Good afternoon,

On behalf of the American Library Association please find attached our response to the Request for Comments by the Broadband Opportunity Council, Docket Number: 1540414365-5365-01.

Please contact me with any questions you might have.

Thank you for the opportunity and we look forward to further engagement on the matter.

Marijke Visser

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Before the National Telecommunications and Information Administration and the Rural Utilities Service Washington, D.C. 20230

Broadband Opportunity Council Notice and)	Docket No.1540414365-5365-01
Request for Comments)	

Comments of the American Library Association

America's libraries advance 21st Century broadband deployment, adoption, and use through coordinated, strategic action by the Broadband Opportunity Council

The American Library Association (ALA) agrees with President Barack Obama that affordable, reliable access to high-speed broadband is critical to U.S. economic growth and competitiveness.¹ *But access alone is not enough*. Broadband deployment must be "married" to broadband adoption to truly drive opportunity for all. Otherwise, it is like producing interstate highways and cars without providing driver's training, rules of the road, or instructors. Currently, 70 million Americans are not "digitally ready" for robust online use, which is nearly twice the number (36 million) of people with no online access.²

America's libraries—well over 100,000 strong—are a critical national infrastructure with a long history of connecting people with each other and with diverse physical and increasingly digital resources. They stand ready to further leverage broadband infrastructure to empower and engage communities and contribute to the missions—whether supporting education, entrepreneurship, or health and wellness—of federal agencies.

ALA, the world's largest library association, applauds and strongly supports interagency coordination of broadband adoption and deployment initiatives so that efforts are not unnecessarily duplicated; public funds are spent efficiently; and barriers to participating in federal programs are greatly reduced.

¹ See <u>https://www.whitehouse.gov/the-press-office/2015/03/23/presidential-memorandum-expanding-broadband-deployment-and-adoption-addr</u>.

²See <u>http://jbhorrigan.weebly.com/uploads/3/0/8/0/30809311/digital_readiness.horrigan.june2014.pdf</u>.

We urge the Broadband Opportunity Council (Council) to be both bold and persistent in addressing these challenges. There may be a host of fixes that can be made with today's technology and resources, but we also need to be willing to revisit these issues over time. The Request for Comment (RFC) provides an important opportunity to highlight existing best practices for federal agencies by examining initiatives and programs that have worked and, equally important, ones that have fallen short of agency goals. These best practices also can serve as models for related state and local initiatives.

We appreciate the opportunity to respond to the RFC and encourage the Council to regularly seek input from the broad range of stakeholders in the broadband ecosystem.

In response to the Request for Comment, we recommend the Council:

- Leverage libraries in service of national purposes;
- Develop comprehensive solutions to the three "A's" of broadband adoption challenges—access, affordability, and ability;
- Reduce or eliminate any barriers to competitive broadband providers. Competition is vital to creating *affordable*, *future-proof* broadband opportunity;
- Develop specific strategies to address the needs of rural and tribal communities;
- Enable smart transitions for e-government services; and
- Improve relevant data collection and sharing.

Leverage Library strengths in service of national purposes

From the internet's inception, America's libraries have served as both an on-ramp to the Information Highway and a launch pad for digital exploration and innovation for people of all ages and backgrounds—whether on school campuses or in community neighborhoods. Highcapacity broadband is essential infrastructure to meeting our public missions.

School, college, and university librarians partner with other educators to accelerate student achievement and advance college and career readiness. In communities of all sizes, library staff in nearly 17,000 public libraries collaborate with government and community partners to facilitate *The E's of Libraries*:TM Education, Employment, Entrepreneurship, Empowerment, and Engagement for Everyone, Everywhere.³ Virtually all public libraries provide wired and wireless public access to computers and the internet, diverse technology training and rich digital content ranging from research to language learning to job training and certification programs.⁴

In fact, emerging library services are increasingly dependent on affordable, high-capacity broadband and innovative applications, such as those enabled by Broadband Technology Opportunities Program (BTOP) grants, state research & education networks, Internet2, and US

