



REPORTS FROM THE FIELD

A valuable complement to the public library and state library surveys is a qualitative component to better understand the quantitative responses. Each year, the research team conducts interviews with library staff in at least two states. This year the research team interviewed 19 public library staff members – most library directors and library IT directors – in two states: Arizona and Tennessee.

Libraries were selected from a pool of those that had responded to the *Public Library Funding & Technology Access Study* survey in fall 2008 and indicated greater-than-average funding increases or decreases. Selections also were made to ensure representation of rural, suburban and urban libraries, as well as geographical diversity within each state. The research team coordinated the selection of libraries with staff at the respective state libraries, who also provided library staff contacts and/or introductions. State library staff members also were interviewed to provide a statewide context for these interviews.

The interviews are not meant to provide a comprehensive view of

public library technology in the states, but rather to gather descriptive, qualitative data that deepens our understanding of funding and sustainability issues.

Key findings

While libraries in Tennessee and Arizona vary significantly in how they fund and support technology access, there were a few common threads across the interviews:

- Most libraries report flat or declining operating budgets, with Arizona libraries particularly hard hit, and larger libraries reporting double-digit reductions. As a result, library directors report reduced operating hours, frozen or cut staff po-

sitions and deferred computer replacements.

- Both state library agencies report federal stimulus funding will provide additional public access computers in the coming year.

- The majority of interviewees have increased Internet connection speeds over the past two years, in some cases doubling or tripling bandwidth capacity.

- Nearly all libraries, unless they already were at capacity, report increased technology use over the past year. Job seekers and e-government needs have driven much of this increase in both states, and library staff members report increased demand for patron technology assistance and training.

ARIZONA FIELD REPORT

Executive Summary

Arizona's economic climate has been on a downward cycle since 2008, causing significant hardship and impacting technology access and maintenance for many Arizona public libraries. Arizona ranks third in home foreclosures in the nation, and there has been a 17 percent reduction in state income. As a result, a majority of Arizona public libraries interviewed have had their budgets cut and are anticipating additional cuts in FY2011. Budget reductions have affected staff, programs, hardware replacements, materials and maintenance contracts. Most library directors interviewed report that inadequate staffing was the leading challenge they faced in meeting increased demand for library services. Some operating hours also have been reduced, but most library directors were resisting reductions in hours as long as possible to ensure public access.

Even though funding is down, almost every library director interviewed reports having increased Internet capacity in the past two years. Statewide, the number of libraries offering connection speeds less than 1.5 Mbps has dropped considerably, while the number with maximum speeds of 1.5 Mbps has nearly doubled. A key source of support for these improvements has been the E-rate program. The Arizona State Library, Archives and Public Records (ASLAPR), a division of the Secretary of State, reports that 60 percent of Arizona public libraries apply annually for E-rate discounts and another 10 percent apply periodically. Many of the Arizona libraries interviewed have used E-rate discounts to reduce telecom costs while improving connection speeds.

Federal stimulus funding secured by the state library through the Broadband Technology Opportunities Program (BTOP) is a potential

boon to public libraries with aging hardware, providing 1,088 desktop and laptop computers to 84 library locations in Arizona. The funding has been received by ASLAPR, and a coordinator has been hired to begin the process of distributing the computers. The State Library also has applied for Round 2 of the BTOP grants as a partner with the Governor's Office of Economic Recovery to provide a dedicated computer terminal in almost every public library in the state for job/workforce development, and to fund 28 "hubs" for jobs/workforce with 10 computers and a staff trainer at 40 hours per month.

Background

Arizona has 86 public library systems with 212 physical library locations to serve a population of 6.5 million residents. The majority of libraries are organized either as municipal government libraries (38.6 percent) or operated jointly by a county and city

(30.1 percent). In FY2008 (the most recent year for which national statistics are available) Arizona libraries reported hosting more than 26.2 million library visits; answering 4.6 million reference questions; and circulating more than 47.6 million items (e.g., books, films, sound recordings, audiobooks).

Arizona residents are served by 2,268 employees, of which 512 hold a Master's degree in Library and Information Science. The state ranks 46th in the nation (including the District of Columbia) for full-time equivalent (FTE) staff per 25,000 residents, with 8.74 FTE compared to a national average of 12.31 FTE. The state also ranks in the bottom half (39th) of the country in operating revenue per capita — \$26.31 per capita, compared with a national average of \$35.63.¹

Nine library and library IT directors at seven libraries were interviewed between December 2009 and March 2010 as part of the Study. They serve communities ranging from 3,000 to 245,000 residents. Staff members interviewed have worked at their library for at least one year and as long as 25 years. Research staff also interviewed members of the ASLAPRA. The interviews were not meant to provide a comprehensive view of public library technology in the state, but their comments help illuminate trends, challenges and successes while serving the public in Arizona libraries.

Technology Resources

There was a wide diversity among the libraries interviewed in the range of technology resources available to the public. Public computers ranged from four in a small county branch library to 61 in a suburban central library location. While the state is above the national average of computers per building, it ranks near the bottom for computers per



Douglas (AZ) Public Library.

