Broadband is essential infrastructure for libraries. Whether advancing education, employment, entrepreneurship, empowerment, or engagement (The E’s of Libraries®), the work of libraries demands robust and reasonably-priced internet connectivity.

A lynchpin of sufficient library broadband is the federal E-rate program. Mandated by the 1996 Telecommunications Act, the E-rate program enables affordable access to telecommunications for public libraries and K–12 schools, with greater financial support for high-poverty areas. Policy makers in the Federal Communications Commission (FCC), Congress, the White House, U.S. Department of Commerce, and elsewhere are urged to preserve and strengthen the E-rate program, empowering libraries and schools to provide online opportunities for all Americans, whether in urban, suburban, rural, or tribal areas.

E-rate: Powering Library Technology Access
The Nashville Public Library upgraded all broadband connections at 21 branches to at least 100 Mbps, supporting 1,100 public access computers and many additional services—a significant upgrade that was only possible with the assistance of the E-rate program.

The Pima County Public Library in Tucson leveraged E-rate funds to upgrade its wireless network. In fiscal year 2015–16, the library had 16,720 laptop internet sessions, 2,025,514 wireless sessions, and computer class attendance of 18,678.

Connectivity for Educational and Employment Opportunity
At the Gregory (S.D.) Public Library “Most students are required to do their homework and submit it online. However, many of our students have no Internet access at home, so, although the school may have provided a tablet or laptop, they have no way of completing the task.” Students come to the library to use the free Wi-Fi and take advantage of study space and other library resources. In Indiana, the

[Image: Nashville Public Library]
DeKalb County Central United School District initiated one-to-one programming for older students and has implemented eLearning for all ages to make up for weather cancellations. However, without the internet access and other resources at the Eckhart Public Library, many students could not complete their online assignments.

Libraries assist post-secondary and continuing education students as well. In Hodgenville (Ky.) Ethan Napier, a student at Elizabethtown Community and Technical College and a U.S. Army Reserves member, uses the LaRue County Public Library for internet access. He has internet access at home, but in this rural part of Kentucky he doesn’t have any choice of provider and his slow 700 Kbps connection at home is weak and unreliable. The faster, more reliable library internet connection allows Ethan to take online self-development classes for the Reserves, submit college coursework, and take tests without fear that his connection will be slow or time out.

Libraries Cultivate Vibrant Entrepreneurship
At the Kirstein Business Library and Innovation Center (KBLIC) at Boston Public Library, broadband is essential to patrons developing startup ventures, several of whom regularly make use of the library’s co-working space with free Wi-Fi, worktables, and white boards. Many startups use cloud-based communication and workflow management tools. One startup at KBLIC, for example, is developing an online marketplace for brick and mortar shops that do not have an online presence. The library’s robust internet connection enables the startup’s backend web development.

Meanwhile, the Santo Domingo Pueblo (N.M.) Library envisions a future where a high capacity broadband connection at the library will expand their capacity to support local entrepreneurs: “In a pueblo where many people are farmers, potters, and jewelry makers, the library helps them connect to the wider world. . . . With a stronger Internet connection . . . [the library] could help artists create their own websites featuring their work so they could sell year-round, not just during market days.”

Opportunities for Rural Areas and Tribal Lands
While library broadband provides important benefits everywhere, people in rural and tribal areas have the greatest need for improved connectivity. In Nenana (Ak.) library internet is a critical link to employment opportunities. Most jobs are in Fairbanks, 55 miles away. The ability to apply for work online via the library helps save residents unnecessary travel time and expense and complies with many employers’ online application processes. In Cherryfield (Me.) community members use library broadband for a variety of employment-related purposes, including applications for work, unemployment benefits, taxes, state licenses for trades and professions, and other online forms. The library’s video conferencing units even allow people to conduct job interviews or attend remote face-to-face meetings without leaving town. In rural areas, when it can take two hours or more to get to a meeting location, services like this at the local library make a significant difference.

Liliana Hurtado visited the Dodge City (Kan.) Public Library three times a week to take GED courses and practice tests on LearningExpress, an online learning resource database provided by the State Library of Kansas. Liliana was hired by the Dodge City Middle School as a para-educator after completing her GED. Not stopping there, she is pursuing a degree at a local community college to become a dental hygienist.