³ See <u>http://www.ala.org/offices/oitp/Es_of_libraries.</u>

⁴ See <u>http://digitalinclusion.umd.edu/.</u>

Ignite. To name just a few relevant examples to demonstrating the power and relevance of broadband networks, libraries are enabling videoconferencing that connects rural communities to distance education, job certification and legal counsel; developing robust platforms for collaboration, learning, and entrepreneurship; and digitizing and co-creating locally relevant digital content that is then uploaded and shared with the world. All of these services depend on reliable, affordable broadband infrastructure to libraries.

Libraries play a particularly important and transformative function in serving those most vulnerable in our country—including those referenced in Section F of the RFC. As NTIA's studies have consistently found, public libraries are the leading public access point for individuals with no home computer or broadband internet access service (32 percent report using the internet at a public library).⁵ Low-income Americans, people with disabilities, minorities, and those who are unemployed are disproportionately represented among those lacking home broadband access.⁶ A more recent and first-of-its-kind survey also finds that public libraries are the most common public Wi-Fi access point for African Americans and Latinos—with roughly one-third of these communities using public library Wi-Fi.⁷

In rural communities, libraries are often the *only* place to offer free public computer and internet access.⁸ Further, new research suggests a link between libraries and rates of home broadband adoption in the most remote rural counties.⁹

Taken together, investments and policies that support affordable high-capacity broadband connections for libraries represent a cost-effective strategy for national initiatives. Why not leverage a nationwide trusted infrastructure already in place for which new services often may be implemented for only modest incremental costs? Further, federal agency collaboration with and funding for libraries to support home broadband adoption, relevance, and meaningful use can particularly benefit vulnerable populations.

The A's of Broadband Adoption and Deployment: Ability, Access, and Affordability

Broadband adoption should be married to all federal (and state/local) broadband deployment efforts. Access is essential, but it is not adequate. Adoption and meaningful use are required to advance education, employment, and full civic participation.

¹⁷See <u>http://www.wififorward.org/wp-content/uploads/2014/01/Communities-and-Wi-Fi-Final.pdf.</u> ⁸See

⁶ File, Thom and Camille Ryan, "Computer and Internet Use in the United States: 2013," American Community Survey Reports, ACS-28, U.S. Census Bureau, Washington, DC, 2014. Available at <u>http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf</u>.

http://www.ala.org/news/sites/ala.org.news/files/content/mediapresscenter/presskits/PLFTAS%20KEY%20FINDIN GS_FINAL.pdf.

⁹ See <u>http://blandinonbroadband.org/2015/04/08/study-shows-connection-between-rural-libraries-and-broadband-adoption/</u>.

- Access must be affordable for any adoption efforts to be sustained. Libraries play two critical roles with regard to affordability. First, libraries are a test bed for non-adopters to become familiar with various technologies in a trusted environment with access to expert assistance from library staff. Second, for some people even if you build it, they will not come, and the library is there to provide free public access to technology resources.
- Libraries should be defined as eligible entities and included in broadband adoption efforts—whether direct funding is provided or partnerships that include libraries are given preference in federal programs.

Ability: Digital literacy is key to broadband adoption

In reference to section D, questions 16 and 17, ALA strongly encourages each agency to address broadband adoption as part of its routine activities and create a culture among federal agencies that supports digital inclusion¹⁰ efforts regardless of whether the agency directly supports such efforts through dedicated funding allocations or if it partners with another agency to do so. For example, moving government services and information online requires both physical access and the ability to access the resources. It is in the interest of every government agency to either directly support digital literacy or to coordinate with agencies that do.

Additionally, state and local governments have an equally strong incentive to incorporate digital inclusion initiatives into existing programs. ALA encourages agencies to leverage existing resources, nationally and at the state level (e.g., state library agencies), rather than duplicating programs with new initiatives. The Council should lead efforts at the federal level while also promoting state action.