5,000 population (2.84, compared to 3.72).² All of the libraries interviewed provide [wireless Internet access](#), reflecting a statewide jump to 100 percent of libraries offering free public access to WiFi, up from 75 percent a year earlier, of Arizona libraries reporting to the *Public Library Funding & Technology Access Study* survey.

Electronic resources available to the public also vary somewhat from library to library. In addition to licensed databases through the AZLibrary, supported by the Arizona State Library, county districts and larger libraries have invested in resources ranging from downloadable audiobooks to language learning programs. “The State Library’s databases are a real godsend,” said one rural library director, who does not otherwise have funding to purchase electronic resources.

Just over half of the libraries interviewed offer computer classes to library patrons. In response to Arizona’s economic climate, one library began a project offering free computer classes, seminars and workshops to help unemployed residents facing foreclosures or bankruptcy. The proj-

ect, called the Recession Response, was supported with funds granted by the State Library under the Library Services and Technology Act (LSTA).

Three other libraries interviewed also offer free classes to patrons ranging from basic computer skills to advanced software classes. “We view these classes as basic literacy. In today’s world, it’s tough to do anything if you don’t know basic word processing and basic Web use,” one suburban library director said.

One library has a computer lab created with a private foundation grant that serves as a regional training center for community groups and government agencies — including the police department and city human resources department.

The other libraries interviewed reported that they did not have adequate staffing and/or staff with the necessary skills to offer formal classes to patrons. “To the extent we’re able, we offer help, but we really don’t have the staff to do it on a regular basis,” said one rural library director. Statewide, the percentage of libraries reporting that they offer technology training dropped about 14 percent from last year.³

FIGURE D-1: MAXIMUM INTERNET SPEEDS FOR ARIZONA PUBLIC LIBRARIES, REPORTED AS PART OF PUBLIC LIBRARY FUNDING & TECHNOLOGY ACCESS STUDY

| Maximum Internet Speeds | 2008 – 2009 | 2009 – 2010 |
|-------------------------|-------------|-------------|
| Less than 1.5 Mbps | 13.6% | 2.6% |
| 1.5 Mbps | 14.1% | 27.6% |
| More than 1.5 Mbps | 66.7% | 67.9% |

Connectivity

Notably, nearly every library interviewed has increased Internet capacity in the past year. Most dramatically, Douglas Public Library jumped from a 7 Mbps connection shared across all city agencies to a 45 Mbps connection. This is still a shared municipal line, but the library previously was utilizing 90 percent of the traffic on the 7 Mbps connection. “When we had everyone flood (the library) in the afternoon, it slowed down the Internet enough to where most of the rest of the city was losing their Internet and phone connections,” the director said. “We had to block the social networking sites until we got the DS3 connection hooked up. We saw an extremely significant drop in our patron count, our computer usage and even our circulation count by blocking those sites.”

With E-rate discounts, the library upgraded the entire network — including wireless, added wired and wireless access points, and built a new server room in 2008. The DS3 connection was added in 2009. “Our Internet is the fastest connection you could possibly pay for today,” the Douglas Public director added.

Show Low Public Library also reported significant impacts on bandwidth in the afterschool hours before upgrading to a 5 Mbps connection. The \$1,200 per month cost would be prohibitive without the library’s 80 percent E-rate discount.

An upgrade from satellite to a T1 Internet connection last year also had a remarkable impact on a small community in La Paz County. “There was a period of a few months when we could either operate the public access computers — barely — or the staff computers, but not both. The first weekend after we got a T1 hooked up, we walked in the library and people were just beaming at us,” said the Parker Public Library director. The library pays \$800 per month for access, before E-rate discounts are applied.

In fact, one IT manager reported several of his county libraries recently upgraded, including one that went from a 756 kbps connection to a 10 Mbps fiber connection in 2009. “So many of the areas are so remote, there aren’t always a lot of options. Some of the outlying libraries were behind the technology curve because of poor Internet connections. We’re running to catch up,” he said.

Statewide, there has been a significant drop in the number of libraries reporting connection speeds of less than 1.5 Mbps — this year, down to 2.6 percent from 13.6 percent last year (see Figure D-1). At the same time, the percentage of libraries with maximum speeds of 1.5 Mbps (or T1) nearly doubled.⁴

One larger library’s director reports struggling to meet patron demand for high-speed bandwidth. “We upgraded from 10 to 20 Mbps in August 2009. The librarians could

no longer do their jobs efficiently while waiting for websites and databases to load.” The library received a 50 percent E-rate discount in FY2009-2010 and has filed for a 70 percent discount in FY2010-FY2011 to further defray costs.

Changes Over the Past Year

Continuing a theme reported around the country, Arizona libraries reported increased use of library technology resources for job-seeking and for filing for unemployment benefits. Sierra Vista Public Library has seen 30 percent increases over the past two years in patron use and circulation, due to job searching and the use of the seven small study rooms, which are the only free meeting rooms available in the community. The library hosts 60 to 70 groups each month. “People are using the library more for life purposes beyond recreation. It seems to be happening more now than before.”

