirements

Comment is sought in ¶202 on whether current competitive bidding requirements typically result in multiple competitive bids. This is not the case for Kentucky public libraries. A survey of E-rate participants revealed that the majority of public library applicants (55%) have not received any bids for services in recent years. Of the remainder, 24% received one bid, and 21% received multiple bids. 79% of public library applicants received one or no bids¹⁷.

Public libraries that received no bids for services fell into two categories. In many of the state's most rural areas, only one service provider is active locally. The remainder requested minimal funding. For FY2013, the average total request per library that did not receive bids was \$4,289.38. The totals for these libraries are frequently comprised of smaller requests for individual services. For example, in FY2013 the Breckinridge County Public Library requested a total of \$4,550.47 divided among three funding requests (FRNs), for an average of \$1,516.82 per request.

¹³ See Adam H. Edelen, Auditor of Public Accounts, Ghost Government: A Report on Special Districts in Kentucky pp. 47-48, available at <http://apps.auditor.ky.gov/public/theregistry/2012GhostGovernmentSpecialDistrictsReport.pdf> (last visited September 13, 2013).

¹⁴ See Kentucky Revised Statutes, Chapter 45A: Kentucky Model Procurement Code, available at <http://www.lrc.ky.gov/statutes/chapter.aspx?id=37250> (last visited September 13, 2013).

¹⁵ KRS, Chapter 424: Legal Notices, available at <http://www.lrc.ky.gov/statutes/statute.aspx?id=18264> (last visited September 15, 2013).

¹⁶ KRS, Chapter 424: Legal Notices, available at <http://www.lrc.ky.gov/statutes/statute.aspx?id=39699> (last visited September 15, 2013).

¹⁷ Email messages from staff at 80 public library E-rate participants, received between August 8 and September 13, 2013.

KDLA strongly condemns additional requirements for entities receiving one or no bids. Bright line rules or limits would unfairly penalize 79% of public library applicants in Kentucky. Those most affected include public libraries in rural areas without competition among service providers, and those with reduced budgets. Adding requirements, or worse, limiting discounts for these entities contradicts two of the three proposed program goals: ensuring that libraries have affordable access to 21st Century broadband, and streamlining administration of the program.

Eliminating Support of Voice Services

KDLA is also strongly opposed to eliminating support for voice services. Nearly one quarter of Kentucky public libraries' current E-rate commitments support plain old telephone service (POTS). In FY2012, the total amount committed to the state's public libraries was \$1,065,217.94, with \$233,501.97 earmarked for POTS.

In Kentucky, Voice over Internet Protocol (VoIP) is not yet considered a viable alternative to public-switch telephone service. Communications from staff in KDLA's regional offices and public library staff indicate that Internet access can be unreliable in the Southeastern region of the state¹⁸. Mountainous terrain and a lack of infrastructure provide challenges in this region. Until infrastructure improvements are made, public librarians will not divert scarce resources to switch from well-established POTS to a system that is more expensive and less reliable.

The Boone County Public Library, an urban system with 6 facilities serving one of the state's fastest-growing counties, invested nearly \$75,000 for their VoIP service¹⁹. This amount did not include maintenance provided by their in-house technology coordinator, a significant consideration when an estimated 64% of public libraries lack in-house IT staff. Most Kentucky public libraries would not be capable of making the substantial investment, both in terms of funding and technical expertise, necessary to acquire VoIP phone service.

A number of Kentucky public libraries participate in the E-rate program solely to receive discounts for POTS. These public libraries and their boards are concerned about CIPA legislation and intellectual freedom issues. Several public library directors that are not participating in the E-rate program have indicated that CIPA compliance is among their primary concerns.

Voice services remain essential for communications and public safety at public libraries. Kentucky public libraries face economic difficulties and a scarcity of resources. Eliminating support for voice service would present a significant hardship to the state's public libraries.

Consortium Purchasing

KDLA opposes preferential treatment for consortia applicants. At this time, most Kentucky public libraries are not participating in consortia or cooperative purchasing agreements. The primary motivation is the ability to procure services at lower prices than those specified in State Master Agreements (SMA's). E-rate program rules are not a barrier to consortium purchasing for the Commonwealth's public libraries.

