INTRODUCTION

A valuable addition to the overall study is a strong qualitative component to better understand the quantitative responses. Specifically, further qualitative detail is needed to recognize what factors influence the library’s ability to meet demands for Internet-based services. It is from these findings that libraries can further influence communities to support the valuable services they provide.

The study employs both site visits and interviews with public library directors and other key stakeholders in selected states to:

- Elucidate trends suggested by the quantitative data;
- Explore quantitative data anomalies;
- Deepen our understanding of certain aspects of U.S. public library advocacy, funding and sustainability; and
- Focus attention on current U.S. public library funding hot topics of interest.

Focus groups were held in four of the 10 states eligible to apply in the first round of the “Opportunity Online” hardware grant program from the Bill & Melinda Gates Foundation. From February to April 2007, the project team heard from 40 participants in leadership positions in rural, urban and suburban library settings in Delaware, Maryland, Nevada and Utah.

The project team also made site visits in each of these four states. In total, the team heard from library staff, patrons, trustees, Friends and community leaders affiliated with 29 libraries.

Questions focused on the libraries’ fiscal climate, the Internet services most used and requested by library patrons, the impact of technology on staff, how libraries advocate for technology in libraries and what support would be most helpful to them. The complete script for the focus groups, as well as a series of follow-up questions emailed to each participant, can be found in Appendix C. The questions posed during the site visits are located in Appendix D.

METHODOLOGY

The site visit planning and execution employs a number of methods to achieve the goals of this portion of the larger study. These include:

- Reviewing previous studies and reports and state-level data regarding Internet connectivity, technology-based services provided by libraries, and stability of funding;
  - Internet Studies (FSU, et. al);
  - ALA Public Library Funding study; and
  - National Center for Education Statistics (NCES)-Federal State Cooperative System of Public Library Data (FSCS)
• Engaging in discussions with a range of individuals familiar with library funding, governance and telecommunications issues;

• Conducting state site visits to more fully explore factors influencing public libraries providing stable and sufficient funding, staffing, and technology; and
  o Meet with state library agencies, public library directors, and other key local stakeholder communities (e.g., library trustees, local government, private local funding groups, etc.); and

• Conducting follow-up phone interviews with selected state and public library staff as required or appropriate.

The use of environmental scan techniques, secondary data analysis, focus groups and telephone follow-up enabled the project team to support the detailed data reported by individual libraries by “grounding” those data in the governance and funding realities of a library community.

Building on “best practice” case studies of successfully networked public libraries reported in the 2006 Internet study, the site visits made it possible to “drill down” to learn more about the challenges public libraries face in providing and sustaining sufficient high quality services and high-speed bandwidth for the range of public access services they provide.

**Site Selection**

Working from the first-year Bill & Melinda Gates Foundation’s “Opportunities Online” grant program, the study team:

• Identified 10 states eligible for grant funding in 2007;

• Reviewed qualitative data collected by Joe Ryan in a survey of Chief Officers of State Library Agencies (COSLA);

• Grouped states around geographic representation and physical proximity to one another to facilitate travel logistics in short time frame;
  o Mid-Atlantic: Delaware, Maryland, New York and Pennsylvania
  o Midwest: Iowa and Kansas
  o West: Colorado, Nevada, Utah and Wyoming

• Reviewed and identified proportional data reported by public libraries in the 2004 and 2006 *Public Libraries and the Internet* study conducted by Bertot, McClure & Jaeger;
  o Marginal and adequate funding to sustain public access services
    ▪ Marginal was defined as fewer than 50 percent of libraries reporting increased or stable operating revenue;
    ▪ Adequate was defined as more than 50 percent of libraries reporting increased operating revenue;
  o Confirmed funding data in the NCES FSCS FY2004 report and the ALA Public Library Funding study (2006) [http://www.ala.org/ala/ors/reports/FundingIssuesinUSPLs.pdf](http://www.ala.org/ala/ors/reports/FundingIssuesinUSPLs.pdf); and
  o Selected libraries with varying ranges of connectivity.
Coordinated with the ALA Office for Information Technology Policy so as not to overlap with site visits scheduled for related site visits on Internet connectivity; and

Identified states where the 2006 study team had not scheduled site visits.

Based on these criteria, and supporting regional representation, the following states were selected for site visits:

- Delaware
- Maryland
- Nevada
- Utah

**Communication with Selected States**

The project team contacted the chief library officers in the selected states. The chief officers were asked to recommend public library directors to participate in focus groups during February, March and April, 2007. The project team requested that these library directors reflect a range of libraries of varying population size, budgets and governance structures. The team also sought representation of libraries that had experienced a high degree of success in creating and sustaining technology access, as well as those more vulnerable.

Four to six public library directors were invited to participate in each small focus group, and two focus groups were scheduled per participating state, except in Nevada where only one focus group was held.

**Presentation of Summary Findings**

In reporting the site visit and focus group findings, it was important to include external research in order to contextualize state-level findings. These sources present data from 2004 and 2007, and represent the most current research available at the time this report was prepared:

- *Public Libraries in the United States: Fiscal Year 2004* (National Center for Education Statistics) was the most recently published national report of public library data at the time this study was completed. The 2004 report was used to put in context public library service areas (population served), organization structure, legal basis and the average size of library buildings. Further, the NCES report was used to describe levels of library service, revenue and expenditure data, and per capita data where available. [http://www.nces.ed.gov/pubs2006/2006349.pdf](http://www.nces.ed.gov/pubs2006/2006349.pdf)

- *2007 State New Economy Index* (Information Technology & Innovation Foundation) was used to understand the overall access by residents to technology and Internet services by state. This study reviewed states on their success in providing high-speed telecommunications access, supporting education, job creation and research. [http://www.itif.org/index.php?id=30](http://www.itif.org/index.php?id=30)

EXECUTIVE SUMMARY

The single most significant theme that emerged from both the focus groups and site visits was the need for increased space and capacity. Deployment and use of public access computing in U.S. public libraries have brought more people to the library (1.3 billion visits in FY2004, 123 up from 821.6 million a decade earlier), many more electronic applications and online services, and a growing capacity to accommodate the MP3 players, USB drives and digital cameras library users carry with them. Yet, many libraries are housed in buildings that predate the Internet – or even TV, in the case of several historic Carnegie buildings. Not only does square footage limit the addition of desktop computers, but old wiring and electrical capacity constrain technology growth.

Capacity constraints also extend to bandwidth and staff. More libraries are reporting significant slowdowns in their Internet connection speeds during the busiest times of day – most often on weekdays after school. Even T1 (or 1.5Mbps) access is not enough for some library systems to provide fast download speeds for the audio and video materials brokered by the library or state library – let alone music or video from such popular Web sites as MySpace and YouTube.

Library staff also are feeling the effects of rapid change in technology offerings and user expectations. The more familiar library patrons become with technology, the more they expect from the library.

Funding

In general, library funding is stable but flat, and library directors are not optimistic about future increases. Libraries have always had to compete for public dollars, but the competition is becoming more intense, particularly in states with population growth and stretched public infrastructure. This was particularly pronounced in Nevada and in Delaware where libraries are not seeing an increase in local funding commensurate with the increases in the populations served. Tax caps further exacerbate this issue, with one library reporting a loss of at least $8 million in capital funding. One city manager stated: “Libraries compete for the same funds as emergency services. They are on the bottom of the food chain.”

In some of the smaller communities, library directors said their funding was fine, but then described the reality of trying to do more with less. One rural library director described a generous budget and good support, but later mentioned that the Internet service had been down for much of the week. Several libraries depended on part-time or volunteer IT support because they were unable to attract or afford staff with specialized technology skills.

Directors in Maryland and Delaware reported recent funding successes at the state level. Maryland libraries will see annual increases in state funding through 2010, and Delaware has dedicated matching funding for technology replacement in libraries. Most directors in large city and county systems in Utah reported positive funding environments at the state and local level where property tax funding for libraries has grown as their communities have grown.

While many libraries have integrated technology costs into their general operating budgets and have created line items for equipment, electronic collections and telecommunications costs, some libraries reported that their greatest funding successes were in securing grant funding for new computers – most often from the Library Services and Technology Act (LSTA) and/or the Bill & Melinda Gates Foundation. One director reported: “We wouldn’t have a single computer without LSTA.” Friends groups also are an important fundraising source for general library funding.

**Patron Technology Use**

Public libraries, particularly in rural communities, continue to be the only sites of free public access computing. But library staff report high technology usage even in communities where home computer and Internet use is quite high. In one county, the library director reported that 85 percent of residents have computers, and 93 percent of these residents have Internet access. “And we’re asking ourselves, how come we’re so busy?” The answer from many patrons interviewed ranged from faster access speeds at the library (broadband versus dial-up), to a need for assistance from library staff, to competition among family members for the home computer. One mother who goes to her library in Nevada with her two teen sons at least twice a week confirmed library computers were much faster than the one at home: “I can do twice as much in an hour.”

One way libraries are working to expand access and keep up with demand is by providing wireless access. Staff in nearly every library visited either reported high usage of the wireless recently made available (along with an accompanying need for more electrical outlets and capacity) or expressed the desire to add wireless access. In fact, when asking how satisfied he was with his library’s computer and technology resources, one library patron said: “You can never have too many workstations.”

A few libraries also have invested in laptops, but this is still rare, and the laptops are usually secured to furniture rather than mobile to ensure they do not leave the library. In most libraries, patrons must bring their own laptops.

Not surprisingly, library staff and patrons reported uses of library computers as diverse as the Web sites and electronic resources available online. A handful of uses were most frequently mentioned, however:

**Email:** Most libraries said this was still the most common use of library computers by residents, as well as by travelers from across the nation and the globe. Because many users only need to use the library computers for short periods of time to stay connected, many libraries have dedicated one or more computers as “express” computers for (usually) 15-minute sessions. This practice was reported to reduce friction between residents and tourists competing for limited computers, as well as to enable the library to meet more patrons’ needs. It also was reported, though, that more and more younger library users were using chat software – where it was available – instead of email.

**Job and professional resources:** This broad category encompasses using library computers to search for jobs, run home offices, apply for jobs online and update personal resumes. One single mom in Maryland looking for a job put it this way: “People need to find jobs, get on their feet.”

One of the most surprising aspects of this use was the dramatic increase in the number of businesses that require applicants to apply online. Staff in several Las Vegas-area libraries reported their libraries were inundated when a new casino opened within the last
year and required all applicants to apply online. For many job seekers, this was their first time using computers and the Internet. Not only did they need to fill out the online application, they also needed to establish an email account and check back frequently to see if they were a candidate for employment. In addition to low technology skills, many of these new library patrons had low literacy rates and/or spoke English as a second language. Not surprisingly, the impact on staff time was tremendous while helping these users. “Online job applications are a killer.” Nevada and Delaware also recently put their state government jobs online and are encouraging job applicants to apply online.

Entrepreneurs were almost as common as job seekers. About 10 percent of the library computer users interviewed relied on the library to research grants, stay in touch with professional contacts, update business Web pages, read online business publications, prepare invoices and more.

**Homework and education-related resources:** The library’s complementary role to schools and universities resounded in patron interviews. Parents and students reported coming to the library, often daily or weekly, to do research for school, use word processing and presentation software for class assignments, and even attend classes online. “When my kids were younger, if it weren’t for the library, they wouldn’t have had that resource. They were here daily – and were ‘A’ students,” said another Nevada library patron. Library staff also reported a sharp rise in test proctoring for high school and college students, though not all libraries offer this service.

**E-commerce and “life management” resources:** Similar to email, many staff and library patrons reported a high level of use for online banking and bill pay, printing boarding passes for air travel, buying and selling stock and more.