Another director echoed this observation. “More people are asking about computer classes, so they can learn skills for the new jobs they were searching for at the library. We have a lot of people that have been laid off, or had their business closed after 20 years, and they haven’t had computer experience over the past 20 years.”

Two other libraries interviewed have created programs for patrons who are unemployed or are looking for job-seeking and computer usage skills. One library brought in a trainer from the Social Security Administration to train staff in helping library patrons fill out unemployment and financial forms, and offering one-on-one assistance to library patrons. “What I am hearing is people who have never used the library before are coming in and asking, ‘How do I fill out this form

for financial assistance or unemployment?” one library director said. At Show Low Public Library, they now host a job support group that offers computer lab classes in résumé building, job searching and basic computer skills.

Parker Public Library, which reports among the highest per-capita use of its public computers among libraries in its expenditure range,⁵ confirms this increased use for job-seeking and unemployment, as well. “We almost always have people waiting in line to use our computers.” Glendale Public Library also had hour-long wait times for com-

puters and the Internet in the community.

Funding

Arizona’s economic crisis is affecting public libraries and all public agencies. Many of Arizona’s budgets cuts stem from the state’s high foreclosure rates and drastic drops in real estate values. As foreclosures spread, property values drop — further depressing local sources for funding.⁶ The state is third in the nation for “upside-down mortgages,” has projected a \$1.9 billion budget gap at midyear FY2010 and a \$2.6 billion shortfall in FY2011.⁷ Maricopa Coun-

sentiment. “The word ‘tsunami’ comes to mind,” he said, citing the funding crisis at the state level, a funding formula that favors population growth and declines in property and sales taxes. “We won’t feel the recovery for another two or three years, so that’s one of the problems we’re looking at.” The library has lost several staff positions due to a hiring freeze and cut its materials budget 8 percent last year. The director anticipates reducing hours and cutting another 10 percent in materials in FY2011.

“It’s bleak ... and we haven’t seen the bottom yet,” a member of the State Library staff said in a separate

“We really need, at this point, a person with (technology) skills almost as much as the technology itself.”

puters at times throughout the day before bringing 12 new computers online.

Increased demand for higher education or continuing education resources also has affected some Arizona libraries. Computer use at the Tuba City Public Library, located on the Navajo Nation, has been up significantly over the past year, in part because the distance education lab at Northern Arizona University has limited hours and is closed on weekends. Many students need access to computers to take online classes and access online research materials. The library reports time limits on public computers sometimes shrink to 20 minutes in the busy afterschool hours. “In the beginning, patrons could stay as long as no one was waiting. Then it was one-hour limits, now it’s 30 minutes per session,” said the library branch manager. The library, which will soon more than double its number of computers from 12 to 26, is the only provider of free public access to

ty, where 60 percent of the state’s population resides, has been particularly hard hit; there are 20,000 to 30,000 empty homes in the Phoenix metro area.

As a result, the majority of Arizona public libraries interviewed were faced with budget cuts in FY2009 and FY2010, and are anticipating more cuts in FY2011. One suburban library in Maricopa County reports a 25 percent cut in its operating budget over the past two fiscal years and anticipates another 20 percent cut in the coming fiscal year. Another suburban library lost one-third of its budget in the past two fiscal years. “The other problem is that even if you have a budget, that doesn’t necessarily mean that you get to spend the budget. We had the brakes put on roughly three months in to the last fiscal year, so we were trying to operate with very little money.” Cuts have affected staff, programs, hardware replacements, materials and maintenance contracts.

A rural library director echoed this

interview.

Many Arizona libraries participate in countywide districts that are funded through a secondary property tax, which allows for resource sharing such as shared catalogs, electronic resources and technical support.

Challenges

In addition to, and related to, funding concerns, the need for more staff support and onsite IT staff support was prominently cited by many of the library directors interviewed. Over half of the library director participants use the county or city IT staff for IT support, which roughly matches what was reported statewide in the *Public Library Funding & Technology Access Study* (PLFTAS) survey. Just over 46 percent of Arizona public libraries reported last year relying on the county or IT staff as a source for IT and computer support, significantly higher than the national average of 14 percent.⁸

Also in the survey, close to one-



New server room at Douglas (AZ) Public Library.

third (31 percent) of Arizona libraries cited a lack of technical staff as a factor influencing the decision of whether to add computers, more than double the national average (12 percent), and the highest of any state.⁹ “We really need, at this point, a person with (technology) skills almost as much as the technology itself,” said one rural library director.

Roughly half of Arizona libraries (51.8 percent) reported in last year’s public library survey that it takes two or more days to have a computer back in service, just over the national average (48.5 percent).¹⁰

Several directors also cited difficulty in keeping computers in service and up to date. One Arizona library director said that out of the 56 public computers in his library, more than one-quarter (15) were out of service and unavailable to patrons at the time of the interview. Another library director reports that over the past 12 months staff members have removed public access computers from service. “We are having great difficulty replacing workstations. They are dying off

faster and faster, and the hardware is not E-rateable. There are very few grants out there or any other kinds of funding to buy replacement computers.” Arizona’s successful application for federal funds will improve this situation for many libraries in the coming year.