Similar to the directive in President Obama's memorandum requiring agencies to complete a comprehensive survey of rules related to broadband deployment,¹¹ ALA recommends the appropriate agency or other entity (e.g., the Office of Management and Budget, Office of Science and Technology Policy, National Academy of Sciences) complete a comprehensive report on existing broadband adoption programs and policies. Such a report should determine where gaps exist and support the development of best practices for promoting broadband adoption efforts in Executive Branch agencies but also in independent government agencies and as appropriate through public/private partnerships.

¹⁰ALA defines digital inclusion as "an overarching approach to ensure that all members of a community are able to access, use, and understand digital technologies and content without cost, social, accessibility, or other barriers. Digital inclusion consists of policies, programs, and actions developed to close the digital divide, promote digital literacy, and ensure digital equity and readiness." *See*

http://digitalinclusion.umd.edu/sites/default/files/DigitalInclusionIssueBrief2014.pdf for additional information regarding libraries and digital inclusion. *See*

http://digitalinclusion.umd.edu/sites/default/files/uploads/2013DigitalInclusionNationalReport.pdf for the full report. ¹¹ See <u>https://www.whitehouse.gov/the-press-office/2015/03/23/presidential-memorandum-expanding-broadband-deployment-and-adoption-addr</u>.

In order to increase broadband adoption, ALA supports building on earlier initiatives such as NTIA's BTOP and the interagency digitalliteracy.gov project.¹² As other agencies consider how to best support broadband adoption, we suggest that rather than create new initiatives, agencies first focus on augmenting these earlier investments. However, additional investment will be necessary to address gaps earlier initiatives have not filled.

Specifically, ALA urges the Council to identify available funding sources across agencies and target such resources toward digital literacy programming in libraries. The Council should also identify and create opportunities for partnerships with local libraries as a cost-effective and efficient means to provide digital literacy training in communities across the country. Libraries are well versed in community needs and tailor programming to address local priorities. Libraries are a critical bridge in broadband adoption efforts providing physical access (the only source in 62% of communities) and the full spectrum of skills development—from basic computer skills to advanced cognitive understanding—necessary to effectively use the resources available online.

Digital literacy is a library core service with virtually all libraries providing either formal or informal training.¹³ As such, ALA's experience shows that the most successful digital literacy programs are not stand-alone training but are those that are tied to specific purposes and directly respond to local need; are a combination of formal and informal training or "point of need" training; and provide ample time for practicing and refining newly acquired skills.¹⁴

Some examples of existing programs that have been successful and should be continued, augmented, or replicated, or initiatives in the early implementation phase are:

• The Institute for Museum and Library Services (IMLS) has invested significant resources in promoting digital inclusion across the country.¹⁵ ALA encourages continued investment in and support of capacity building among local libraries so they can sustain initial investments. ALA also supports research to support state and local efforts and increase the cost-effectiveness of investments. In order to ensure that IMLS is able to

¹² NTIA and other federal partners developed DigitalLiteracy.gov as a valuable resource for practitioners providing digital literacy training and services in their communities. The portal includes best practices that grantees are implementing in their projects, and other useful tools. NTIA collaborated with the U.S. Departments of Education, Agriculture, Energy, Health and Human Services, Housing and Urban Development, and Labor, as well as the Corporation for National and Community Service, the Federal Communications Commission, and the Institute of Museum and Library Services. The portal offers online resources on many topics, including workforce training and online job searching. NTIA Also developed a Broadband Adoption Toolkit based on the lessons learned from 100 BTOP grantees from across the country. *See* http://www.ntia.doc.gov/press-release/2013/ntia-broadband-adoption-toolkit-shares-best-practices-across-us.

 ¹³ See <u>http://www.districtdispatch.org/2013/01/on-the-front-lines-of-digital-inclusion/</u>
¹⁴ Ibid.