**Social networking Web sites like MySpace and YouTube:** Not surprisingly, more and more patrons are reporting that MySpace, YouTube and other popular Web sites are part of their routine use of library computers. High school and college-age students were most likely to report that this was a top use for them, but one mother with two children in Maryland also uses MySpace to participate in an online journal with eight of her siblings.

**E-government resources:** The most common e-government resources reported by library staff were accessing and filing tax forms, seeking and using Department of Motor Vehicle information, and seeking immigration information and making appointments with the Immigration and Naturalization Service.

In addition to wireless access, the most common technology requests or suggestions for improvements were:
- More computers;
- Longer time limits for computer use;
- Faster computer and Internet speeds; and
- More or better peripherals, including scanners, color printers and CD burners.

Almost every library, regardless of size, budget or location, experienced wait times at some point during the day. In the busy after-school hours, queued lines were not uncommon. Most libraries have and enforce time limits on computers ranging from 30 minutes to two hours. Some allow
patrons to re-log on as often as they are willing to “take their turn”, while other libraries strictly enforce daily time limits – often one or two hours per day.

One of the most striking statements about the impact of time limits came from a Utah librarian, who described the wealth of online resources available through the library and the frustration of limited computer access. “It’s a real contradiction that needs to come through. We’re really not allowing people enough time to fill out an application, to do homework…. Thirty minutes is nothing.” Without time limits, however, fewer people would be able to use the library computer resources. One library staff member described trying to find the right balance between serving the most people possible and allowing adequate time online for a meaningful experience. The library has established different time limits for after-school hours and the quieter times in the morning.

**Staffing**

The impact of technology on library staff is substantial. As library patrons become more and more sophisticated technology users, the demand for faster and better service is growing. Patrons are bringing their iPods, digital cameras and laptops to the library expecting to use them as seamlessly as they might at home or work. Or, they are new users of these technologies who are looking to staff for help configuring their laptop’s wireless or help downloading and emailing digital photos. It’s a challenge, particularly for staff members who also are new to technology, to feel competent enough to help their patrons.

At the same time, the library technology environment is becoming more complex – from managing the network to updating the library’s Web site to troubleshooting new business applications that help libraries track items purchased, cataloged and circulated. Libraries are installing self-check computers and reservation systems to manage time limits on computer sessions. They are providing more downloadable media – from text e-books to audiobooks to videos. They are creating e-newsletters to promote events and services and sending email renewal notices. They are purchasing filtering systems and managing the settings.

High on almost every director’s wish list is at least one—or additional—dedicated information technology staff person. Many library staff, particularly in rural libraries, learned computer skills on the job or in training offered at the state or county level. With staffs as small as one or two full-time employees and a handful of part-time employees, many directors struggle to find time for staff training. In these libraries, there are no building-level IT staff at the library. Larger libraries with dedicated staff may still have only one IT employee. “We have well over 100 computers and just the one guy,” reported a Maryland library director. Directors at a couple of the larger libraries said they had hired or planned to hire a manager of a “virtual branch” to manage all of the system’s online offerings.

Keeping current is an ongoing challenge both in terms of the available training, time and the proclivity of staff members. “You almost need two levels of IT staff. How do we push to the next level while keeping things running on the floor?”

While providing technology access can be challenging, most staff also reported it was rewarding. They reported being able to provide better reference services and access to online resources that they never would have had the space or budget for in print. “Technology is a great leveler between small- and large-sized libraries, but there is a growing sense of unease about there being so much more that I don’t know.”

151
Advocacy
Library directors reflect a wide range of experience and ease in advocating for support of their libraries. Nearly all agreed that library leaders must be “at the table” in local government, and that they must proactively demonstrate the value of library services to local officials and business leaders.

Library directors freely shared examples about how they are creating meaningful relationships at all levels to improve and integrate library services in their communities. Several directors provide an orientation and/or tour of the library to all new city or county elected leaders. Several had commissioned internal audits or surveys of patrons to gauge satisfaction and use of library resources. Many directors talked about building trust with local budget agencies through sound planning and stewardship of resources. At least one library prepares a business case, often discussing the return on investment for each of its technology initiatives. Most libraries used statistics and stories to show the value of the library.

However, many library directors also noted that advocacy was just one more responsibility they struggled to handle with too few staff, little training and limited time. As a result, they were dependent on others’ funding decisions, rather than framing the discussion. Since it was often the case that local leaders were not frequent library users, decision-makers often were unaware of the level of use and range of services offered in the library. Several directors described a turnaround in support from the mayor or council member after outreach by library staff brought them to the library for a well-attended event or meeting. Even library supporters need ongoing education about new technology offerings and the value of these to the local community.

Most libraries had Friends groups, and trustees often were advocates for the library when it mobilized support for budget discussions or capital campaigns. One Delaware library Friends’ group had mobilized many of its 269 paid members to serve as liaisons to other community groups and “take the library everywhere.” One Nevada library board member regularly attends Chamber of Commerce and City Council meetings to provide library updates. It was rare, however, for trustees and members of the Friends groups to be engaged in regular outreach to the community on behalf of the library. Where there was regular communication with community groups – including Lions Clubs, school boards and the Boy Scouts – this was handled by the library director or other library staff.

DELAWARE CASE STUDY
Library technology in Delaware has been well-funded, but the state is now facing an economic downturn. The state funds the statewide library network, a three-year match program for computer replacement, statewide licensed databases and has established and is working toward a statewide Delaware Library Catalog. Public libraries in Sussex and Kent County have integrated their collections in the catalog, and Wilmington Public Libraries and New Castle County Public Library System are considering the move. The state also is investigating how it may be able to offer all libraries wireless access on the statewide network.
**Governance and Statistical Information**

Delaware has 21 public library systems with 33 physical library locations and two bookmobiles serving more than 4.2 million residents.124 Delaware’s public libraries are organized primarily as library districts (52.4 percent) and county systems (28.6 percent). Another 19.1 percent are organized as municipal government or city/county libraries.

In 2004, Delaware public libraries reported serving more than 3.5 million visitors, answering nearly 500,000 reference questions, and circulating nearly 5 million items (e.g., books, films, sound recordings, audio books, etc.). Delaware public libraries borrowed or loaned another 276,000 items through interlibrary loan on behalf of residents.125

Residents are served by 282 library employees, 97 of whom hold Master’s degrees in Library and Information Science (MLIS) and another 49 that work as librarians but do not hold a master’s degree. Delaware public libraries rank 42nd in overall staffing and 41st in MLIS staffing.

In fiscal year 2004, Delaware public libraries ranked 29th in the number of public-use Internet computers per building (9.39) compared with public libraries in other states.

**Funding Summary**

Seventy-five percent of Delaware’s public library funding comes from local sources (tax dollars), 12.7 percent from state sources, 0.5 percent from federal sources, and 11.9 percent from other sources (e.g., private fund raising, gifts, bequests, etc.).126

Delaware ranks 32nd in total operating revenue support ($26.48 compared with $32.21 nationally). Delaware public libraries rank ninth in state support, 35th in local support, and 12th in other support. In 2003, the state increased its investment in upgrading technology access in its libraries. After the Bill & Melinda Gates Foundation and the state provided funds to replace every computer in the state’s public libraries, the state created new funding for computer replacement. An incorporation tax provides $300,000 annually for libraries to replace computers on a three-year cycle, plus provides another $100,000 in funding for “innovative library technology.” Libraries must provide a 50 percent match for the technology replacement funding. The incorporation tax funding is in addition to roughly $635,000 in state funding for libraries, which is up from $100,000 five years ago.

Fifty-nine point nine (59.9) percent of operating expenditures go toward staff costs (salaries, benefits, retirement), 15.9 percent toward purchasing collections, and 24.1 percent for other things, such as programming, building maintenance and utilities, and computer hardware and software. Regarding other operating expenditures, Delaware’s spending is slightly more than the

---

125 ibid
126 ibid
national average of 21 percent. Delaware ranks 33rd in total operating expenditures ($24.83 spent per capita), 37th in staffing and 25th in collections.\textsuperscript{127}

In this year’s \textit{Public Library Funding & Technology Access Study}, Delaware reported that of those receiving E-rate discounts, telecommunications services (72 percent) and Internet connectivity (28 percent) were the two most commonly funded discount categories. The majority of technology expenses in both fiscal year 2006 and 2007 were paid from local and state revenue sources, and for some libraries, donations and local fund raising were significant contributors to supporting technology purchases.

In fiscal year 2004, Delaware public libraries reported $1.4 million in capital expenditures (building repairs, renovations, or new buildings). Fifty-three-point-six (53.6) percent reported expenditures below $10,000 and 19.1 percent between $10,000 - 99,999. Approximately six libraries, 28.6 percent, reported capital expenditures in excess of $100,000.\textsuperscript{128}

This year (2007) the Delaware Committee on Libraries recommended that $10 million for new library construction be included in the Governor’s budget. While the Governor usually accepts the recommendation, State Library staff report that competing construction pressures for new schools and roads this year have reduced the anticipated funding to $1 million.

\textbf{Connectivity Summary}

The State Library reports that all of the public libraries have T1 or T3 access. Fifty-one point six (51.6) percent of Delaware’s libraries reported access speeds of 6 mbps or higher. Libraries in New Castle County are on the county network. All other public libraries are on the state library network. The major barrier to connectivity in the state is that the capacity for connectivity does not exist in all parts of the state.

Delaware public libraries reported in the \textit{Public Libraries and the Internet 2007} survey that 81.8 percent of its patrons must wait to use public Internet computers at some point in the day. The top three factors influencing the library’s ability to add more computers is space (81.8 percent), costs (63.6 percent) and maintaining and upgrading computer equipment. Sufficient staff to support public access computing was ranked fourth.

Wireless connectivity was available in 48.5 percent of Delaware’s public libraries, and it was anticipated that another 18.2 percent would add access in the coming year. Speeds of access may be impacted for some libraries that share bandwidth with existing public access computers (30.3 percent) despite the strong connectivity access speeds available in Delaware.

The State of Delaware ranks 27th in the number of Internet users as a share of the population (59.1 percent). In the deployment of computers and Internet use in schools, Delaware ranks 38th nationally.\textsuperscript{129}

The Delaware Children’s Internet Protection Act (title 29, chapter 66c) requires public libraries to have acceptable use policies, prohibits anonymous use of a library’s computers and mandates

\begin{footnotesize}
\begin{enumerate}
\item ibid
\item The Information Technology & Innovation Foundation. 2007 State New Economy Index. \texttt{http://www.itif.org/index.php?id=30}
\end{enumerate}
\end{footnotesize}
tiered Internet access for youth under 17 years old. A parent or guardian must accompany the minor to the library to apply for a library card and must designate “no Internet access;” access only to DelAWARE Digital Library databases appropriate for grades K-5; access to all DelAWARE Digital Library databases; or full access to databases and the Internet. Only “full access” allows youth under 17 years old permission to use the Internet in Delaware public libraries.

**Major Challenges**

While the state has been supportive of technology infrastructure in libraries, technical support is still an issue. Several libraries do not dedicated IT staff and are dependent on the State Library for assistance. Many of those with support at the county library level still lack trained staff at the building level.

Developing, accessing and maintaining library Web sites also are challenges, particularly for small libraries.

**Focus Group Summary**

The project team conducted two focus groups at the Sussex County Department of Libraries in Georgetown. In Sussex County, there are three county libraries, plus the bookmobile. There are 11 independent libraries, which also receive funding from the county. In addition, the independent libraries also receive funding from a 1 percent tax for placement of mobile homes and a capitation tax based on a formula devised by library trustees. Some municipalities contribute utilities and other public works. The County Advisory Board also provides guidance on policy issues.