Another library with a four-year replacement schedule for hardware and dedicated IT staff reports success in building and using a “spare parts inventory” to return inoperable computers to service quickly.

Overall staffing also is a significant concern. Nationally, Arizona ranks 44th in the number of paid FTE staff,¹¹ and budget cuts have further reduced human resources. Glendale Public Library lost 13 percent of its staff last year due to budget cuts, and anticipates losing additional staff this year (FY2010) and next. Every library interviewed either has a hiring freeze or has lost staff due to incentive retirement packages — all during a time of increased library usage.

“I think that at a time when they need us the most, we’re trying to work with our hands tied behind our

backs,” one library director said. The library has responded by increasing cross-training across work areas, and by asking outside agencies to train staff in completing e-government applications, including unemployment benefit forms.

Successes

All seven libraries interviewed reported a number of successes and accomplishments over the past year. Several libraries worked with the Arizona State Library on the first round of the Broadband Technologies Opportunity Program (BTOP) grants. Parker Public Library plans to add computers at each of its three locations.

It took another library IT coordinator about 18 months to add two more staff to his IT department, finally hiring them in July 2009. “We’re better than 12 months ago because we have more staff, but the libraries used to call and sometimes I couldn’t get to it [computer] for a week. Now we have more people to respond.”

Keeping the same library hours and maintaining the best possible service to patrons were top priorities for Apache Junction. “I need for the library to stay as popular as possible. And I don’t think that cutting hours would produce the right results in terms of keeping the library popular and necessary in peoples’ minds,” said the library director.

Glendale Public Library was able to add 12 additional desktops in the main library and provide the Foothills Library Branch with laptops. “Now we are able to offer classes for people that are job hunting, and we feel that is a big accomplishment.” Another library’s website is the second most frequently used in the city, following Human Resource job postings. “We can never do enough to publicize what we do — there’s al-

ways room to do more. It's a matter of time to do it and our own ingenuity."

Glendale Public Library will be working to maintain and cross-train staff to meet the demands of the library patrons. Many of the library's reference librarians are providing one-on-one computer assistance to patrons, while also fielding reference questions and staffing the phones and service desks. Douglas Public Library is trying to maintain staffing levels and operating hours. "I cut six hours in 2008 and I have not cut hours this year, even though I was asked to consider it. I am pretty firm on that we are here for a very important purpose, and cutting the hours is not a way to fix this problem." Several libraries interviewed will be

taking on major projects over the next 12 months. Flagstaff-Coconino County Library plans to establish websites for all of county libraries that will then be connected through a shared integrated library system. "We are growing our technology resources and increasing capacity," said the library IT manager. In August, Show Low Public Library plans to add 10 more public access computers to the library's new 14,500-square-foot building. And Parker Public Library is using grant funding to create a virtual information center through the library website. "I'd like to not just make the Internet available, but go beyond basic classes. I would like to create online portals and teach people how to use them, not only to gain access but to create unique information re-

sources about this area," the director said. He also hopes to establish a county district in La Paz in the coming year.

Conclusion

In spite of the funding challenges facing many Arizona public libraries that threaten available staffing and resources, library directors are fighting to retain operating hours, and to improve the quality of public technology access with higher Internet speeds and by adding new computers purchased with federal stimulus funding. Library staff continue to play vital intermediary roles in supporting and managing public access technology that are critical to teaching their patrons the skills needed to successfully navigate online information and resources.

TENNESSEE FIELD REPORT

Executive Summary

With the second lowest funding per capita for public libraries in the country, the Tennessee State Library and Archives division of the Office of the Secretary of State has worked to leverage state and federal funds to support public technology access in small and medium-sized libraries across the state. Like its colleagues, the State Library brokers a collection of licensed databases that is available to every resident in the state, but also provides five dedicated IT staff members, shared access to downloadable audiobooks and e-books, and a Public Library Management Institute for libraries served by 12 multi-county regional libraries. Regional library staff members are state employees and provide continuing education, assist in selection and maintenance of library technology, and catalog and provide supplementary library materials to member public libraries. Library Services Technol-

ogy Act (LSTA) funds pay network services consultant (NSC) staff salaries and are provided as matching funds for libraries' hardware replacement.

Aside from the four metropolitan library systems and 10 independent libraries that are not part of the regional system, this state-level approach provides a basic level of library service for Tennessee residents through their public libraries. This assistance, however, "sometimes works against local funding when the state provides so much for the local libraries," according to previous State Librarian Jeanne Sugg in a 2009 report and reiterated by current State Library staff.¹² Library directors interviewed reflected a range of interaction with local governing bodies, ranging from confidence in the mayor and county commission's support to one director's discontinuing reports to the county commission because no additional funding was

available, regardless of the library's successes.

As has been the case nationwide, library staff interviewed report increased technology use, particularly tied to job-seeking, as the state faced higher than average unemployment in the past year. Several libraries have improved their Internet connection speeds and added desktop or laptop computers in the past year to better accommodate greater demand.