¹⁵ Working with the University of Washington Information School and the International City/County Management Association, the Institute of Museum & Library Services produced Building Digital Communities: A Framework for Action (available at <u>http://www.imls.gov/about/building_digital_communities.aspx?id=9&category=6&pg=1</u>). It also has funded the seminal Digital Inclusion Survey and digital literacy training tools (*see* <u>http://www.imls.gov/supporting_trainers_to_bridge_the_digital_divide.aspx</u>), among other investments.

support this critical work, ALA recommends that funding for the Library Services and Technology Act (LSTA) be restored to FY10 levels (pre-sequestration) of \$213.5 million.

- The Workforce Investment and Opportunity Act (WIOA) explicitly defines libraries as eligible entities and allows them to serve as "one-Stop partners" (i.e., partners to One-stop Centers, which provide a suite of job training and job search services) and recognizes libraries as models of digital technology implementation. The legislation also includes a definition of "workforce preparation activities" that specifically includes digital literacy skills and permits governors to use statewide funds to coordinate with library employment and training activities.¹⁶ Forthcoming regulations from the Department of Education and Department of Labor related to WIOA implementation should help ensure that libraries are leveraged properly to maximize the impact of WIOA investments and address skills gaps identified in the 2015 report "Making Skills Everyone's Business" from the Office of Career, Technical and Adult Education.¹⁷
- The Department of Housing and Urban Development (HUD) has initiated a Digital Opportunity Demonstration ("Demonstration")¹⁸ to narrow the digital divide for children and their families living in HUD assisted housing. The Demonstration wisely incorporates digital literacy as key to addressing the perception and relevance adoption barriers as well as the need for specific skills training. Further, the Demonstration provides a platform for local governments, organizations, and others to collaborate in developing strategies to close the digital divide in their respective communities. ALA supports this effort to test innovative approaches that could be scaled nationally.

Public-private partnerships build capacity but should be carefully integrated in government initiatives. ALA recommends that prior to initiating a new partnerships, the lead agency assess existing community or state assets and leverage these rather than invest resources in developing competitive or duplicative programs. In the case of local libraries for example, libraries are invested in their communities, dedicated to sustaining community resources, and are intimately familiar with community demographics. Local knowledge is essential for successful programs that involve private entities.

Access and Affordability: Promote Broadband Deployment and Increase Competition

ALA supports initiatives and programs that leverage existing community assets and markets for telecommunications services and we encourage the Council to build on and improve upon investments already made to ascertain current availability of high capacity broadband infrastructure such as the work of the FCC and NTIA.¹⁹ However, in cases in which high-capacity broadband is either not available or not affordable we encourage specific interventions.

¹⁶ The Workforce Investment and Opportunity Act. <u>https://www.congress.gov/bill/113th-congress/house-bill/803</u> ¹⁷ See <u>http://www2.ed.gov/about/offices/list/ovae/pi/AdultEd/making-skills.pdf</u>.

¹⁸ Department of Housing and Urban Development [Docket No. FR–5859–N–01], *Advance Notice of Digital Opportunity Demonstration*. Available at <u>http://www.gpo.gov/fdsys/pkg/FR-2015-04-03/pdf/2015-07719.pdf</u>.

¹⁹ See the National Broadband Map website available at <u>http://www.ntia.doc.gov/category/national-broadband-map</u>. See also The FCC E-rate Maps of Fiber Connectivity to Schools aand Libraries. Available at <u>https://www.fcc.gov/maps/E-rate-fiber-map</u>.

In terms of Section B of the RFC, we see a need to address the lack of competition among service providers, particularly in rural and remote areas, so as to drive down costs for broadband and encourage new entrants or otherwise incent investment in previously unserved or underserved areas. We therefore encourage the Council to review the recent efforts of the FCC to address these issues.²⁰

There is an inconsistency regarding government guidelines (ref. Question 8) for what constitutes broadband. We support the FCC's current definition of broadband as 25 Mbps down, 3 Mbps up. Frankly, we find the USDA's broadband definition for rural areas of 4 Mbps down and 1 Mbps up to simply be too slow. We encourage all Executive Branch agencies to adopt the FCC's definition of broadband and to adopt the Commission's inevitable upward revisions. Additionally, there also should be an increasing tilt toward balanced download/upload broadband benchmarks as content creation becomes an increasingly robust activity at the local level.