We gratefully acknowledge the assistance of Annie Norman, director and state librarian of Delaware Division of Libraries / State Library, and Carol Fitzgerald, director of the Sussex County Department of Libraries, for their time, thoughts and assistance in organizing our visit. We also would like to thank all of the librarians who participated in our focus groups. A complete list of focus group contributors can be found in Appendix F.

**Expenditures and Fiscal Planning**

The libraries are braced for a decline in funding, with the amount still to be determined. The mobile home tax has declined recently, and participants expressed concern that state funding may decrease due to a deficit in the transportation budget. While library use and real estate values are increasing, assessments have not changed in years and are unlikely to be increased since low property taxes are part of the area’s attraction, especially to retirees. In addition, most libraries must compete with schools, roads, sewers and other growing infrastructure needs.

The amount of private fundraising varies widely. One library received a grant for a projector from a local business. Another received funds for a Little Tyke computer center. Three libraries reported receiving a significant part of their budget from private sources. One library raises about 30 percent of its budget through fundraising efforts. Two libraries conduct an Annual Appeal. Most of the boards and Friends groups are focused on raising money for new buildings.

The State Library Technology Plan calls for the replacement of all library computers every three years, and the new ILS requires up-to-date computers, so libraries must upgrade to take advantage of the statewide catalog in development. The state will fund up to 50 percent of the replacement costs as a matching grant. This year it also provided $3,000 to every library for
technology training through a Library Service Technology Act (LSTA) grant for professional development.

The group agreed that county officials’ understanding and support for technology has come a long way since the system first made its case for automation in the 1990s. Members of the county library’s advisory board have been—and continue to be—active at the local and state levels, writing letters and meeting with legislators.

Participants agreed that getting state money for a new statewide ILS system and for computer replacement was a major achievement. All praised the leadership of the State Library and the Sussex County Department of Libraries director.

“I was in a very rural area in New York State, but we had much more technology than the libraries in Delaware, when I got here... The changes that I have seen in the last five years have been dramatic and it really shows the effort on the part of the state and county and everybody... leadership is really the key. If you have the good leadership, things will happen. But if the leadership isn’t there, it can fall apart very quickly.”

**Meeting Patron Technology Needs for Internet Services**

In all but one community (where a community college allows the public to use its facilities), the public library is the only source of free computers and Internet access. All have T-1 lines.

The most frequent computer users cited by the focus group participants are:

- Middle and high school students;
- Young adults: ages 20-30;
- Retirees (in the coastal resort communities);
- Foreign students (in coastal resort communities); and
- Men

What they use most are:

- Email;
- MySpace and online dating;
- e-Bay;
- Online games;
- Job applications (the State of Delaware has put all its job applications online);
- Taxes;
- Classes;
- Genealogy;
- Word processing and PowerPoint; and
- Databases

One library sets aside a special computer with a three-hour time limit to accommodate time-intensive uses. Two libraries proctor tests. Computer classes—everything from basic to preventative maintenance—continue to be popular.

Foreign students who work summers in the resort communities pay for a nonresident card. They use the library mainly to do email with family and friends. Retirees are heavy users in the retirement communities. They learn about databases in Lifelong Learning Classes and some do
research for classes they are either taking or teaching. One library director pointed out a success story reported in her library’s newsletter.

“His name was Bernie . . . He’d never touched a computer in his life. He came and took some of the computer classes. He got so good that he would come in with his oxygen tank, trailing it behind him. It turned out, he had adopted a foster child, a girl in Guam, and he would show us her photos and he was so proud of her, because she graduated from nursing school there. And she would write back to him…”

Another told of a man in his fifties who had retired from the state and needed to supplement his income. He couldn’t read, but the library staff helped him fill out job applications online and he ended up with a job as a night watchman that pays more than the staff member earns.

It was noted that libraries today serve both the technology “haves” and “have nots.” Lines of five or six people are common. Some people get tired of waiting and leave.

The most frequently requested services:

- More computers;
- Wireless;
- Quiet area;
- Color printers;
- Scanners; and
- CD burners

**Impact on Staff**

“I keep trying to remind them, you know, nobody’s going to die over this. We’re not an ER here. But people come in, demanding what they want. And they don’t want us to have to figure it out; they don’t want us to have to learn it. I find it is very difficult for the staff to cope when things are constantly changing.”

The directors expressed concern that customer service suffers when staff are not technologically savvy. The learning curve hasn’t been easy, particularly with the speed of change. One director said that many on her staff are still uncomfortable with technology.

Finding time to spend on training can be challenging. One director said she finds it hard even to have staff meetings because so many of her employees work only part-time. (“Even if I pay them to come in, they have other jobs or other commitments or college or whatever, and it’s very hard.”) Staff turnover, especially part-timers, means there is a need for continual training and retraining. Hiring tech-savvy teenagers has been a help for some, although it was noted that Dairy Queen pays $10 an hour—more than the library.

The group had high praise for the technical staff at the county and state levels. But they also said every library should have its own full-time IT person to manage the Web site, train other staff and the public, and do day-to-day troubleshooting. They did not, however, foresee a way of funding such a position—both because of the higher pay scale for IT workers and the required benefits. Only two libraries hire outside help with technology needs on a part-time basis. It is more often the case that one staff person becomes the de facto “technology person” to troubleshoot and coordinate with the county or state library IT staff.
“I don’t have to wait. I don’t have to go, ‘I have no idea when the computers are going to be up’ . . . That’s the plus side. The down side is that it’s extremely stressful and I don’t get my other work done. So I end up putting in additional hours that I’m not getting paid to do.”

Libraries serving resort communities face an additional challenge in terms of traffic, which often doubles during the summer months, and training seasonal visitors to use new systems.

“I think the worst day we had last year, we had 1,500 in one day... Every summer person that comes back this year is going to have to be retrained in how to get on the computer, and also how to release a print job. We’re going to invest at least 15 minutes per person . . .”

Stress has a big impact on staff. Participants said their staffs struggle to keep up with constant upgrades, and many feel inadequate. A new integrated library system (ILS) and time management system introduced by the State Library has been greeted with great relief. But the previous system – a source of considerable frustration and stress – left many staff feeling unsure and anxious.

The bottom line is staff like technology when it’s working and they feel competent. Several, especially those who work at the circulation desk, said technology has made their work faster and easier. Staff also like the new time management software that times people out automatically and allows staff to monitor behavior without a confrontation.

**Advocating Support for IT Services**

“So from our point of view, meeting with another person to advocate that we need more computers is simply another thing on our pile.”

The directors readily admitted they could use help with advocacy.

“As a small library director, you’re doing everything, and your life is consumed by your library. I have done other jobs – this is not one of the hardest, but it’s one of the most challenging when it comes to consuming your life. You do everything, and you do it in order to make that library work, because you don’t have enough staff to do it all.”

One director said her library’s best advocate is a board member who volunteers at the circulation desk because she knows what goes on in the library on a daily basis. But it also was noted that many board and Friends members lead busy lives and don’t feel they have time to reach out to policymakers. If they do speak out, it is more likely to be for a new building, which has a clear needs assessment, than for technology or other ongoing operating issues. Not surprisingly, library board members who are technology users themselves are more likely to be supportive. But a director, who described her board as technology savvy, noted that they are still surprised at how quickly things change and how much it costs.

The directors said they could use help at several levels:

- Assessing their library’s technology needs;
- Assessing their staff’s skill levels;
- Assessing job applicant’s computer skills;
- A guide to how many computers are needed;
- Facts about computers in libraries, how many people use them and how they use them;
- Training other people to be advocates; and
- Educating their boards and legislators about technology needs and the need to update equipment
One director recalled an ALA intellectual freedom kit that she said was very helpful.

“It had everything in it I needed so that I could create a program taking the least amount of time on my end.”

Wrap-Up Discussion: Biggest IT Needs
If money were no object, this is what would be on the directors’ list:

- Full-time IT staff
- More computers, including laptops
- Computer lab
- Bigger building to accommodate more computers
- Wireless (that is easy to administer)

Site Visits Summary
The project team visited four libraries, one serving a coastal community and three serving rural areas. All serve small (20,000 or under) but growing and increasingly diverse populations. Three of the four are the only source of free computers and Internet access in their communities. In one town, a community college offers free public access on a limited basis.

Most of the adult computer users observed are men, many of them looking for jobs or doing job-related research. Interviews with computer users found that those at the rural libraries were less likely to have Internet access at home than at the coastal library. They also were a more ethnically diverse group.

At one library, a local author comes to the library daily to work. Other users monitor National Oceanic and Atmospheric Administration weather Web cams throughout the Eastern Shore, check stock quotes and go to online dating sites.

Computer users at the coastal library included a semi-retired NASA scientist who was checking in with a colleague about a project and a young man who runs his online business from the library (“This is faster. I have to get out of the house. I don’t want to become a secluded hermit.”)

Needs
The greatest needs expressed by the rural libraries were for more space, more computers and more staffing. All three libraries are fundraising for an addition or new library building, which would then allow them to double or triple the number of computers. All three libraries have one-hour time limits per session, which can be extended for another hour if no one is waiting.

One library operates in an historic building built in 1866. Previously a church, it has served as the town’s library since 1919. Not surprisingly, they’ve invested thousands of dollars to update electrical and wiring. About a year ago, the library installed new routers, switches and wiring. Before that, Internet access was down on a daily basis. With the recent annexation of 1,300 homes and plans for a new development bringing 2,000 more homes, the town will have grown by about 50 percent. The library currently has about 1,400 square feet and eight public access Internet workstations.
Another library in need of a new building operates out of two small rooms. Its seven computers are divided between two rooms, one of which serves as a meeting/study area. When the room is closed, three of the computers cannot be used. The server is in the staff bathroom. The other library, whose building dates from 1993, has 16 public access computers (two for children), and there are often lines after school. In addition to more space for computers, the addition would double the children’s area and create quiet areas and meeting rooms. None of the rural libraries offer wireless access yet, but it is one of the most frequently requested services.

The coastal library, which opened a new building in 2001, has 30 public access computers—including ones dedicated for children’s use. There is a half-hour time limit, but there are unlimited extensions if no one is waiting. There are generally only lines during the summer months. The library has wireless and the director is exploring adding laptops. If money were not an object, she would like to have an Internet cafe with all the computers grouped and a separate area for teens.

Staff members at all levels expressed concern that they are not able to help everyone who needs it—either because they don’t have the time or lack technology skills. “Short of closing the doors and not helping the public, where do you find the time to have staff training?” one director asked. In fact, another director reported that she does close her library occasionally to offer training.

One of the rural libraries, which logs some 2,200 computer sessions a month, has a “mostly dedicated” IT person to handle updates and assist patrons. She estimated that she helps 25 people a day, but that there are more who could use assistance. One director noted, “It’s a constant learning situation. If staff doesn’t enjoy it, it can be a problem.”

Part of the challenge in recruiting and retaining staff was the low pay available—as well as a lack of benefits.

In the coastal community, the library’s computer use triples during the summer when vacationing families and foreign students employed for the summer come in to email, read their hometown papers and complete course work. Even with the addition of a part-time staff person, the staff is stretched to the limit.

**Keeping up**
Only one of the libraries has a technology plan, other than the three-year replacement plan put in place by the state. All of them rely heavily on the county or state libraries for planning, technical assistance and training. One staff member described her library’s policy as, “If it ain’t broke, don’t fix it.”