Background

Tennessee has 187 public library systems with 289 physical locations to serve more than 6 million residents. The libraries are organized primarily either as municipal government libraries or as county libraries. In FY2008 (the most recent year for which national statistics are available), Tennessee's public libraries reported hosting more than 20.4 million visits, answering 4 million reference ques-



Left: Lexington-Henderson County Everett Horn Public Library.
Right: Stewart County Public Library.

tions and circulating more than 24.8 million items.¹³

Tennessee residents are served by 1,839 library employees, of which 312 hold a Master's degree in Library and Information Science. The state ranks last in the nation for full-time equivalent (FTE) staff per 25,000 residents, with 7.56 FTE compared to the national average of 12.31 FTE. The state also ranks 49th (including the District of Columbia) in total operating revenue per capita — less than half (\$16.73) the national average of \$35.63 per capita.¹⁴

Ten library staff members, most library or library IT directors from six libraries, were interviewed between December 2009 and March 2010. They represent communities ranging from 11,000 to 575,000 people. All but one (which has library branches) provides service exclusively through one library location. All of the directors interviewed have worked at their current library location at least one year and as long as 34 years. Research staff also interviewed network service consultants and members of the Tennessee State Library and Ar-

chives. The interviews were not meant to provide a comprehensive view of public library technology in the state, but to help illuminate trends, challenges, and successes achieved while serving the public in Tennessee libraries.

Technology Resources

All but one of the libraries interviewed have a website with online public access catalogs and provide free wireless access to patrons. Most have more than the state average number of [public access computers](#) per location — 14.2 — reported in this year's *Public Library Funding & Technology Access Study* (PLFTAS) survey.

The majority of those interviewed report relying exclusively on the statewide Tennessee Electronic Library (TEL) for access to licensed databases. One library invested in additional e-resources, including language learning software and an investment research database. All of the library staff interviewed mentioned an increased patron interest in e-books and downloadable audiobooks. About 178,000 titles were

circulated through the state-funded Regional E-book & Audiobook Download System (READS) in 2008-2009, a 53 percent increase over the previous year. "We have found that the demand for (print) books is still so huge. At the same time, we can't keep up with demand for downloadable audiobooks and e-books," said a Nashville Public Library staffer.

Oak Ridge Public Library (an independent library outside the regional library system) would like to add e-books, but staff report the library doesn't have the budget to purchase access on its own outside READS.

Four of the libraries interviewed offer formal technology training for patrons, but one of these offers classes only a few times each year due to a lack of library staff and/or volunteer teachers. Two libraries report high class attendance and waiting lists to attend. "Classes are extraordinarily well-attended and well-received. We can't keep up with demand, especially as we've had to cut hours this year because of budget cuts. Our patrons are really

feeling it.”

Another library director confirms the importance of this technology assistance: “Not everyone knows how to get on and do things, and certainly finding work these days has shifted to using computers. These people would not have any way of doing it if libraries weren’t doing their part. So that’s probably the greatest value to the community in providing this resource of instruction and access. Technology is a wonderful thing, but for some people it’s a real roadblock.”

One library indicates it does not have space to offer classes, and another reports it has shifted to a one-on-one training model rather than a classroom approach. One library staffer is charged with providing daily 60- to 90-minute sessions by appointment. This one-on-one, scheduled approach to [patron technology training](#) has been cited with growing frequency in site visits during the past three years of this Study, and new national data finds that approximately [24 percent](#) of libraries now provide this service.

Technology Support and Maintenance

There were some inconsistencies between state-level reported data and individual interviews. Close to half (45.4 percent) of Tennessee libraries report that it takes more than two days to return public library computers to service, well above that reported nationally (24 percent).¹⁵ Only one library director interviewed, however, said this was the case. Most reported that computers were rarely out of service, and when one was down, onsite (mostly non-IT) library staff usually can return a computer to service in less than two days. Several interviewees report library staff learned trouble-shooting skills from network service consultants (NSCs) from the State Library. This teach-

ing role was confirmed in a separate interview with the NSCs, who added that repairing a computer often would be a lower priority than other service needs (e.g., access to the Internet or bringing circulation system back online) and, as a result, might take more than two days. Each NSC is responsible for providing technology support to three regions, or approximately 60 libraries and 800 to 1,400 staff and public computers. “Today, you need to be a full-blown network administrator for 50 buildings. The complexity of the network inside the public library is similar to that of many businesses,” said one of the NSCs.

Tennessee (42.4 percent) is second only to West Virginia (58.5 percent) in the percentage of libraries that take advantage of IT and computer support from State Library IT staff.¹⁶ Nashville Public Library, which is not part of the regional library system and has a dedicated IT staff of four plus city IT support, keeps a reserve of equipment to swap out as needed to ensure “zero downtime” for public computers. This reserve is created by purchasing 3 percent more equipment than what is needed on the floor.

About half the libraries interviewed have replacement plans; two of these were described as “informal” or ones that might “slip,” and range from a target of three- to five-year replacement cycles. One library funds equipment out of a capital budget, while most others report using LSTA grants (matched with general operating or funds raised by the local Friends group) or other grant funding. “Without LSTA, our budget would have been and would continue to be inadequate to keep up with our technology needs,” said one director. “It is really through the combination of the two that we are able to leverage our general fund technology budget against LSTA grants to keep pace with our tech needs.”

