Strategic vision and careful management have helped U.S. public libraries weather the storm of the Great Recession, supporting their role as a lifeline to the technology resources and digital skills essential to full participation in civic life and in the nation’s economy. Libraries continue to transform lives by providing critical services and innovative solutions to technology access, in spite of years’ worth of consecutive and cumulative budget cuts.

More Americans than ever are returning to their libraries for access to essential technology services not found elsewhere in the community, including free computer and Internet access, technology training, and assistance with job-seeking and e-government services.

The 2011-2012 Public Library Funding & Technology Access Study was conducted by the American Library Association (ALA) Office for Research & Statistics and the Information Policy & Access Center at the University of Maryland. Begun in 1994, this annual study is the largest existing study of Internet connectivity in public libraries. Its findings provide an annual “state of the library” report on the technology resources brokered by public libraries and the funding that enables no-fee public access to these resources.

Facing fiscal challenges on all sides — local, state, and federal — public libraries strive to meet the expanding technology needs of their communities:

- Public computer and Wi-Fi use increased last year at more than 60 percent of libraries.
- More than 90 percent of public libraries now offer formal or informal technology training.
- Over three-quarters of libraries (76.3 percent) offer access to e-books, a significant increase (9.1 percent) from last year. Additionally, e-book readers are available for check-out at 39.1 percent of libraries.

After more than four years of consecutive budget cuts, it is unclear whether libraries will be able to recover the funding needed to return to pre-recession levels of staffing, open hours, collections and technology services. While a segment of U.S. public libraries reported budget improvements, many libraries continue to grapple with the negative, cumulative effect of ongoing budget woes:

- Twenty-three states report cuts in state funding for public libraries this year. For three years in a row, more than 40 percent of states have reported decreased public library support.
- A majority of public libraries (56.7 percent) report flat or decreased budgets, a slight improvement from the 59.8 percent reported last year.
- Over 65 percent of libraries report an insufficient number of public computers to meet demand some or all of the time.
- Overall, 41.4 percent of libraries report that their Internet connection speeds are insufficient some or all of the time.

Funding Cuts Restrict Access

The 2011-2012 study indicates improvement among libraries reporting reduced open hours (9.1 percent), compared to 15.9 percent last year. For the fourth year in a row, urban libraries report the highest numbers of libraries (16.5 percent) that decreased open hours; however, this reflects an improvement when compared to last year’s 31.7 percent.

Nationwide, over 62 percent of libraries report offering the only free Internet access in their community. The impact of decreased open hours is substantial, since just 6 percent of U.S. public libraries, primarily urban libraries, serve almost 60 percent of the population. Millions of people are denied essential library services — from access to e-government social services sites, to literacy resources, to training to meet the demands of today’s global marketplace.

This impact is greater for those states recording a high percentage of reduced hours for two years in a row, including: Nevada (54 percent, and 27.7 percent last year); Georgia (30.3 percent, and 31.5 percent last year); Florida (19.5 percent, and 21 percent last year); and California (18.7 percent, and 44.5 percent last year).

Increasing Demand for Digital Literacy Skill Training

In an information and Internet-driven age, where information, services, and resources are increasingly only available online, people who lack digital knowledge and skills struggle.

In the 2011-2012 survey, over 36 percent of public libraries report increasing numbers of patrons enrolling in technology training classes. Interviewed library staff in Georgia and Idaho also report that requests
for one-on-one assistance have increased, with many requests from those who lack basic computer skills: seniors who need to order medications online; truck drivers required to renew their commercial driver’s license online, or displaced manufacturing workers who need to apply for jobs online.

Over 44 percent of U.S. public libraries support digital literacy skill-building through a wide range of formal technology training classes:

- Libraries (67 percent) offer training in general computer skills (e.g., how to use the mouse or keyboard, printing).
- Libraries (73.3 percent) offer training in general software use (e.g., word processing, spreadsheets).
- Libraries (86.5 percent) offer training in general Internet use (e.g., e-mail set up, Web browsing).

Many libraries combine formal and informal training to create opportunities for learners to practice their newly acquired skills. Additionally, many classes link these skill-building activities to specific outcomes, such as employment or financial literacy.

However, for libraries with flat or decreasing budgets, a lack of staff, equipment, space, and insufficient Internet speeds provide significant barriers to improving digital literacy through technology training.

For the third consecutive year, libraries report that services for job-seekers remain the top-rated Internet service. Public libraries are often the only source for training and employment resources, especially after the drastic cuts to federal spending for training over the last six years, including $1 billion cut since 2010. Library services for job-seekers include:

- Access to job databases and other online job resources (92.2 percent).
- Patron assistance to complete online job applications (76 percent, an increase of nearly 10 percent from two years ago).
- Collaboration with outside agencies or individuals to help patrons seek or attain employment (34.3 percent).

Digital literacy skills are essential for accessing online government services. Public libraries continue to expand e-government assistance, as well as partnerships with other agencies to support these services:

- Almost all libraries (96.6 percent) provide assistance to patrons applying for or accessing e-government services, an increase of nearly 16 percent from last year.
- Over 70 percent of libraries report that staff provide assistance in completing government forms.
- Nearly 31 percent of libraries partner with government agencies, non-profit organizations, and others to provide e-government services.

However, almost half of all libraries report that they do not have enough staff, as well as staff expertise, to help patrons effectively use employment and e-government services.