We also take this opportunity to call attention to the vastly different nature of broadband needs for libraries as multi-user environments (with an average of 20 computers per location) and the broadband capacity necessary for the end user to have a quality experience as compared to home broadband capacity.²¹ We fully support the recent capacity goals adopted by the FCC for libraries: 100 Mbps for libraries serving populations of 50,000 or less and 1 Gbps for libraries serving populations greater than 50,000.²² We encourage the Council to be equally futurefocused as we can anticipate that broadband needs will only continue to grow.

Because fiber is often installed along public right-of-ways (ref. Question 11), we strongly encourage any highway construction projects be required to work with local communities to ascertain if it would be beneficial to install fiber to the community as part of the overall construction. We also encourage close cooperation and collaboration between federal broadband build-out programs.

Question 18 in the RFC references barriers that exist at the state and local level to broadband deployment. There are non-federal impediments that negatively impact broadband deployment. One of the major issues here is that approximately 20 states have state statutes that prevent or severely impede communities from building their own broadband networks. The FCC took action in February 2015 to pre-empt²³ the laws in Tennessee and North Carolina that prevented communities from meeting community demand for broadband service. We encourage federal Executive Agencies to support any future petitions filed with the FCC from communities in other states seeking preemption of these restrictive laws in their respective states.

²⁰ See <u>https://www.fcc.gov/e-rate-update</u>, particularly the second *E-rate Modernization Order*, December 11, 2014. ²¹ See <u>http://www.ala.org/offices/sites/ala.org.offices/files/content/Speed_Test_FINAL_0.pdf.</u>

²² See *E-rate Modernization Order*. July 11, 2014 at ¶37. Available at

https://transition.fcc.gov/Daily Releases/Daily Business/2014/db0723/FCC-14-99A1.pdf.

See "FCC Grants Petitions To Preempt State Laws Restricting Community Broadband in North Carolina and Tennessee." February 26, 2015. Available at (https://apps.fcc.gov/edocs_public/attachmatch/DOC-332255A1.pdf.

Develop specific strategies to address the needs of rural and tribal communities

Libraries in rural and remote areas routinely report additional challenges to receiving the broadband capacity they need to provide adequate access to online resources. Issues for libraries range from no access to high-capacity broadband, access that is cost-prohibitive, and a general lack of competition among service providers. In 2013, half of libraries report broadband speeds of 10 Mbps or less and almost 1 in 5 rural libraries reported a speed of 1.5 Mbps or less.²⁴

Question 21explicitly references building capacity in state, local, and tribal governments and cites technical assistance as a possible area of focus. While rural and small libraries, which make up 81 percent of all public libraries, are poised to be powerful partners in closing the digital divide in their communities, many lag far behind necessary broadband capacity. In addition to the above mentioned barriers, rural and small libraries very often lack the expertise to effectively assess current broadband capabilities, plan for the future, and manage complex procurement processes necessary to obtain high-speed broadband, as it is not feasible for a small library to employ specialized technical and administrative staff. This barrier is especially true for those furthest behind the broadband capacity goals—most often small and rural libraries.

As we have learned in FCC proceedings, there is a need to balance simplicity and accountability in application processes. Particularly if we hope to reach those most disconnected, we need to lower the barrier to participation by small and rural institutions that seek to engage and bridge digital gaps. Another lesson from the recent E-rate modernization proceeding that should be considered by federal agencies is the possibility of providing additional funding to incent state and tribal government investments in broadband deployment.²⁵

Tribal lands (Questions 18-20)

One of the challenges for tribal libraries is qualifying to participate in the E-rate program. Tribal libraries must be eligible to receive funding through the state library agency and must meet the definition of a library under the 1996 Library Services and Technology Act (LSTA).²⁶ While we recognize the merit in state-level decision making, some tribal libraries are precluded from participation in the E-rate program.