“In today’s high-speed world, there is no commodity more valuable than information, which is why broadband connectivity is more important than ever before—particularly in a rural state like Maine. In order for our communities and students to keep pace, schools and libraries need fast and reliable access to the Internet. We’re very pleased that the FCC is releasing these critical [E-rate] funds to help accomplish that.”

—SENS. SUSAN COLLINS (R-MAINE) AND ANGUS KING (I-MAINE)
Libraries serve America’s communities by providing opportunities to advance education, employment, entrepreneurship, empowerment, and engagement (The E’s of Libraries®). These vital services depend on robust broadband internet access. The federal E-rate program is a lynchpin to robust and reasonably-priced broadband access for libraries. The overall impacts of the 2014 E-rate modernization still taking effect, it is premature to consider additional program changes.

Libraries also use their broadband to partner with other educational institutions to enable distance learning. E-rate helps the Quapaw (Okla.) Tribal Library provide high-quality internet to the community. Building on this resource the library is now partnering with Northeastern Oklahoma A&M College to make online classes including videoconferencing available. This allows area residents to earn college credit from the library, instead of driving to campus, which can be very difficult for students without reliable transportation. The library’s partnership with the college also provides tutors to assist those students who need extra help and library staff are authorized test proctors.

**Activating Innovation and Mitigating Disaster**

Robust broadband allows libraries to serve communities in innumerable other ways. For example, the Curry Public Library in Gold Beach (Ore.) used E-rate funds to install two dedicated fiber lines that open up new community possibilities. The library reports: “We are in the process of expanding our technology offerings by adding a learning center with a 170-person conference space and robust computer lab. [Previously] no one in our community had access to a network that could support something that big.” In Ohio, E-rate resources supported the library broadband connection that makes “Listen Columbus” possible. This project of the Upper Arlington Public Library is the state’s first digital library collection focused on curating and providing access to local music, featuring some of the top musicians in Central Ohio.

E-rate supported broadband allows libraries to assist their communities in times of natural disaster, leveraging their network connectivity to act as community information safety nets. In August 2016, multiple tornadoes struck Kokomo (Ind.) forcing hundreds of residents to take refuge in an emergency shelter. The Kokomo Public Library relocated its mobile lab with laptops and hotspots to the shelter so that people could notify family that they were safe, use social media to connect with missing friends, and apply for FEMA assistance.

**Improving the Effectiveness and Efficiency of the E-rate Program**

In 2014, the FCC adopted two sweeping orders to modernize the E-rate program. Initial feedback from the library community indicates the modernization is having a positive impact, especially in increasing broadband capacity and Wi-Fi access. Even so, not all libraries have yet benefited from the new provisions. The library community looks forward to working with policy makers to ensure the effectiveness and efficiency of the E-rate program, as well as the broader context of broadband policy.

“The return on . . . investment [for E-rate] is immeasurable. Internet [access] is an essential library service that provides job resources, homework help, research information and much, much, more. It returns the best bang for the buck and will only grow more useful, and used, in the future.”

—MATT NOJONEN, DIRECTOR, LEAVENWORTH (KAN.) PUBLIC LIBRARY

**TAKEAWAYS for decision makers**

- Libraries serve America’s communities by providing opportunities to advance education, employment, entrepreneurship, empowerment, and engagement (The E’s of Libraries®).
- These vital services depend on robust broadband internet access.
- The federal E-rate program is a lynchpin to robust and reasonably-priced broadband access for libraries.
- With the overall impacts of the 2014 E-rate modernization still taking effect, it is premature to consider additional program changes.
The 120,000 libraries across the United States are a powerful force in addressing public policy priorities. Libraries advance Education, Employment, Entrepreneurship, Empowerment, and Engagement for Everyone, Everywhere—The E’s of Libraries®.

Libraries serve America’s cities, towns, counties, and states; on school and college campuses; on military bases; in hospitals, government agencies, corporations, and other institutions. Library professionals provide diverse programs, services and resources tailored to community needs.

The American Library Association (ALA) is the oldest and largest library association in the world, with more than 57,000 members. The ALA Annual Conference, held in June, typically attracts over 20,000 participants. ALA’s Washington Office engages federal and national decision makers and influencers.

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