The coastal library only recently started offering a basic computer class. The rural libraries currently don’t offer classes. One stopped when the staff member who was teaching left the library.

**Advocacy**
All of the library boards and Friends actively campaign in their communities for new buildings, but have not focused on technology per se. One library Friends’ group has mobilized many of its 269 members to “take the library everywhere.” Friends members’ often serve on community event committees and collaborate with organizations ranging from the Chamber of Commerce to
the Hospital Auxiliary to the local garden club. “It’s foolish to stand alone,” said the Friends president, who also frequently attends library legislative day. “The more we work together, the better we are.” The library also held a legislative breakfast to raise awareness and gain support for a planned expansion.

Another library director said she believes many directors are hesitant to ask for increases or don’t ask for enough—“We’ll ask the Rotary or Jaycees for $1,000, but that’s not what pays the salaries.” She also said directors should be out in the community educating people about the library, but that most don’t have the time.

MARYLAND CASE STUDY

Maryland public libraries benefited early from Internet access, thanks in large part to the vision of then State Librarian Maurice Travillian and the public library administrators. Building Sailor, the online public information network, residents had dial-in access to the Internet as early as 1995 through each public library in the state. The network also supports state government and K-12 education (http://www.sailor.lib.md.us/sailor/). This network quickly expanded both in number of access points and in bandwidth, and now provides high-speed access to the Internet.

Many of the librarians interviewed in Maryland describe their state as "Library Heaven." The network of 24 library systems allows all library directors to "be in one room," and they maintain a proud tradition of working together on cooperative initiatives. The State Library has provided strong leadership, and state funding for libraries also is strong. The library community has worked together effectively on recent funding increases.

Despite strong state funding, local funding continues to be a challenge, but most libraries reported they were “holding their own.” Internet services are highly utilized for job searches and applications, social networking and email, homework, e-government, online education and downloadable media.

The libraries’ greatest needs are for more dedicated IT staff, increased bandwidth, space for more computers, and videoconferencing to improve staff training. There also is growing interest in research and development to stay ahead of the curve and continue to lead. Even in "Library Heaven" there is no room for complacency.

Governance and Statistical Information

Maryland has 24 library systems organized by 23 counties and the city of Baltimore. There also are three regional library systems and a State Library Resource Center that provide support to libraries in the state. There are 179 physical library buildings and 11 bookmobiles serving more than 5.4 million residents in fiscal year 2004.130

In 2004, Maryland public libraries reported serving more than 27.7 million visitors, answering nearly 7.3 million reference questions and circulating nearly 50.8 million items (books, films, sound recordings, audio books, etc.). Maryland public libraries borrowed or loaned an additional 280,000 items on behalf of residents, who are served by 3,200 library employees. Of these employees, 634 hold master’s degrees in Library and Information Science (MLIS) and another

1,219 have been trained as librarians but do not hold a master’s degree. Maryland is unique in offering a Library Associate Training Institute, which is a 12-week training program that also requires 90 hours of in-service training to become certified by the state. Library associates are enrolled by their employers.

Maryland public libraries rank first in the number of public-use Internet computers per building (16.79), as compared with public libraries in other states.\textsuperscript{131} The national average is 10.32.

**Funding Summary**

Sixty-nine point seven percent (69.7 percent) of Maryland’s public library funding comes from local sources (tax dollars), 13.3 percent from state sources, 16 percent from other sources (private fundraising, gifts, bequeathals, etc.), and less than 1 percent (.9 percent) from federal sources. Maryland public libraries rank 15th in total operating revenue support – 4th in state revenue support, 22nd in local revenue support, and 7th in other forms of revenue support.

Sixty-nine point seven (69.7 percent) of operating expenditures go toward staff costs (salaries, benefits, retirement), 15 percent toward purchasing collections, and 15.3 percent for other things, such as programming, building maintenance and utilities, and computer hardware and software. Maryland ranks 15th nationally in overall operating expenditures – eighth in collections expenditures, and 13th in staffing expenditures.

Maryland public libraries reported in the *Public Libraries and the Internet 2007* survey that of those receiving E-rate discounts, telecommunications services (100 percent) and Internet connectivity (37.9 percent) were the two most commonly funded discount categories. The majority of technology expenses in both fiscal year 2006 and 2007 were paid from local and state revenue sources, but fees/fines and donations and local fund raising were significant contributors to supporting technology purchases.

In fiscal year 2004, Maryland public libraries spent more than $29.7 million on capital expenditures (building repairs, renovations, or new buildings), ranking 15th nationally.

The Information Technology and Innovation Foundation 2007 *State New Economy Index* ranked Maryland third in the United States based on 26 indicators in the following five categories: knowledge jobs, globalization, economic dynamism, transformation to a digital economy, and technological innovation capacity.\textsuperscript{2} Driving much of Maryland’s high ranking is broadband deployment, availability of high-tech jobs and workforce education, IT professionals, managerial, professional and technical jobs, and scientists and engineers (a result of the expansion of federal research agencies locating in Maryland).

A strong economy and advocacy from the library community has translated into increased state funding for public libraries in recent years. The Maryland Library Association was successful in 2006 in securing a three-year per-capita state aid increase of $1 per year.\textsuperscript{132} This legislative change positively impacted the expenditure capacity of Maryland public libraries. Per-capita

\textsuperscript{131} ibid
expenditures rose from $36.30 in fiscal year 2004 to $37.48 in fiscal year 2005. This incremental increase will continue through fiscal year 2010.

While state funding for libraries was on the rise, most focus group participants expected flat funding for the coming year from county and other local sources. One county library director was asked to submit a flat budget and a budget with a 10 percent reduction, which would mean the loss of a branch library. Another director expected an increase, which has been the case for the past several years.

**Connectivity Summary**

It’s not possible to talk about connectivity in Maryland without talking about Sailor, the statewide network that was conceived in 1989. Working cooperatively and pooling federal grant money, Maryland libraries established themselves as pioneers in providing Internet access in libraries, as well as to government agencies and schools. Planning for what would become the network began in 1989, and it continues to have a lasting impact.

Bertot and McClure reported in their 1996 assessment of the Sailor project that “The goal to provide free, local, and instant access to electronic networked information resources pushed Maryland to the forefront of public librarianship. Through creativity, DLDS (Division of Library Development and Services)-public library collaboration, and an entrepreneurial spirit, Maryland is now in a position that far exceeds the current state of the nation in terms of Internet connectivity. Indeed, while the rest of the nation’s public libraries contend with issues of establishing Internet connections, Maryland, through the Sailor network, is entering a new era of electronic content and service development. This will once again place Maryland on the frontier of statewide electronic networking.”

Not only did Sailor put librarians in the driver’s seat for technology access in Maryland, it also continues to be cost-saver for libraries and their users. “Without Sailor, we’d be individually out there trying to acquire broadband at God knows what cost,” according to one library director.

In addition to the Sailor backbone, individual public libraries in Maryland provide high-speed connectivity, with the state library reporting more than 90 percent of its libraries operating with such access. Specifically, 45.9 percent support at T1 levels, and 49 percent at 6 mbps or greater. Further, the state library feels there are few, if any, barriers to high-speed connectivity.

Wireless connectivity was available in 54.7 percent of Maryland’s public libraries, and it was anticipated that another 35.2 percent would add access in the coming year. Although high-speed connectivity is prevalent, a number of libraries reported sharing bandwidth to support wireless access (77.8 percent). This has caused some libraries to split connectivity between Sailor connections and locally supported connections.

The state of Maryland ranks 10th in the number of Internet users as a share of total population at 65.1 percent, compared to 58.7 percent nationwide, but is 46th in the deployment of computers and Internet use in schools.

---

http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/23/c0/00.pdf  
134 The Information Technology & Innovation Foundation. 2007 State New Economy Index.  
http://www.itif.org/index.php?id=30
Major Challenges

The high-speed pipe simply isn’t large enough. Concerns expressed by public library administrators, staff and trustees, as well as the public, all point to the need for faster connection speeds. One library, for example, has blocked the annual college basketball “March Madness” playoffs because it crashed the library’s network more than once. Perhaps because Maryland libraries are relatively well-funded and provide rich online content, they are the victims of their own success as downloadable and streaming audio and video – often purchased and provided by libraries – gobble up bandwidth.

Some library administrators need guidance on developing compelling talking points with which to approach county government and external funding organizations to fund libraries and provide support for training and outreach. This was especially true in the smaller, less affluent and more rural of Maryland counties.

Focus Group Summary

The project team conducted two focus groups in Maryland, one in person in Howard County on April 4, 2007, and one by conference call on April 17. Staff from five libraries participated on April 4, and staff from four libraries participated on April 17. We gratefully acknowledge the assistance of state librarian Irene Padilla in helping organize our visit, to Brian Auger and Howard County Library staff for hosting us, and to all of the librarians who participated in our focus groups. A complete list of focus group contributors can be found in Appendix G.

Expenditures and Fiscal Planning

All of the focus group participants mentioned the increased state funding, which is available to local jurisdictions through a formula based on the population and wealth of the county. On average, the state contributes about 15 percent to public library budgets – although this can range from libraries receiving about 40 percent from the state to those receiving about 10 percent.

Most of the focus group participants expected flat local funding for the coming fiscal year, although one county director expected an increase, and another said she was asked to submit a flat budget, as well as a budget reflecting a 10 percent cut.

“The county doesn’t have a lot of money. So, when it comes to fixing a bridge or funding a library, it’s hard to be out there in front,” said one director in a mostly rural county.

Because of the Sailor project, no public libraries reported needing to pay for Internet connectivity. If they no longer participated in Sailor, they had worked to create another network system in concert with other government agencies. Most databases also were funded through the state or regional library systems.

Several focus group participants also said that Sailor and the fact that Maryland public libraries were or are Internet service providers (ISPs) means they have more credibility when they request funding for technology initiatives. Librarians have been leaders in providing Internet access not only within their walls, but also for other public agencies, schools and home users.

“The attitude from county managers is: ‘If they say they need it, we’d better pay attention.’”
**Meeting Patron Technology Needs for Internet Services**

The Internet services available and highly utilized ranged widely, but participants reported that the most frequent uses included:

- Searching or applying online for jobs;
- MySpace;
- Homework help, including tutor.com and use of databases;
- Online education;
- Downloadable media (e-books, audio, video); and
- Email

“It (computer use) has grown tremendously, and not only because of MySpace, but we’re also finding that more and more people don’t want to have to deal with all the spamming, firewall and technical issues required to run a home network.”

Also mentioned were: e-government services, chat, online banking and bill payment.

“We’re seeing a steep increase in accessing government forms online.”

Time limits of 30 or 60 minutes were the norm for most libraries in the focus groups.

“It’s not only the space and number of computers – it’s the time. We have some people who want to stay on there all day, and right now, we’re just saying one hour. We’re building all of these expectations.”

Most of the focus group participants also offered computer classes for library users. These classes are in high demand, but one library recently discontinued the classes due to staffing limitations. Another library is dealing with class waiting lists by digitally videotaping introductory computer and Internet workshops and putting them online. When classes fill up, people have the option of taking the class online.

“We could probably fill three times as many classes as we can afford to offer.”

There also was a discussion of how technology has improved traditional library services. "Our world is revolutionized. Reference is so much easier…. We now provide more services, but books don't give us the same kind of problems."

The top technology requests also varied widely from library to library, including:

- Videoconferencing to improve staff training;
- Increased bandwidth to accommodate the growing demand for downloadable media;
- More physical space and better configurations for additional computers; and
- Additional support for digitization efforts

**Impact on Staff**

At the top of most focus group participants’ wish list was a desire for more dedicated IT staff. Several county libraries reported they have only one dedicated staff person for all their branches.
“We have well over 100 computers and just the one guy,” reported a Maryland library director.