An IMLS-supported study²⁷ on the digital inclusion needs in Native communities conducted by the Association of Tribal Archives, Libraries, and Museums (ATALM) in 2014 found that only 15 percent of reporting tribal libraries receive E-rate discounts. This limited participation can be attributed to complicated eligibility requirements, a general lack of awareness, and tribal

²⁴ See ALA comments to FCC Further Notice of Proposed Rulemaking, September 15, 2014, Appendix. Available at <u>http://apps.fcc.gov/ecfs/document/view?id=7522678477</u>.

²⁵ See <u>https://www.fcc.gov/page/summary-second-e-rate-modernization-order</u>.

²⁶()See Pub. L. 104-208, Sec 213 (2). Available at <u>http://www.gpo.gov/fdsys/pkg/PLAW-104publ208/pdf/PLAW-104publ208.pdf</u>.

²⁷ See Digital Inclusion in Native Communities: The Role of Tribal Libraries. Available <u>http://www.atalm.org/sites/default/files/Report%20for%20Printing.pdf</u>.

administration complexities. However, as the study found, when tribal libraries are able to access E-rate, it makes a significant contribution to digital access and opportunities in Native communities. As one respondent indicated, "Because we are on a remote island in the Bering Sea that is accessible only by air and water, the Internet provides access to a world we otherwise would not be able to reach. We would not have internet connections without E-rate funding." Because of new rules adopted by the FCC, tribal libraries that participate in the program and receive funding for construction projects from tribal governments or federal agencies, federal agencies should leverage this opportunity to help increase desperately needed deployment to tribal lands, specifically last mile construction to tribal libraries, and commit to be a source for the additional funding that the E-rate program will match.

In consultation with ATALM and the American Indian Library Association (AILA), ALA encourages IMLS to work with relevant federal and independent agencies to revisit the issue and develop a specific plan of action to ameliorate the situation. ATALM and AILA are committed to assisting IMLS in finding a manageable solution for tribal libraries that choose to participate in the E-rate program.

Smart transitions for e-government services

(Question 4)

ALA urges the Council to identify methods of supporting state and/or local libraries that facilitate the use of online government information (i.e., e-government). An internet connection is necessary to learn about and participate in a growing number of government services. As critical points of online access and assistance when government agencies move their services online, libraries increasingly find themselves responsible for helping the public navigate their websites.²⁸ The library community has provided leadership in filling the gap creating by shifting government services and information online without adequate safeguards. For example, Lib2Gov serves as a repository of government information concerning healthcare, disaster preparedness, immigration, social security and taxation. Additionally, the site offers practical insight to libraries looking to establish e-government services. Several agencies serve as partners in the Lib2Gov project—including the Internal Revenue Service (IRS), the U.S. Government Publishing Office (GPO) and the Social Security Administration (SSA)—and individuals from these agencies periodically participate in webinars hosted through the site.²⁹

One opportunity to enable an e-government "safety net" may be found in the Pew Center for the States' concept of "linked investment." They note that states can save money on incarceration by moving inmates to lower cost – and more effective – community-based programs. The key to

²⁸ Gordon, Elana. "Libraries Serving as Obamacare Information Hubs," Governing, February 14, 2014. See http://www.governing.com/news/headlines/american-turn-to-libraries-for-health-insurance.html. Also see http://digitalinclusion.umd.edu/sites/default/files/EgovernmentIssueBrief2014.pdf. Also see http://digitalinclusion.umd.edu/sites/default/files/EgovernmentIssueBrief2014.pdf.

saving the money on prisons is "linking" those savings to increased investments in other programs.