Connectivity

As in Arizona, several Tennessee libraries have upgraded bandwidth within the past two years, often doubling Internet speeds with new contracts. Suburban Jasper Public Library provides maximum speeds of 10 Mbps, rural Dover 12 Mbps and urban Nashville 100 Mbps—up from 40 Mbps just two years ago. Nashville plans to upgrade to 500 Mbps this summer, and urban Johnson City will



The computer sign-up line forms early at the public library.



Left: Mobile laptop lab at Nashville (TN) Public Library.
Right: Technology inventory at Nashville (TN) Public Library.

move from an inadequate 5 Mbps to 10 Mbps in July 2010.

“Not too long ago, we thought 5 Mbps was just great. Now, particularly in the afternoons, it can be slow as molasses. We have more and more laptops in the library, too, so the number of people that are just bringing their laptops in to study just continues to grow, and that’s just more pressure on the bandwidth,” said the Johnson City Library director.

The [E-rate](#) discount has enabled significant bandwidth upgrades for Tennessee urban libraries. Johnson City is doubling bandwidth and paying less per month with a new telecom contract and an 80 percent discount. E-rate also will support Nashville Public Library’s bandwidth jump, which will better enable streaming media, computer security and maintenance. “Because we get 80 percent E-rate discount, coupled with the new (citywide) contract, we think we can afford to do it. We couldn’t keep the doors open without E-rate. It’s so vital and

important to us. Altogether it will cost \$102,000 next year with E-rate, but would have been \$600,000 without E-rate,” said one of the library’s administrators.

Two library directors also mentioned working with local committees to support the Connected Tennessee initiative to improve technology access in their communities. “Being a part of Connected Tennessee helped the library. Our staff need to be in the community reaching out to bring people in,” said one director.

Connected Tennessee is a non-profit agency with eCommunity Leadership Teams in each county working to expand broadband availability and to increase its usage. As a result of the library director’s involvement, the library was able to upgrade, replace and add a total of 14 public Internet computers when the local committee was looking to improve public access to the Internet in the community. “People love coming to the library because it can take hours (to download) at home. Even if

they can get DSL access, many are cutting home expenses now.”

Changes Over the Past Year

As a group, all interviewees confirmed library use has increased over the past year. Jasper Public Library, for instance, has seen an increase in library visits to 1,900 each week, from 1,750 last year. “Sometimes you can’t get through here (with all the people).” The library has wait lists for computer use; most mornings for job-seekers and afterschool for students. The library averaged about 900 Internet sessions per month in 2008, as compared with roughly 1,100 in 2009, reaching a peak of 1,566 in September 2009.

Job-seeking was uppermost in the minds of most librarians interviewed. “Some of the people that come in may have to apply for jobs online and may have never ever put their hands on a computer before. They need complete assistance to do this. But this is the only way they can send this application in to the

NASHVILLE PUBLIC LIBRARY MOBILE LABS

Mobile computer labs — or collections of laptops equipped to be deployed to multiple library locations — are becoming a more common fixture in the public library landscape. In fall 2009, Nashville Public Library began implementing its own laptop labs in a way that brings together several trends within public library technology: patron job-seeking, new community collaborations, addressing computer and staff capacity concerns, and an ongoing need for computer skills training for both patrons and library staff.

The library has three mobile computer labs:

- One “job search” computer lab with 10 laptops.
- One mobile teaching computer lab with 10 laptops and one projector.
- One staff training lab with 10 laptops.

“Job search” laptops were funded by the Nashville Career Advancement Center (NCAC) using federal stimulus dollars it had received. The mobile teaching lab and staff training lab were funded by the Bill & Melinda Gates Foundation. Public library branches provide the meeting room space for classes and one-on-one assistance, and the Nashville Public Library Foundation funds two part-time staff who support classes, patron use of the mobile labs and one-on-one coaching for jobseekers.

“Last January [2009], the joblessness rate in the metro area reached a critical mass. People couldn’t complete online job applications within (1 hour) time limits on public PCs — or sometimes even start the application because they didn’t have an email account or basic computer skills,” said Web Development and Public Education Administrator Pam Reese. “It was frustrating staff citywide because they didn’t have the necessary time to devote to help people.”

“I was walking through the other day, and I started helping a man who was applying for a job at a fast food restaurant. Because it’s an incredibly clunky online application, it took the man two hours to do it,” said Technical Services Administrator Tricia Bengel. “He had worked in a factory his entire life, was laid off, and he was just looking for a job.”

To address the need, in January 2009 the library started a program called “Jobs in January” in which the desktop computer lab at the Central Library was dedicated every Tuesday to providing additional computer time and assistance. The library approached the NCAC to teach classes to patrons, and the relationship grew to cross-training for library staff, mutual referrals and the development of the mobile lab.