Another library director with only one IT staff person was appreciative of the support he received from county IT staff, as well as from the regional library system and Sailor network staff. Other directors also emphasized the vital role played by the regional library systems.

Larger and better funded libraries also were adding IT staff or hoped to add them in the future. One county just received funding for a manager of a “virtual branch.” The library also had dedicated IT support staff to help patrons with troubleshooting and technology questions.

“You almost need two levels of IT staff. How do we push to the next level while keeping things running on the floor?”

The difficulty of keeping up with new technology offerings, patron demand and staff training was mentioned by several focus group participants. One library has found success with “just-in-time” staff training via the library’s intranet. Trainings are videotaped, and then cut into two-minute segments that can be watched online as needed. The ability and vision to offer cutting-edge services, while minimizing costs and maintenance, was a consistent concern. Other staff impacts included turning Internet filters on and off, and troubleshooting equipment.

Technology like computer reservation software and self-checkout is freeing staff for more one-on-one interaction, but the demands of library patrons continue to grow.

“Technology is a great leveler between small- and large-sized libraries, but there is a growing sense of unease about there being so much more that I don’t know.”

**Advocating Support for IT Services**

While most focus group participants felt they didn’t need to “sell” technology in libraries, they shared many experiences about how they had successfully built and maintained relationships with elected officials and community leaders.

A recent TV news story highlighted a library’s community database and how it was being used by emergency management staff. The reporter interviewed emergency staff who used the database when they were responding to 911 calls and realized they needed to refer people for support services from other community agencies. The library is now upgrading the services with a $40,000 grant from the county Human Services Council.

“If we try to position the library as a critical agency in the county, I can’t think of something that’s more critical than the emergency responders out there using your database.” The library also has worked with county IT staff to develop point-to-point wireless access that serves library patrons and local police in their squad cars.

“In terms of my budget pitch, the library was always thought of as a 9-to-5 operation, but I can clearly walk in there and give them the calendar of the week and say, ‘This is our 24 hour, seven day a week cycle of activity, and you know, we’re seeing over 1600 people a day.’ And I challenge any county commissioner to find another county agency that serves that many people a day – walk-in, as well as virtual users of all the resources that we have.”
Another director said she treats other county departments as library customers. “What are you doing? How can we help? What kind of partnership can we form? We bring them over and show them how what we’re doing impacts what they’re doing. They see the relevancy of our programs and services. We’re in their face.” Library staff members are involved with other city and county initiatives, such as the Sister City program. The library also involved County Council members in the library’s strategic planning process.

Library directors also encouraged library board members to use Internet resources available through the library Web site, including tutor.com and an online story time program. The trustees’ positive experiences made them more effective advocates for the library’s electronic services. Librarians also shared statewide polls and research with key decision-makers.

The unity of the Maryland library community was largely credited for the unanimous passage of dedicated state funding for library operating budgets.

**Wrap-Up Discussion: Biggest IT Needs**

Several participants in the Maryland focus groups focused on the future. Topics ranged from disappointment with current integrated library systems (ILS) and the need for a better, library-responsive ILS to expressing the need for library technology research and development (R&D) departments, to envisioning attractive, edutainment software – "so that we can get a lot more kids using the services, but at the same time, improving their skill sets so there is positive impact when they are in school.” There was strong agreement that it is difficult to balance the daily maintenance of technology with planning for the future.

"You have to be nimble and pay attention."

**Site Visits Summary**

The project team also met and talked with library staff members and patrons at six libraries. A list of sites visited can be found in Appendix G.

**Expenditures and Fiscal Planning**

**Local funding holds steady:** Most libraries visited enjoy good relationships with county funding agencies. Even in an area where home sales were down, the library reported a small funding increase last year – larger than most other local government agencies. Still, though, the library was a relative bargain – comprising less than 1 percent of the overall county budget for most libraries visited.

**Meeting Patron Technology Needs for Internet Services**

**Keeping up is the major challenge:** The greatest needs voiced in our interviews were for more computers and faster speeds. For some libraries the greatest limitation was the amount of bandwidth available. One library staff person described waiting several minutes for a Web page to load during peak hours. For another library, it was the age of the computers. “The county has a beltway (fiber), but we are traveling on bicycles (computers more than five years old).” Fifty percent of the library’s computers are more than six years old.

Another library staff member proudly described the system’s six-year-old computers, powered with open-source software ranging from Open Office to Groovix. The library does not have a replacement schedule for its computers now because they are not tied to a
particular operating system. On the flip side, another library uses open-source software as a last-resort because its software licenses have expired. Both libraries agreed patrons as a group are not familiar with open-source software and often prefer commercial software similar to what they use at home, work or school.

**Libraries tackle time limits:** Most libraries reported time limits of 45 minutes or an hour. One library reported that there is some wait time (ranging from 15 to 60 minutes) much of the day. While most libraries had moved to time management systems, one library system was successfully using the “honor system” when its computers reached capacity – usually in the after-school hours and on weekends. A public announcement would be made asking patrons to wrap up what they were doing and relinquish computers if they had been on for a while. The staffer said the system worked well and saved the library the expense of installing time and print management systems. Printing costs also were voluntary – with the library allowing five free pages and then requesting 10 cents per page.

Other library staff reported that the time management software was a boon in relieving staff from the duty to ask patrons to give up their computers at a set time. “Managing time limits was our staff’s biggest complaint,” one director reported.

Several libraries also worked to ease time pressures with “express” Internet workstations that allowed patrons online access for a limited time – usually 15 minutes – which would allow them to avoid lines for quick tasks like checking email or printing a boarding pass.

**Wireless a priority:** For libraries not yet offering wireless access, it was the top patron request. Libraries offering wireless reported frequent use – and requests for more power outlets. One student at Georgetown Law School uses the library’s wireless access twice a week to write papers and check email. A tutor at another library uses the wireless access daily with his high school and college students. Several libraries noted they segregate the networks for staff and patron wireless access to improve security and bandwidth. One librarian called wireless a “win-win” because it transfers hardware maintenance costs to the users, and it gives users more flexibility.

**Top uses:** Staff and patrons reported social networking – including MySpace, Flickr and BlackPlanet – is one of the top uses of library computers and Internet access. One mother of two reported that she uses MySpace to participate in an online journal with her siblings – including several living overseas. One of the libraries visited, however, blocks MySpace because it crashes the computers. Other high-volume uses included: email, job searching and applications, gaming, and homework resources.

Of interest and note is a 2005 survey Baltimore County Public Library conducted of its in-library computer users over four days. Email and general Internet browsing were the top uses reported, although popular activities varied significantly by age range. Younger users (under 21) were more likely to play games, do homework or participate in online chat. Users ages 22-39 were the most likely to look for and apply for jobs. Users were more likely to e-mail the older they were.\(^\text{135}\)

Impact on Staff

More tech support, please: Library staff visited echoed the request for more IT support heard from the focus groups. Library staff reported they do not receive tech support from the county IT staff, although staff reported networking with school and community college IT staff formally or informally. One library added two IT staff last year and plans to add a Web content manager this year. Most of the libraries offered classes for their users.

Advocating Support for IT Services

Reputation is key: One reported key to sustained funding is the reputation library staff have built with county leaders. “We have a fabulous reputation. Our budget is distributed as a model. Librarians are ahead of others in planning,” one director said. The library ties its budget priorities to county goals. One library schedules library orientations for all new county council members while another library highlighted its outreach to schools and the Board of Education.

Overall, library staff also reported trustees are not actively engaged as advocates or community liaisons on behalf of the libraries’ technology services. While the boards and Friends groups are supportive and can be mobilized as needed, it was rare to have a sustained outreach effort on the part of board members in the community.

NEVADA CASE STUDY

The population of Nevada has been growing steadily for at least a decade. U.S. Census Bureau data reports a 24.9 percent increase in population between April 2000 and July 2006, as compared to a 6.4 percent increase nationwide. In some communities, the legal service area of the public library has more than doubled in less than five years. However, there has not been a corresponding growth in the number of library capital projects or library funding. Most libraries are reporting that their community use is at or near capacity.

Local economies have not kept pace with the increasing demand for more sophisticated technology. As in Jackson County, Oregon, where the timber industry is gone and has not been replaced by another economy that provides ongoing stability for local government (and libraries), Nevada deals with similar issues where the mining industry is no longer viable. Nevada libraries suffer when markets for cyclical goods or services (minerals, tourism) are weak.

Overall, funding is a problem for county libraries, and even those with independent taxing districts. Tax caps mean population growth doesn’t pay for itself. Nevada only taxes on 35 percent of a property’s value (if $100,000 home, the tax is only on $35,000 of the home’s value). The cap on property taxes does not apply to new properties in the first year. On top of this, the state legislature has capped recurring revenue from assessments so that it can be no more than 3 percent per year for residential property or 8 percent for commercial property. Libraries are hurt disproportionately by tax caps because their services are free (unlike other agencies that may charge fees for services).

The top concerns limiting optimal access to computing and the Internet include:

- Constrained space;
• Limited staffing, especially in rural libraries, where this also impacts the ability to offer computer training and maintain open hours for library use; and
• Lack of dedicated IT staff: Libraries without dedicated IT staff struggle to adequately support aging hardware; and

Rural libraries are the only free site of public access computing in their communities, and can also offer higher access speeds, as compared with those available to most residential users. All rural libraries have sign-up sheets, with waiting lists at some point in the day – even with time limits set for as little as 30 minutes.

Waits are common during peak periods in all Nevada public libraries, whether located in urban, suburban or rural areas. Although wireless and high-speed wired access is readily available in urban locations, the demand for these Internet services frequently outpaces supply. Urban libraries offer time limits for public access computers that range from 60 to 90 minutes, with two hour sessions allowed in computer labs.

Although the libraries in Clark County benefit from dedicated property tax funds, they also report difficulties in obtaining needed capital funds for new construction. In addition to the state licensed databases and downloadable audio, the larger libraries provide downloadable video and interactive homework help.

**Governance and Statistical Information**

Nevada has 22 public library systems with 85 physical library locations and four bookmobiles to serve its more than 2.5 million residents. Nevada’s public libraries are organized primarily as county library systems (50 percent), and library districts (40.9 percent). The rest are organized as municipal and multi-jurisdictional libraries (9.1 percent). Public libraries located in remote areas are often in shared facilities with limited space for public access stations.

In fiscal year 2004 (the most recent year for which national statistics are available), Nevada public libraries reported serving more than 9.9 million visitors; answering nearly 1.6 million reference questions; and circulating more than 14.9 million items (e.g., books; films; sound recordings; audiobooks). Nevada public libraries borrowed or loaned an additional 60,000 items through interlibrary loan on behalf of its residents, who are served by 828 library employees. Of these employees, 160 hold a Master’s degree in Library and Information Science (MLIS), and 63 work as librarians, but do not hold a master’s degree.