“Yes, you can access the Internet elsewhere, but will the Starbucks’ barista or McDonald’s server help you set up your first e-mail account, submit your first online job application, or evaluate reliable sources of information?” says Lee Moon, assistant director, Three Rivers (GA) Regional Library System.

National initiatives have been launched to help communities face the challenges to their efforts to provide digital opportunity for all of their residents. In March 2012, the Institute of...
Museum and Library Services (IMLS) released *Building Digital Communities* designed to raise awareness about the access essential to digital communities and identify goals and strategies for focus in digital inclusion efforts (e.g., economic and workforce development, education and civic engagement). Last year, the Department of Commerce’s National Telecommunications and Information Administration (NTIA), in collaboration with other federal agencies, launched DigitalLiteracy.gov, a central website for practitioners and the general public to encourage the sharing of content and best practices in teaching digital literacy skills.

Libraries Connect Through Mobile Apps and Social Networks

More U.S. libraries of all types are selecting social media applications and tools to increase community interaction, enhance access to library services and improve channels for information dissemination.

This year, for the first time, the study asked libraries to report on their use of specific kinds of social media tools:

- A majority of public libraries (70.7 percent) report using social networking tools (e.g., Facebook, Hi5) to connect with library users and the general public, and for marketing purposes.
- Almost half of public libraries (45.6 percent) report using communication tools (e.g., Blogger, Wordpress, Vox, Twitter) to reach the public.
- Over a third (37.3 percent) report using photography sites (e.g., Flickr, Zoomr).
- Nearly 28 percent report using video sharing tools (e.g., YouTube, Vimeo, and Openfilm).

The study also collected data this year on how libraries rely on mobile technologies to reach their online users and the community at large:

- Over 14 percent of libraries report their websites are optimized for mobile devices.
- Nearly 12 percent report they use scanned codes (e.g., QR codes) for access to library services and content.
- Over 7 percent report they have developed smartphone apps for access to library services and content.

The results of a recent Pew Research Center survey points to the importance of expanding use of mobile technologies. Nearly half of American adults (46 percent) own smartphones as of February 2012, an increase of 11 percent from May 2011. Nearly every major demographic group experienced a notable uptick in smartphone market penetration over the last year.1

David Lee King, digital branch and services manager, Topeka and Shawnee County (KS) Public Library, reported in his April 5, 2012 blog post that in March 2012, slightly more than 11 percent of their library website visits were via a mobile device. Referencing the Pew smartphone survey, King said: “If you haven’t yet started building with mobile in mind, now is definitely the time to start — you are very close to alienating almost half your customers. They are interacting with their favorite sites online using their smartphone (think Facebook, Amazon, YouTube, etc.).”

Urban/Rural Digital Divide

The current study depicts an emerging digital divide: rural libraries (which account for nearly 50 percent of all public library outlets in the U.S.), can neither provide adequate volume of technology training to the public nor keep pace with new technologies. These inadequacies continue to negatively affect the progress of rural libraries to build digitally inclusive communities. For example:

- Nearly 32 percent of rural libraries, as compared to 63.2 percent of urban libraries, provide formal technology training classes.
- Less than 10 percent of rural
libraries, as compared to 36.1 percent of urban libraries, have launched websites optimized for mobile devices.

- Only 3.7 percent of rural libraries, as compared to 27.8 percent of urban libraries, provide smartphone apps for access to library services and content.

While rural libraries have seen improvements in high-speed broadband connectivity, only 17 percent of rural libraries report offering speeds greater than 10 Mbps, as compared to 57.4 percent of urban libraries. Due to the broadband demands of streaming video (including online instructional courses) and the sharing of increasingly graphic-heavy content, many libraries experience network saturation on a daily basis, which seriously affects the work of both library staff and the public.

The importance of the provision of sufficient connectivity at libraries is amplified by data from a 2010 Pew Research Center survey that reports that only 50 percent of rural households had broadband at home, compared to 70 percent of urban households. A 2011 survey conducted by the National Telecommunications and Information Administration (NTIA) reported that 27 percent of dial-up users, primarily in rural areas, indicated that they did not have access to broadband Internet service in their area.

Conclusion
Increasingly, communities across the U.S. depend on public libraries for a "triple play" of resources: 1) facilities and physical access to technology infrastructure; 2) a wealth of electronic content; and 3) information professionals trained to help people find and use the information most relevant to their needs. Unless library operating budgets recover ground lost during the past four fiscal years, there is no guaranteed continued access to these vital resources.

Data from the 2011-2012 study portray a fragile environment for libraries, with limited fiscal improvement mainly overshadowed by their inability to meet increasing demands for services. Decreases in several essential areas — staffing, open hours, and the ability to upgrade equipment, bandwidth speed and infrastructure — present increasing challenges to the quality and availability of library services.

“Our funding has been cut so low that we’re really at the end of our financial tether," said Donna Howell, director, Mountain Regional Library System in Georgia. “But we’ve been able to keep our spirits up, because despite the budget cuts of the past five years, the use of our libraries has grown in double digits every year. Yes, we’re doing a lot more with a lot less, but the fact that we’re still relevant enough to our community for them to keep coming back in such large numbers gives me hope for our future.”

70 percent of urban households. A 2011 survey conducted by the National Telecommunications and Information Administration (NTIA) reported that 27 percent of dial-up users, primarily in rural areas, indicated that they did not have access to broadband Internet service in their area.

ENDNOTES