“About two years ago, NCAC funds were reduced, which put economic pressure on us,” said Brian Clark,

FIGURE D-2: NASHVILLE PUBLIC LIBRARY COMPUTER CLASSES

| | FY2008 | FY2009 | FY2010* |
|------------------|--------|--------|---------|
| Classes Offered | 124 | 185 | 285 |
| Class Attendance | 961 | 1,632 | 2,226 |

*Projection based on July 2009-February 2010 data

NCAC operations director. “So the idea of getting more resources out on a more countywide approach became important. If you’re unemployed, you don’t want to have to buy gas and drive 10 to 15 miles [to one of the three NCAC Davidson County locations], when you can go to the local library.” Nashville Public Library has 21 library locations throughout the county.

Staffing the mobile labs is key to its success. “The person that runs the jobs lab doesn’t just turn on the computers, he has expertise in career development and is technologically savvy,” said Tari Hughes, Executive Director of the Library Foundation. “Staff will help them write their résumés, help navigate ways to look for job opportunities and more.” With close to one-third of library positions cut over the past five years due to budget cuts, the Library Foundation’s role in funding staff has been critical.

Between October 2009 and January 2010, the “job search” lab hosted 900 computer sessions. The lab is currently stationed at the Edmondson Pike branch, which is located in a community that is increasingly diverse—including Kurdish and Burmese refugees—and many struggle with language, as well as technology, skills when applying for work.

“Books are still important, but how do you help people understand it’s more than books? A foundation board member said, ‘It sounds to me like we’re really redefining what it means to be literate in today’s society. If you can read, that’s great, but if you can’t apply for a job because you don’t know how to get on a computer, then you’re not really functionally literate.’ We’re redefining literacy in a sense,” Hughes said.

Along with a new leadership role supporting Nashville public schools initiated by the Mayor, Library Director Donna Nicely points to the library’s mobile labs as a success story. “We have to stay relevant — to be integral to the city’s priorities,” she said. “If you’re considered essential, you’ll do a lot better in the budget process. Every library director needs to be asking him or herself ‘what part can the library play in the city’s priorities?’”

company they're applying to," said one rural library director.

Poor technology skills also affect patrons seeking government information and services, another director reported. "You also have to go online to get any kind of government forms, too. It's a real segment of society that I think is kind of getting lost in the all the technology. I hope somebody in the government is aware of this. Libraries are providing this service for those people. And we're really about the only place where they can get computer access and help."

A rural library director pointed to 17 percent unemployment in the county, forcing many to the

dowry, which made up about 25 percent of its overall operating budget. The director cut her collection and equipment budgets each by more than half, and has lost staff and reduced hours. The library relies on grant funding (LSTA and foundation funding) to maintain its computers. Seventy-six percent of the library's budget is allocated for staff; there are no funds to provide health insurance or retirement.

Still, all interviewees report cuts in library budgets have been commensurate with — or less than — those sustained by other city or county agencies. "Everyone understands the sort of return on invest-

they allowed some libraries to waive state maintenance of effort requirements. It also was the first year the state could not provide any state aid to the metropolitan libraries due to serious state budget issues. Aid was restored in FY2010.

Challenges

Funding and space concerns continue to top the list of challenges libraries face in maintaining or improving public access technology. "We need to be open later — until at least 8 p.m., but I don't have the budget," one library director explained. Her library now closes most evenings at 5 or 6 p.m.

"You have to go online to get any kind of government forms. ... And we're really about the only place where they can get computer access and help."

library to look for jobs and continuing education. "The local career center is overflowing, so they send people to the library. People are going to school as part of the displaced worker program. They need help registering and checking their grades. There is bigger and bigger demand." The library has seen monthly Internet sessions grow from an average of just over 2,000 in 2007 to close to 2,600 in 2009.

Circulation has "gone through the roof" at another library, which also is seeing an increase in career-related questions.

Funding

For the most part librarians interviewed report flat or declining public funds during the past one or two years. In one case, the library lost about one-half the value of its en-

ment they're getting from the library," one library director said.

Nashville Public Library has experienced cuts in its operating budget almost every year since FY2004. Since the vast majority of the operating budget goes to staff and benefits, the library was forced to eliminate staff and reduce operating hours. Five years ago, the library closed all its branches on Fridays, and most are now also closed all but two weeknights. The main library is now closed on Mondays. A separate capital budget supports technology and collection expenditures; library foundation funding, the use of temporary staff and self-checkout are helping fill some gaps left by operating budget cuts.

In light of economic pressures, State Library staff report that FY2009 was the first year in which

Another library has seen a 17 percent reduction in hours open in FY2009 from FY2004. "Since adding the new Main library and the five area libraries, we have more square footage and fewer people. To accomplish this and still offer good customer service, we have had to think creatively and use technology very heavily," said Nashville Public Library staff.

Similarly, another library director is looking to implement radio-frequency identification systems (RFID) in the coming year as a way to maximize existing staff. "I'm very interested in that technology, because I think that that would give us the opportunity to reshape some of our staffing levels. I think that we can put more focus on directly working with the patron."