Nevada public libraries ranks 18th in the number of public-use Internet computers per building (11.06), as compared with public libraries in other states. The size of Nevada’s public library buildings range considerably in square footage. Interestingly, library service areas of 10,000 to 24,999 residents have larger libraries than do those serving 25,000 to 49,999 residents. A similar pattern is observed with even larger service areas, attributed to the availability of more branch library outlets in larger service areas, whereas smaller communities may have only one main library building. For communities serving fewer than 5,000 residents, square footage ranges from 2,764 to 6,049.


\[^{137}\text{ibid}\]

171
**Funding Summary**

Seventy percent of Nevada’s public library funding comes from local sources (tax dollars). The balance comes from other sources (25.1 percent), such as private fundraising, gifts, bequests, fines, and fees; state sources (3.2 percent); and federal sources (1.3 percent)

Nationally, Nevada ranks 22nd in total operating revenue support; 26th in state support; 33rd in local support; and 3rd in “other.” The fact that Nevada public libraries rely so heavily on non-tax support is important to consider in order to understanding the state’s overall capacity to provide services, especially technology-related services. The national average for non-tax support is $2.59 per capita, but in Nevada it is $7.50. Only Rhode Island ($7.65 per capita) and New York ($7.70) have higher per capita non-tax revenue. Nevada libraries rely significantly on grant funds or sponsorships to underwrite library improvements and launch new initiatives.

Nationally, Nevada ranks 28th in total operating expenditures ($27.13 spent per capita); 29th in staffing; and 14th in size of collections. In Nevada, the largest percentage (65.6 percent) of operating expenditures are used for staff costs (salaries, benefits, retirement), with 17.5 percent spent on collections, and the remaining 16.9 percent for other things, such as programming, building maintenance and utilities, computer hardware, and software.

Nevada public libraries reported in the *Public Libraries and the Internet 2007* survey that of those receiving E-rate discounts, telecommunications services (100 percent) and Internet connectivity (35.7 percent) were the two most commonly funded discount categories. The majority of technology expenses in both fiscal year 2006 and 2007 were paid from local revenue sources.

When it comes to capital expenditures, only four states spent less (Hawaii, North and South Dakota, and Wyoming). About 36 percent of Nevada public libraries (roughly 38 branches) benefited from $1,075,000 in capital expenditures (e.g., building repairs; renovations; new buildings). Approximately 11 branch libraries made minor repairs (paint, etc.) costing under $5,000. Only nine of Nevada’s public libraries reported spending more than $50,000 on capital improvements (possibly for major repairs and renovations). In 2005, North Las Vegas built a new branch library that cost about $5 million, on donated land.

During the focus groups and site visits used to develop this profile, rural library directors projected flat funding at best for the coming fiscal year; several directors anticipate budget and staffing cuts. Urban library directors, mainly in the Clark County area with tax districts, stated that they expect to see continued funding growth as a result of new construction. Library directors and several library trustees and community members noted what *Governing Magazine* in 2003 called “a deeply rooted anti-tax ethos in the state.”

**Connectivity Summary**

Of Nevada’s 22 public library systems, 14 jurisdictions are members of the Cooperative Libraries Automated Network (CLAN), which provides a shared library application system, telecommunications network, and Internet-delivered catalogs, indexes and databases. The remaining 8 public libraries systems (Washoe; Las Vegas-Clark County; Henderson; North Las Vegas; Boulder City; Pahrump; Smoky Valley; and Amargosa) manage their own autonomous internal systems.
The Nevada State Library estimates that the majority of the state’s public libraries (90 percent) are on broadband connections (not dial-up), although not necessarily with high-speed or dedicated access. However, of the 85 physical public library locations, six are limited to dial-up access.

Like other states, Nevada supports multiple telecommunication networks, and the infrastructure in some parts of the state is not as robust as it could be. Much of the state is sparsely populated, and the telecommunications infrastructure in Nevada reflects that reality. Unless there is a reason to develop an infrastructure in parts of the state without the population to support it, change will happen slowly.

Forty-two-point-seven (42.7) percent of Nevada’s libraries reported access speeds of 6mbps or higher. Another 35.9 percent support public access computing at 768kbps-1.5mbps, and 21.5 percent at speeds below 768kbps.

Wireless connectivity was available in 28.6 percent of Nevada’s public libraries, and it was anticipated that another 18 percent would add access in the coming year. Speeds of access may be impacted for some libraries that share bandwidth with existing public access computers (54.7 percent) despite reasonably strong connectivity access speeds available to Nevada’s public libraries.

According to the 2007 State New Economy Index, Nevada ranks 40th in the number of Internet users as a share of the population at 55.6 percent, compared to 73 percent nationwide. The state ranks next to last in the deployment of computers and Internet use in schools, followed only by Utah. While Nevada ranks fifth in the nation in the deployment of residential and business broadband lines, public libraries in some parts of the state are not served by commercial providers of broadband services or cannot afford the high implementation costs. The State Library considers six public libraries to be “vulnerable.”

**Major Challenges**

Most of the significant obstacles to increased access to computers and the Internet are rooted in limited local funding. Most rural library buildings are at least 12 years old and predate the need for computer wiring and workstations. Even in libraries willing to be open with only one staff person on duty, directors of small libraries expressed that hours were limited due to staffing shortages. One small library reported dozens waiting in line for the library to open at 10 a.m. on weekdays.

The lack of IT support also was named a consistent issue impacting public computer access. All CLAN libraries are able to use the cooperative’s staff resources for help, in addition to their counties’ IT staff. However, those seeking help from their county frequently report finding themselves at the bottom of the service priorities – particularly if the county only has one IT person to provide IT service to all departments and agencies. Several libraries devote part of a library staff person’s time to supporting and troubleshooting IT; most staff have learned how to manage routine problems while on the job.

---

Focus Group Summary
The project team conducted a focus group among all the attendees of a regularly scheduled CLAN Board meeting in Winnemucca on March 8, 2007. We gratefully acknowledge the assistance of CLAN director Dana Hines and the Nevada State Library & Archives in coordinating our visit and would like to thank the CLAN members for allowing us to take a large part of their board meeting agenda. A complete list of focus group participants can be found in Appendix H.

Expenditures and Fiscal Planning
Overall, participants anticipate flat budgets, at best, for the coming fiscal year. Three participants expected budget cuts in the coming fiscal year. Most county budgets were still in development and due in May 2007. All attending libraries are funded through a sales and/or room tax; none of the participants derive revenue from separate taxing districts.

Participants referred several times to the fact that libraries are not a mandated county service, per Nevada Revised Statutes. In part for this reason, they feel libraries consistently rank at the bottom of priorities for their county/local governments – particularly as compared with public safety agencies.

One director noted that one of her county commissioners didn’t support the library and its technology until he was in the library and saw the use—particularly among Hispanic children. She has moved the copy machine to the back of the library to ensure that county commissioners make their way through the entire library. Participants also agree that the perception that libraries provide pornography is a real problem for obtaining funding for technology in libraries.

A single funding success was reported by the group: writing grants for technology, along with carpeting, electric and other capital improvements. One participant stressed the importance of sharing personal stories to make the case for libraries. Her story featured two women with infants who were using the library to complete their degrees online. She used this anecdote in grant applications, a newspaper story, and word of mouth.

Meeting Patron Technology Needs for Internet Services
Participants reported the most frequent uses of library computers are:

- Email;
- Google;
- Printing boarding passes for air travel;
- Online banking;
- E-government (particularly tax forms and immigration documents);
- Downloadable audiobooks; and
- Continuing education.

One participant highlighted the fact that Nevada personnel forms now are available only online. “This is true for a lot of job application forms now.” People also take job tests online.

The top technology requests are:

- Wireless access;
- Downloadable media; and
• Genealogy databases.

The top priority with any additional funding is for new or expanded buildings, followed by dedicated IT staff at the building level.

One participant said: “I would do more of everything I’m already doing.” Her priorities are a bigger server and triple the bandwidth.

Other expressed needs included:
  • Flash drives;
  • Time management software; and
  • Dedicated space for computer labs.

Less than half of the libraries offer formal technology training; most is done one-on-one. Several participants reported inadequate staffing levels and too few computers to offer training. At least one library mentioned using volunteers to do public training; another participant commented that demand for training was decreasing at her library.

**Impact on Staff**
Overall, most participants stated that the biggest impact of technology on library staff was managing time limits. All libraries reported 30-minute or one-hour time limits as the norm, with waits for computers common. One library reported that it had previously used time management software, but stopped because users were losing documents when the time limit was reached. Another said that the time management software was important for the library, as it was often ‘ugly’ to get people to relinquish the computers they were using.

Most participants reported they are dependent on county IT staff for technical support that is woefully inadequate. “If we could get away from some of the junk (outdated equipment) we have in the library, the IT person would be less busy.”

Libraries also depend on CLAN for technology support or hired an outside company. A couple of libraries dedicate part of their library staff time to technology support.

**Advocating Support for IT Services**
“We don’t promote the computers. It’s just expected.”

Most participants mentioned they had done some initial promotion of technology when computers were first introduced, but now it’s mostly handled through word of mouth. One participant mentioned that DSL only recently became available residentially. Nearly all reported they were the sole providers of free public access to the Internet, and even home computer users come to the library for faster Internet access. There was overall agreement that more promotion could overwhelm library capacity, which already is stretched thin.

All libraries reported having Friends groups. Most participants reported they do not have strong local government support. “They want you to have the best and the fastest, but they don’t want to pay for it.” Library boards are helpful, but libraries can’t compete with public safety concerns at budget meetings. “The sheriff is threatening that people will die without more funds, while the library can only promote the positive.”
Participants provided some examples of how they are engaging the local community to improve support. One library leverages performance opportunities for other community organizations. When the library brings in a performance group, the director asks them to add an additional performance at a local nursing home for a small fee. “The library needs to become the giver, not just with its hand out.”

Another participant mentioned its sponsorship of an oral history project, as well as a photography competition and exhibition that now contributes more than $300,000 to the local economy. Another participant sponsors a high school art show, which help brings people into the library. “The library is a common ground – a neutral ground.”

Wrap-Up Discussion: Biggest IT Needs
When asked to identify their community’s biggest IT needs, requests for more staff, more space, and more hours re-emerged. A specific challenge mentioned is that rural communities need more bandwidth at affordable rates. “During telecom deregulation, providers made a lot of promises, but Congress has never held them accountable.”

Other challenges include: the need for librarian recruitment, as many of the participants are nearing retirement; and increased support for school librarians and information literacy efforts. Many shared the concern that children are coming to the public library without critical research skills.

Site Visits Summary
The project team visited several libraries, serving populations ranging from roughly 2,000 to 478,000 residents, meeting with library staff members, library patrons, trustees and city leaders representing 14 libraries.

The following findings, summarized by broad themes, emerged during site visits and focus group discussions:

Expenditures and Fiscal Planning
Funding is not keeping pace with increased use: Although library use (visits and computer session) is increasing, there has not been a corresponding growth in funding for county libraries. In fact, library directors in county libraries and community leaders agreed almost verbatim that libraries are at or near the bottom of funding priorities, particularly when competing with public safety and roads/transportation.

“I fear for parks and recreation and for libraries. Sales taxes are down. Libraries are not a mandated service. Libraries compete for the same funds as emergency services. They are on the bottom of the food chain,” one city manager said. In fact, the city technology director characterized the library’s equipment as “aged and antiquated.” The city planned to install a new server, new computers, and new security this year.

The fiscal climate for libraries with dedicated taxing districts is more positive, as funds from property taxes increase with population growth. Many of these directors, however, shared their rural colleagues’ experience of anti-tax voters. Ballot measures to support capital funding for new building projects have been largely unsuccessful at the same time that all service indicators are on the rise. Property tax caps also have limited library
growth, reducing revenue by $8 million in capital funding, according to one director’s estimate.

Despite constraints on consistent and sustainability local funding, library staff continues to fundraise and collaborate to meet increased demands. One public library recently began offering wireless access after receivers were donated by the library’s active computer user group. A local computer store owner provided system set-up, and a commercial provider offered free bandwidth. At another library, the board funded wireless access when the city balked in offering the service.