In the 1990s, a public-private partnership between state agencies and telecommunications carriers formed the Kentucky Information Highway consortium, or KIH. A SMA was established, and Kentucky public libraries, as political subdivisions of the state, were eligible to purchase Internet services off the SMA.

¹⁸ Email messages from staff at 80 public library E-rate participants, received between August 8 and September 13, 2013.

¹⁹ Email message from Technology Coordinator, Boone County Public Library, 1786 Burlington Pike, Burlington, KY 41005, received September 13, 2013.

KIH was instrumental in bringing Internet access to large areas of the Commonwealth, but as service provider competition increased, most public libraries found it more cost-effective to leave the consortium. Currently only two public libraries purchase off the most recent incarnation of the KIH SMA. These libraries are two of the largest in the state, with complex networking needs. The majority of public libraries participating in the E-rate program have only one location and no in-house IT staff.

Due to the lengthy duration of the procurement process, the prices quoted in SMA's are outdated at the time of adoption. SMA's are frequently used by public libraries as a starting point in negotiating with service providers. Public libraries are eligible to purchase hardware from SMA's negotiated by the Commonwealth Office of Technology (COT).

Educational Purposes and Mobile Hotspots

Activities that are integral, immediate, and proximate to the provision of library services to library patrons include administrative functions. Public library services promote literacy, education, and lifelong learning and include the provision of resources relating to workforce development, 21st century skills, and digital literacy skills²⁰. Administrative functions are intimately connected with the provision of library services, and placing limits on funding for services that are not directly available to public library customers would be very difficult to monitor and would raise cost-allocation challenges.

KDLA advocates for the expansion of the educational services definition to include traditional public library outreach services, or library services to library customers that do not occur on library property. Activities that are integral, immediate, and proximate to the provision of library services to library customers do not always occur in public library buildings.

Several sub-recipients of KDLA's BTOP grant used project funds to invest in laptops and mobile units. Classes offered outside of the library accounted for 13% of the total number, and were offered in community centers, senior centers, churches, housing authorities, Adult Education offices, One Stop centers, and other locations. Cellular data plans were critical to the success of these classes, allowing computer training to take place in locations without Wi-Fi access.

Cellular data plans are also relied upon by bookmobile librarians. With the largest fleet of bookmobiles in the nation, Kentucky has a strong tradition of extending public library service to those who cannot physically come to library buildings. Cell phone data plans enable a commensurate level of service to those offered in public library buildings, especially in terms of circulation and Internet access.

CIPA compliance

KDLA is adamantly opposed to extending CIPA requirements to devices belonging to public library customers. Extending CIPA requirements to these devices would make it exponentially more difficult for public libraries to comply with the provision requiring that the technology protection measure be lifted for bona fide research or other lawful purposes.

Most Kentucky public libraries applying for E-rate discounts do not employ IT staff, and would be unable to the filter on a single device. As the Digital Services Manager of one participating public library said, "[I]t will become increasingly difficult to implement a filter that works across the many different types of devices coming on the market while giving adults (but not children) the option to disable the filter. We can determine a patron's age on library-owned computers by

²⁰ 20 U.S.C. § 9121(5) available at <http://www.gpo.gov/fdsys/pkg/USCODE-2011-title20/pdf/USCODE-2011-title20-chap72-subchapII.pdf> (last visited September 15, 2013).

sites or to disable the filter or if it is shown that an adult user's election to view constitutionally protected Internet material is burdened in some other substantial way, that would be the subject for an as-applied challenge"²².

KDLA strongly recommends maintaining the current CIPA regulations as they apply to library-owned devices using library-owned networks. Another consideration is the accessibility of 3G and 4G connectivity for tablets and smartphones. Without a way to filter traffic on these networks, the potential exists for CIPA-prohibited content to be viewed in public libraries.

KDLA is in agreement with the comments in ¶186: now that public libraries are employing network-level protection more ubiquitously, the 2001 decision that prohibits public libraries from receiving discounts for technology protection measures should be revisited. Anecdotal evidence from BTOP sub-recipients indicated that libraries employing technology protection measures for the first time experienced increased network security and decreased time spent on computer maintenance.