One library provides 15 public access computers in a 5,200 square feet

building. “There are always people waiting. I could buy the computers, but we don’t have any place to put them.” Across the state, 77 percent of libraries last year reported limited space a factor influencing their decision to add computers. Two libraries citing space constraints as a primary concern said they hoped a state application for Broadband Technology Opportunities Program (BTOP) funding would provide mobile computer labs. The State did not receive a BTOP Round 1 grant but has submitted another proposal for BTOP Round 2, which would benefit larger libraries if funded. Additionally, 76 rural libraries will benefit from a recently announced stimulus package from the United States Department of Agriculture (USDA) with matching state dollars from the State’s Department of Community Development.

Other challenges mentioned include network controls imposed by the local government agency and a need for more IT staff support. Overall, libraries interviewed relied on a range of IT support — including self-taught library staff, dedicated IT specialists on-site and State Library IT staff.

Successes

In looking back over the past year, library directors point to several areas they feel have made a difference in successfully meeting community demand for technology services:

- Supporting job seeking: “*Helping job-seekers is our main thing right now.*”

- Providing Wi-Fi: “*We have people in every day using the wireless; and we have people in the parking lot after hours. That way people can do their job résumés or file for unemployment, even if the library is closed.*”

- Connecting through social networking: “*The library is a leading force,*” said one rural library director who went from 80 Facebook fans to 250 in a few days. About half of the

libraries interviewed have a Facebook presence.

- Implementing “express” computers to reduce wait times for patrons who may need only 15 minutes on a public access computer.

- Providing one-on-one technology assistance: “*Libraries have always been a place that people have come to for self-improvement. Whether it’s books or the Internet, people have been able to come and learn what they need.*”

- Implementing laptop labs.

“*They are booked every day.*”

One Tennessee director echoes past years’ interviewees by stating, “*It’s an accomplishment that we’ve maintained state-of-the-art technology resources within a tight budget — no services were lost, nothing that would be noticed by patrons.*” The library’s budget was flat last year and is expected to be flat again in the coming fiscal year, reducing the library’s overall purchasing power.

Other technology projects on the horizon include a request for funding to implement RFID at Johnson City Public Library, a new integrated library system that will better support social networking and patron engagement at Lexington Public Library, and digitization of an oral history collaboration between the Oak Ridge Public Library and the Department of Energy.

Conclusion

Like most states, library staff in Tennessee report feeling great pressure to adequately fund and staff library services, sustain public access computers and provide Internet access. Additional demands are coming at a time when most report flat or declining budgets, which hurt their ability to keep library doors open and retain adequate staff to meet intensive job-seeking and e-government needs. State Library staff report further reductions are expected in their agency budget, which is likely to further reduce regional library staff and lead to

more centralized services in the coming year. ■

ENDNOTES

1 Institute of Museum and Library Services. *Public Libraries Survey: Fiscal Year 2008*. Washington, D.C.: IMLS, 2010. <http://harvester.census.gov/imls/pubs/pls/index.asp>.

2 Ibid.

3 *Libraries Connect Communities: Public Library Funding & Technology Access Study 2008-2009*. Chicago: American Library Association, 2009. Page 80.

4 Information Institute, Florida State University. *Public Libraries and the Internet 2009*. Figure 85. <http://www.liicenter.org/plinternet/2009LIinternet.pdf>.

5 *Library Journal*. “America’s Star Libraries: The Stars, State by State.” November 15, 2009. <http://www.libraryjournal.com/article/CA6705870.html>.

6 Fletcher, Michael A. “Housing Crisis Casts a Cloud Over Sun Belt: In Once-Booming Areas, Help Could Be Too Little, Too Late.” *The Washington Post*, Feb. 5, 2008. <http://www.washingtonpost.com/wp-dyn/content/article/2008/02/04/AR2008020403270.html>.

7 McNichol, Elizabeth & Nicholas Johnson. “Recession Continues to Batter State Budgets; State Responses Could Slow Recovery.” Center on Budget and Policy Priorities. Feb. 25, 2010. <http://www.cbpp.org/cms/?fa=view&id=711>.

8 Information Institute, Florida State University. *Public Libraries and the Internet 2009*. Figure 83. <http://www.ii.fsu.edu/content/view/full/17025>.

9 Information Institute, Florida State University. *Public Libraries and the Internet 2009*. Figures 78 and 80. <http://www.ii.fsu.edu/content/view/full/17025>.

10 Ibid, Figure 97.

11 Institute of Museum and Library Services. *Public Libraries Survey: Fiscal Year 2008*. Washington, D.C.: IMLS, 2010. http://harvester.census.gov/imls/pubs/Publications/fy2007_pls_report.pdf.

12 Manjarrez, C., L. Langa, K. Miller. (2009). *A Catalyst for Change: LSTA Grants to States Program Activities and the Transformation of Library Services to the Public*. (IMLS-2009-RES-01). Institute of Museum and Library Services. Washington, D.C. Page 121.

13 Institute of Museum and Library Services. *Public Libraries Survey: Fiscal Year 2008*. Washington, D.C.: IMLS, 2010.

14 Ibid.

15 Information Institute, Florida State University. *Public Libraries and the Internet 2009*. Figure 97. <http://www.ii.fsu.edu/content/view/full/17025>.

16 Ibid, Figure 83.