Another library director recently secured corporate sponsorship to underwrite online reference services and live homework help offered by the library. This library also has a Friends group that raises about $70,000 per year, holds an annual fundraising event, and has recently started a foundation to focus more on fundraising and planned giving.

Meeting Patron Technology Needs for Internet Services

Public libraries are the only sites of free public access computing: All have sign-up sheets or electronic reservation systems for computer usage, and all have waits during some point in the day, even with time limits as few as 30 minutes. Library computer usage has grown greatly in the past two years. For example, one library’s computer usage grew to 11,999 in 2006 from 9,577 the previous year—this in a town with a population of only 7,700.

Libraries and Internet-use computers are being used at or near capacity on a daily basis: At many locations, staff reported a line of patrons seeking Internet access waiting for the library to open, especially on Mondays. The peak computer usage time for most libraries is after school from 2 p.m. until closing. Weekends also are busy during most times of the day. Library staff members encourage adults to visit the libraries in the morning to ensure the maximum access to computer time.

Impact on Staff

Online job searching; all types of applications increasing: Interviews with library staff and users confirmed that the leading uses of library computers and Internet access are: email; job searching and applications; research; and “life maintenance” (e.g., online banking; printing boarding passes; using social networks like MySpace; and gaming). Las Vegas-area libraries particularly emphasized the growth in online job applications, which require many people to use computers for the first time, establish email accounts and check back frequently on job prospects. Several staff members noted the difficulty of completing this task in one hour and the heavy impact on front-line staff in assisting patrons one-on-one. “Online job applications are a killer.”

One library staff person reported: “The biggest change in tech services is that the computers have gone from toy to tool, especially for adults looking for jobs.” The library helps job seekers fax resumes, use job resources and navigate e-government sites. Members of the community are frequently referred to the library from other community agencies. Increase use of e-government services also was cited by several staff members. For example, the Immigration and Naturalization Service (INS) requires that people go online to make an appointment to meet with agency staff.
Libraries offer more than access: While most libraries grouped public access computers together, one library also located two staff computers in the area. Library staff reported they were better able to notice a patron struggling online and library users were more likely to ask for help. Computers are always staffed with at least one person. Accessing and printing job and government forms (e.g., birth records; death certificates; Department of Motor Vehicle forms; and state income tax forms) is a frequent use. “People are overwhelmed. Computers aren’t just in libraries for people to find information on their own. Having staff nearby is critical.” The library’s T1 access also was cited as a draw for library users – including those with Internet access at home. One branch manager noted, “People don’t have IT staffs at home.” The leading requests for technology were for wireless, more computers and faster access speeds.

Advocating Support for IT Services

Relationships are key: One library trustee regularly attends Chamber of Commerce and City Council meetings to update them on library activities. He began networking with a new business that had moved into the library’s service area, inviting them to conduct job interviews in a library meeting room installed with free wireless access. The company is now a library donor.

One director commented, “I can only do so much. I need the Chamber (of Commerce) to be advocates. Libraries shouldn’t be positioned as charity – then you’re treated like a second-class citizen. What we do is important – it’s not trivial or entertainment, it’s lifelong learning.” The library has actively participated in true partnerships, those in which the library is able to contribute to its strengths – such as community programming, meeting space or online homework help – in return for community support and funding.

In addition to collaborations with community businesses, several libraries are looking to develop relationships with school districts. “School administrators now have a greater stake in kids passing – which is an opportunity for libraries. Homework help needs to actively support curriculum, not just term paper support.” The library is buying textbooks and creating homework help centers for students.

Another key advocacy relationship is the collaborative way in which the libraries relate to one another. The rural library branches in the Las Vegas Clark County District, despite small building sizes, are able to rotate their collections and benefit from the IT staff expertise of system staff. This relationship allows the library to be more responsive to the local community, and provides far greater offerings than the local economy could otherwise support. Several members of CLAN also highlighted the importance of this cooperative relationship in providing technology connectivity and a shared catalog.

UTAH CASE STUDY

The public libraries in Utah range from the beautiful and bustling new Salt Lake City Public Library to the also bustling rural library with a “No Internet Today” sign posted on the door of its historic Carnegie building. With huge population growth in many areas, the state is doing well financially, so most libraries also are doing well. Yet, although libraries in small communities tend to say funding is good, they then go on to describe the challenge of doing more with limited resources.
About 80 percent of the state’s population is located in the “Wasatch Front” – which is about 100 miles long, 30 miles wide and includes Salt Lake City, the major urban center of the state and the center of the Church of Jesus Christ of Latter-Day Saints (Mormons). Home to resorts and tourist destinations like Park City and Moab, Utah public libraries serve users from around the world. Many library directors reported they are renovating or building new library buildings to accommodate increased demand – or that they need more space and currently lack funding.

New technology is seen as positive change, but also is a challenge to all public libraries. There is a need for more computers and more space – new buildings – more bandwidth, and wireless, if they don't have it already. Many directors and staff noted that technology has improved library operations, from better and faster reference service to emailed pre-due and hold notices etc. Maintaining and servicing equipment also is challenging. Most small libraries don't have dedicated IT staff and depend on service from their city or county, where they may not have much clout.

Email, e-government, homework, genealogy databases and personal business (e.g., boarding passes, paying bills) were cited as the most used Internet services. Time limits on computers range from 30 minutes to two hours, and many libraries are using time management software to manage these sessions. In small libraries, it was noted that staff often don’t have time to help people use computers. While training provided by the State Library is appreciated, keeping staff up-to-date is a widespread challenge.

There was agreement that more technology planning is needed in individual libraries and that establishing strong relationships with local government, schools, business and other partners will help increase support for new technology and for libraries in general.

Governance and Statistical Information
Utah has 72 public library systems with 113 physical library locations and 23 bookmobiles serving more than 2.3 million residents in fiscal year 2004. Seventy percent of Utah’s public libraries are single building systems, and nearly 28 percent have branch libraries. Utah’s public libraries are organized primarily as municipal or city libraries (61 percent), and county library systems (39 percent).

In 2004, Utah public libraries reported serving more than 15.8 million visitors, answering more than 3.7 million reference questions, and circulating more than 29.5 million items (books, films, sound recordings, audio books, etc.). Utah public libraries borrowed or loaned another 33,000 items on behalf of residents, who are served by 1,082 library employees. Of these employees, 162 hold Master’s degrees in Library and Information Science (MLIS) and another 302 that have been trained as librarians but do not hold a master’s degree.

Utah public libraries rank 10th in the number of public-use Internet computers per building (11.96), as compared with other states. The national average is 10.32.

---

140 Ibid
**Funding Summary**

Ninety-three percent of Utah’s public library funding comes from local sources (tax dollars), 1 percent from state sources, and 5.4 percent from other sources (private fundraising, gifts, bequeathals, etc.). Utah ranks 26th in total operating revenue – 38th in state, 21st in local, and 34th in other.

Sixty-six percent of operating expenditures go toward staff costs (salaries, benefits, retirement), 16.7 percent toward purchasing collections, and 17.2 percent for other things, such as programming, building maintenance and utilities, and computer hardware and software. Utah ranks 24th nationally in total operating expenditures ($27.90 spent per capita) – 24th in staffing, 15th in collections, and 30th in other.

Utah public libraries reported in the *Public Libraries and the Internet 2007* survey that of those receiving E-rate discounts, Internet connectivity (77.3 percent) and telecommunications services (56 percent) were the two most commonly funded discount categories. The majority of technology expenses in both fiscal year 2006 and 2007 were paid from local and state revenue sources, and for some libraries grants were significant contributors to supporting technology purchases.

In 2004, Utah public libraries spent more than $7 million on capital expenditures (building repair, renovations, or new buildings), ranking 38th nationally.

**Connectivity Summary**

The Utah State Library estimates that the majority of the state’s public libraries (90 percent) are on broadband connections (not dial-up), although not necessarily with high-speed or dedicated access. All Utah libraries have access to the Utah Education Network (UEN), but each library must pay a local telecom provider to be able to connect to the UEN backbone. The major connectivity issues relate to cost variation (especially in areas where smaller telecommunications providers are located) and IT staffing challenges.

As reported in the *Public Libraries and the Internet 2007* survey, 23 percent of Utah libraries have access speeds below 768kbps, 46.1 percent supported access between 769kbps-5mbps, and another 26 percent supported access at speeds greater than 6mbps.

The State Library estimated that 29 percent of Utah public libraries are vulnerable – those at greatest risk of being unable to support certain basic infrastructure, internal network services and external network services. Approximately 10 libraries are in areas with smaller telecommunications providers whose prices for connectivity are much higher than mainstream carriers. One large system and about 14 smaller public libraries do not have adequate sustained IT support.

Utah ranks third in the number of Internet users as a share of total population at 69.6 percent, compared to 58.7 percent nationwide. The state ranks last, however, in the deployment of computers and Internet use in school.141

---

In 2004, the Utah State Legislature passed a state version of the Children’s Internet Protection Act. Amending Utah Code 9-7-215 and 9-7-216, in order to receive state funds, Utah public libraries must have an Internet policy regarding use of the Internet by minors and an Internet filter on all computers available to the public. This filter must be set up to block images of child pornography and obscenity to all users, and items harmful to minors to users under 18. Library staff may disable the filters for adults for "research or other lawful purpose."142

**Summary of Major Challenges**

The two major challenges identified by State Library staff are:

- Need for new information technology (IT) – upgrades or replacement. Budgeting and planning for regular technology upgrades is emphasized.

- IT staff support: Rural libraries are unable to find, hire or keep IT staff. Staff expertise in smaller libraries does not systematically include IT.

A third challenge identified by nearly every library director interviewed is for additional space to better accommodate demand for public Internet access and other library resources. “Our operating and technology budget has been adequate. Our facilities have not.”

**Focus Group Summary**

The project team conducted two focus groups in Utah, one at the State Library on February 20, 2007, and one at the Manti Public Library on February 21. Staff from six libraries participated on February 20, and staff from five libraries participated on February 21. We gratefully acknowledge the assistance of State Librarian Donna Jones Morris, Library Development Program Manager Douglas Adams, State Data Coordinator Juan Tomás Lee and other state library staff for hosting us, sharing their time and thoughts, and organizing the focus groups and site visits for us. We also would like to thank all of the librarians who participated in our focus groups. A complete list of focus group contributors can be found in Appendix I.

**Expenditures and Fiscal Planning**

The larger city and county library systems reported being in good condition fiscally. As their communities have grown, there has usually been a corresponding growth in library services and resources. All are funded primarily with property taxes, and most have dedicated tax districts. A few of the libraries reported they had built reserve funds for capital and technology projects.

Libraries in smaller communities were more likely to report that funding is OK, but then would go on to describe the reality of trying to do more with less. One director noted there was no budget growth, and she was struggling to keep enough people on staff to stay certified in the state. Another said her library has a generous budget and good support, but later mentioned that the Internet service had been down for most of a week. And another director of a very small library said, "We have no problems…passed a bond issue last year and are doing a renovation, but would like to be open longer. People would appreciate it. If they see a light on, people show up.” Only one of the rural libraries had a dedicated tax district.

The larger libraries have separate line items for technology, most reported good relationships with their city or county IT departments, have replacement schedules for equipment, and have

---

dedicated IT staff. One library director mentioned that the county IT department does all of the bidding for new equipment and provides telecom networking at no charge to the library.

"Our IT department has been very willing to experiment with us on things. So contrary to their instinct, they let us use some laptops that were scheduled for discard. They hate doing that sort of thing, but they put them out at the branches and made them work for wireless, so that we could expand the number of PCs we had for the public by using anchored laptops. We’re now buying laptops and putting them in places where we otherwise would not be able to provide access very easily."