Broadband planning

KDLA recognizes the potential value in increased broadband planning among E-rate applicants. KDLA's BTOP grant benefitted from the work of a consultant from Pomeroy IT Solutions, Inc. The consultant visited all 46 project libraries, performed a needs assessment, and recommended individualized solutions based on their existing infrastructure and collaboration with library staff.

The consultant's evaluation laid the groundwork for a very successful program, and the services were purchased off a SMA, making them available to the Commonwealth's public libraries. However, the cost would have been unsustainable for smaller libraries. The average cost for the initial visit was \$390, and the overall average cost per public library over the course of the grant was \$1,300. For many small public libraries, this amount is roughly equivalent to their entire E-rate discount.

The consultant also served as a liaison between local commercial providers of IT services and the public libraries. As a result of his efforts, many libraries established relationships with local personnel, leading to increased IT support. This was an unexpected outcome of employing a consultant to assist with project planning.

While planning is extremely valuable, KDLA suggests that this proposal contradicts the proposed goal of streamlining administration of the program. If the FCC deems broadband planning is necessary, the costs of a consultant must be supported, or public libraries will leave the program without experiencing the benefits of increased connectivity.

Conclusion

In summary, KDLA:

- Strongly supports the three proposed goals for the E-rate program.
- Advocates for flexible connectivity goals. Bandwidth targets aligned with the population and rural or urban status of public libraries would be achievable and sustainable.
- Strongly supports increased funding to fully support program goals. If barriers to Priority 2 funding were removed and funds were available below the 90% discount level, public library adoption rates for high-speed broadband

²² UNITED STATES V. AMERICAN LIBRARY ASSN., INC. (02-361) 539 U.S. 194 (2003) 201 F. Supp. 2d 401, reversed. Available at <http://www.law.cornell.edu/supct/html/02-361.ZS.html> (last visited September 16, 2013).

would increase significantly. Additional funds, in combination with program reforms, are necessary to preserve and strengthen the E-rate program and its mandate to promote equity of access.

- Supports an “evergreen” Form 471 for multi-year contracts and eliminating the Form 470. These reforms would reduce the administrative burden on Kentucky public library applicants and USAC’s School and Libraries Division.
- Strongly opposes additional bidding requirements for libraries receiving one or no bids for services. Bright line rules or limits would unfairly penalize 79% of public library applicants in Kentucky. Limiting discounts for these libraries contradicts two of the three proposed program goals: ensuring that libraries have affordable access to 21st Century broadband and streamlining administration of the program.
- Opposes the elimination of support for voice services. Voice over Internet Protocol (VoIP) is not yet considered a viable alternative to public-switch telephone service in Kentucky. Until infrastructure improvements are made, public librarians will not divert scarce resources to switch from well-established POTS to a system that is more expensive and less reliable.
- Opposes preferential treatment for consortia applicants. Increased funding for Priority 2 services should not be limited to regional consortia. Restricting access to much-needed funds would contradict the proposed goal of ensuring libraries have access to 21st Century broadband.
- Advocates for the expansion of the definition of educational purposes to include public library outreach activities. Administrative functions are intimately connected with the provision of library services, and placing limits on funding for services that are not directly available to public library customers would be very difficult to monitor and would raise cost-allocation challenges.
- Adamantly opposes extending the provisions of CIPA to include all devices on a library’s network, including those owned by library customers. KDLA urges maintaining the current CIPA regulations as they apply to library-owned devices using library-owned networks.
- Recognizes the value of broadband planning. If the FCC deems broadband planning is necessary, the costs of a consultant must be supported, or public libraries will leave the program without experiencing the benefits of increased connectivity.

The Kentucky Department for Libraries and Archives supports the FCC’s efforts to modernize the E-rate program to address the 21st century technology needs of Kentucky public libraries. KDLA and the Commonwealth’s public libraries stand ready to help the FCC achieve its goals.

Respectfully submitted;



Charlene E. Davis
State Library Services Division Director
Field Services Division Acting Director
Kentucky Department for Libraries and Archives