Over the next five and ten years, more and more government services will go online. These changes overall should save money and increase service quality – but they will also leave some people behind – those with limited broadband access and/or skills. Libraries have long provided both the public access and the social support for people accessing government services – often doing so with little or no financial and organizational support. This "shadow mandate" for public libraries has been well documented in the literature.³⁰

As government agencies and organizations move additional services online, a portion of the planned savings should be allocated to create a new fund that ensure public access and support for those services will be available at public libraries. In the cases where no savings are expected, a portion of the project budget should still include a corresponding investment in public access and support. ALA has some specific ideas and will be happy to provide further detail on request.

Improve data collection and sharing

Section H of the RFC asks several important questions related to measuring broadband availability, adoption and speeds. ALA asserts that there are two aspects of public interest: mapping broadband to community anchor institutions and measuring the quality of that broadband in terms of the public user experience.

First, we are concerned the mapping of broadband for community anchor institutions (CAIs) will not be maintained in the future. Too often the focus is strictly on residential consumers and CAIs are an afterthought, at best. Considering the substantial and necessary investments made in broadband networks to support education, research, learning and telehealth needs, there should be a plan for documenting progress against broadband benchmark goals. There should be a consistency in the questions asked by measurement and mapping organizations to ensure that the results are comparable from state to state.

Secondly, we need to better understand how subscribed broadband speeds relate to the user experience. The 2015 "Broadband Quality in Public Libraries: Speed Test Findings" report by the ALA and the University of Maryland Information Policy & Access Center sought to provide

³⁰ "Cost shifting onto community organizations needs to be met with additional funding of those organizations. Government agencies, school systems, and large employers increasingly privilege web-based access to many basic services, including job and benefits applications. Because many of the constituents for these services have limited Internet access and/or limited Internet proficiency, these measures often shift human and technical support costs onto libraries and other community organizations that do provide access, in-person help, and training. Fuller funding of these intermediaries is the best means of assuring a meaningful broadband safety net and a stronger pathway to adoption in these communities." Available at <u>http://www.ssrc.org/publications/view/1EB76F62-C720-DF11-9D32-001CC477EC70/</u>

insights into the broadband connectivity quality of service that users experience in public libraries through the use of speed test tools.³¹ Among the findings of this small study:

- There is *significant* variation in captured speed data among libraries of all sizes; the captured speed data for direct (wired) and Wi-Fi connections; and the captured speed data between download and upload speeds.
- The median captured speed delivered to individual users' devices is significantly less than the subscribed network speed.
- In most cases, quality of service degrades at peak use times, sometimes dramatically.

The research points to the need for more in-depth study and analysis of broadband connectivity in public libraries (and other community anchor institutions that provide public broadband access) to ascertain the quality of broadband and network services. Towards that end, we encourage the FCC to expand its *Measuring Broadband America* (2011-2014) research initiative to include community anchor institutions such as public libraries. Such research would provide a definitive assessment of the quality of broadband services in public libraries and facilitate further development of the E-rate program into the future. Similarly, we think this could provide valuable information to the Department of Education and the Department of Health and Human Services, for instance, regarding K-12 schools and telehealth centers, respectively.

Conclusion

ALA thanks the Council for the opportunity to provide input on expanding broadband adoption and deployment to communities across the country. Success hinges on addressing both simultaneously and focusing on all three of the A's of adoption and deployment; ability, access, and affordability. Libraries are committed to assisting and should be leveraged as a strong partner for success.

Finally, we encourage government agencies to be future focused so that initiatives accelerate innovation. We recognize the nature of technology is dynamic, and programs need periodic review and refresh. Regulations, definitions, and review processes should allow for emergent technologies to be facilitated and encouraged.

Sincerely,

Emily Shehetry

Emily Sheketoff Director, ALA Washington Office

³¹ See <u>http://digitalinclusion.umd.edu/content/ipac-publishes-broadband-quality-public-libraries-speed-test-findings-and-results</u>.