Even well-supported libraries face the challenge of keeping up with new technology and public demand for services. There are ever-present technology maintenance and replacement costs. Many reported they’ve run out of space for new technology, although demand continues to grow.

“Maintenance charges seem to just keep stacking up for each new implementation of technology. There’s service, there’s support, there are upgrades, and there is everything that comes along with it.”

The support for technology in the small libraries is more varied, with some getting equipment and service from their city governments, and others working with local phone companies. One library receives free Internet service from its local phone company, which also has donated three computers to the library. The library has placed small sponsorship cards at each of the computers. Another of the small library directors said, "We wouldn’t have a single computer without LSTA." Two of the directors of small libraries mentioned they had frequent problems maintaining Internet access.

**Meeting Patron Technology Needs for Internet Services**

The Internet services used most include:

- Email;
- E-government (e.g., tax forms, Department of Motor Vehicles forms);
- Databases (e.g., homework, genealogy, Kelly's Blue Book);
- Downloadable audiobooks; and
- Personal business (e.g., boarding passes, paying bills)

Most libraries that offer free wireless access reported significant growth in its use in the past two years. Two libraries had added electrical outlets or a “laptop lane” to accommodate the growing demand. “As we design new buildings, that’s going to more of an issue to power them (laptops) all over the library.”

One of the libraries reported remote use of the library’s online resources, including that the use of the online catalog, databases and downloadable audiobooks, is “growing by leaps and bounds.” The library reported 2,500 to 3,000 unique uses outside the library, with genealogy databases the most frequently used. All libraries expressed appreciation for the premier databases funded by the state and provided through the State Library, which save individual libraries as much as $200,000 a year.

Several libraries reported a growth in non-English speakers in the library. One has had great success with a locally developed software program to help teach English as a Second Language.
(ESL) and reports classes are “packed constantly.” Staff frequently are called upon to help navigate patrons through the “maze” of getting a driver’s license. “Government e-business is a struggle for them.”

E-government can be challenging for any patron. Several library directors mentioned the prevalence of filing divorce papers online. “That is very demanding on staff time, if you get even one. It can be very staff-intensive with people who are under unusual pressure.” The librarian reported that the courts often direct people to the library and the free public computer access they offer.

All of the libraries in the focus groups have time limits on computer use, ranging from 30 minutes to two hours. Most do not allow online chat. The larger libraries offer wireless and most report it is heavily used. The smaller libraries receive many requests for wireless but few have managed to add it to their services. Three of the large libraries are involved in digitization projects with their local newspapers.

There also was discussion regarding how technology has improved library operations and efficiency with self-check, automated sorting equipment, email newsletters, and "pre-due" notifications etc.

"Our email notices, overdue notices, courtesy notices, and hold notices are all email. That been a huge change in the way that some of our workflow happens in our circulation departments. And on a very positive side of that, also we've seen our postage drop by about $20,000 a year."

The top technology requests shared by the smaller libraries are for wireless and downloadable audiobooks. In larger libraries, the requests are for scanners, color printing (one offers color printing), and the ability to download media to iPods.

"The demand is always for the next service that can be delivered via the Web or email."

This demand also is taking a toll on available bandwidth. One focus group participant with two T1 lines at his library said they are nearly at 90 percent utilization from 4 p.m. to closing time every day.

If money were no object, the libraries would want more space – new buildings – more bandwidth, workstations, and/or laptops, plus downloadable video and more downloadable music (instead of CDs). If they don't have it already, wireless is high on their list. Two of the smaller libraries need new online catalogs.

**Impact on Staff**

There was agreement that technology has greatly changed staff work, and older staff members find it more difficult to adjust. Library patrons are becoming more and more sophisticated users of technology, and expect the library and library staff to be able to accommodate the full range of devices they carry to the library. All agreed Internet search tools are much better and greatly aid with reference requests. Staff now spends a lot of time managing computer use and helping people with new technology.

"As soon as we got time management software, then my staff started thinking they were librarians again. But they never – I don't think they're ever going to be librarians like they were.
The questions are different. The questions are sometimes more difficult. The expectations are much higher."

Troubleshooting wireless access is taking a toll on library staff. More and more patrons are bringing their own hardware – from laptops to PDAs – to the library and asking for staff help in configuring and using the devices on the library’s network. There also is a learning curve for downloading new media. “We’re in an on-demand society.”

In the smaller libraries, staff reported difficulty providing training or computer assistance for patrons due to limited staffing and available time. There also is a continuing need for staff training both to help users and to manage and use new systems for circulation. Focus group participants acknowledged that the State Library provides training, but most prefer to handle this in-house to save travel time and meet specific local needs and schedules.

Another staff impact is complying with the state Children’s Internet Protection Act, both by monitoring computer use and turning filters on and off when requested by adult patrons.

**Advocating Support for IT Services**

The questions about increasing support for new technology – and for libraries in general – inspired spirited discussions about getting to know the local political environment and building relationships with local officials. Personal library tours and presentations to new City Council members were mentioned as ways to build knowledge and trust. “We give a thorough tour of the library, along with a PowerPoint presentation with fun and interesting statistics. I can tell you that is one of the most worthwhile things that I do in the year. One gentleman had never been to the library before, and now he’s a big library supporter.”

Another library used its development fund to pay for an outside management audit. The focus group participant credited the audit’s positive findings with providing the support and background needed for the county commission to approve a tax base increase.

Another participant shared her experience advocating for library services and technology: "It was a big surprise to a number of county officials that we’re doing the volume of computer use and support that we do, and that so many people come to us. They live in this bubble that people have home computing. And now that government services have moved online, how do people get online to access those government services?"

Good advance planning also is key to gaining respect, along with visibility and participation in the community. By planning five years in advance and following the plan, the county IT department “trusts us more, and they become part of our success.” At least one library prepares a business case, often discussing return on investment, for each of its technology initiatives.

The smaller libraries focused even more on local partnerships with schools, other libraries, businesses and individuals. One director mentioned that her board members help with grant writing, and another has a board member who also serves on City Council. One library has a literary club that does story hour programs and fundraising, another receives regular donations for audiobooks from a trucking company, and one even has two donated cows (the library will receive funds from a local rancher after the cows are sold). This focus group also said the State Library does a good job with training and support for libraries, and the Gates grants were a turning point.
"What Gates has done is amazing... It was the first training we received, and we got help from the technicians. Having requirements made a difference..."

"Our communities can't afford to hire staff with an MLS (Master’s degree in Library Science), but we know our communities, and we can get help from other places. The only free access to the Internet is through our libraries."

One director noted that some elected officials "look at libraries as a drain. They don't bring in money." Another shared her positive experience bringing the mayor to her library to do a storytime for kids. He was surprised by the turnout. The discussion concluded with one of the directors noting that her library is the single resource for learning that serves the whole community, and that in a recent survey, the library had the highest ranking among public services.

Site Visits Summary
The project team also visited five libraries serving populations from about 3,000 to 19,000, based on 2000 Census. One was a county library, and the others were municipal libraries. The team met and talked with library staff members, trustees and patrons. A complete list of sites visited can be found in Appendix I.

Expenditures and Fiscal Planning
Space is at a premium: Most of the communities visited have experienced growth since the decennial census. Two libraries reported that population growth has translated into new and larger library buildings within that same time period. Another library sought voter approval for a bond issue and lost. One library is completely landlocked and needs a new plot of land, as well as funding for a new building in order to expand services.

The Utah site visits included a library in a dramatic new building shared with a senior center, a rural library temporarily housed in basement of city hall while its Carnegie building is being renovated, and a bustling suburban library in what the staff described as one of the fastest-growing cities in the country. Its population was 13,000 in 2000 and is 40,000 in 2007.

Meeting Patron Technology Needs for Internet Services
The top uses reported include email, genealogy, business, e-government, schoolwork, shopping, and My Space. Most libraries visited do not allow gaming. “The board feels like the computers should be used for more serious purposes.” Interestingly, an adult patron that uses that library about four times a week said he would like a gaming space and related teen programs for community youth – along with more computers overall. Another library that allows gaming reported that this was a major reason for time limits. “Otherwise people would be in all day, every day.”

A surprising service that came up several times during focus group conversations and site visits was the frequency of library staff helping people get divorces online.

Many people still have dial-up access at home, so the libraries’ high-speed connections are popular. Where wireless is available, it also is heavily used.
At one library, staff give an orientation and tour to the library’s Web site with each new library card issued (five or 10 per day). As a result, remote use of the library Web site has quadrupled.

Time limits range from 30 minutes to two hours, and most of the libraries are acquiring time management software. Staff at one library with four public Internet workstations reported waits are frequent throughout the summer months. Patrons interviewed said they usually don’t have to wait a long time, and are generally satisfied with the services they receive.

**Impact on Staff**

Technology is a challenge for all of the libraries visited, but most see it as providing a positive change in both service and operations. Each library has a different arrangement for keeping their tech services up-to-speed. In one small library, the city had provided tech help, but the library wasn't a priority, so found it more effective to contract with a "geek with a sense of humor." Another library has a building-based staffer who works for the county but ‘lives’ at the library.

A common issue for libraries that depend on city or county IT is the difficulty in balancing the unique needs of libraries serving the public with the local government concerns about network security. Some examples of this include: new security software installed across one county that required library workarounds to allow patrons to print and to access email accounts; whether or not to allow online chat features (“Some people are all email, others only use chat for communicating.”); filtering; and differences in bandwidth needs between government staff and library users, particularly during the high-volume after-school hours.

A small town library had a “no Internet today” sign on the front door. Due to a problem with the state network’s filtering, they had eliminated all Internet access on their five public access workstations for the previous four days. Over the course of an hour, several people came to the library hoping to get online.

In addition to keeping equipment in operation, all of the staff interviewed mentioned the challenge of keeping up with new technology trends. The speed of change and demands of increasingly savvy patrons can be intimidating for staff – particularly for those who are not regular technology users themselves. One library director in a small community said her patrons tend to be slow adaptors, and haven’t made much use of online services. Most others are racing to meet the demands. Not all of the libraries have technology plans, but there is growing awareness at the board and director-level that there is a need for this. One board member is working to make regular technology planning part of the library's by-laws.

Technology has greatly changed staff work. “Some people you have to help every single time they come in. It's a small town, so people know you and expect help.” There was the usual consensus that some staff have adapted more quickly than others, especially the younger ones. The State Library has provided training and counsel, and networking at county library meetings was also mentioned as helpful.
Advocating Support for IT Services

Several library staff and one trustee interviewed said they don’t need to promote the technology services available at the library. “People already understand it.”

A library trustee and staff at one library outlined the various factors necessary to pass a library bond issue and increased levy after a previous attempt had failed. “We drew a picture for voters with a poll that presented concrete, hard facts” – including community needs like space for a separate children’s program space and auditorium. They also reached out to senior citizens to create a joint library building and senior citizen center for exercise space, Meals on Wheels, and public auditorium. The final deciding factor for the County Commission was the donation of two acres of land, which was matched by the county. The bond passed by 80 votes; the library square footage and operating budget have subsequently tripled.

Important community partners included: schools and community colleges, Wal-Mart (which has supplied many libraries with small grants that have supported technology and other library services) and Friends groups. Most libraries had not established relationships with the local Chambers of Commerce or community service organizations (e.g. Lions, Kiwanis).

Requests for advocacy support included: more and better statistics about library and library technology use; radio and TV public service announcements to promote library use; and workshops and materials for trustees to build advocacy skills.