SECTION III

Findings from Focus Groups and Site Visits
The research team visited 30 public libraries serving urban, rural and suburban communities in four states: New York, with more libraries than any other U.S. state (754) and a ranking in the top half of the country in terms of full-time library staff; North Carolina, which, although larger than all other states visited, has among the fewest libraries for its population size (75) and ranks near the bottom in full-time staffing levels; Pennsylvania; and Virginia.

In states so different in so many ways, several common themes emerged from focus group sessions and site visits. Perhaps most surprising is that half of the computer users interviewed in these libraries do not own home computers, and only 32 percent have access to the Internet at home. One library director put it this way: “The digital divide is alive and well in our areas. We serve urban and very rural areas. They either cannot afford high speed or (service providers) do not go there.” About 70 percent of these library users said they used library computers at least once a week.

Granted, the research team talked with only about 200 library users over the course of about four weeks of site visits, and the method was simply to talk with computer users in the library during its visits. But the message was clear: A great many people still depend on their local public libraries for access to computers and the Internet. Especially in communities with low literacy rates and high unemployment, this access and vital assistance from library staff are as necessary as books and tutors for improving literacy. Librarians report helping first-time users learn to use a mouse, open email accounts and fill out online job application forms.

To ensure a consistent base of electronic resources for all of its residents, each of these states provides access to a statewide collection of electronic resources: NOVELNY,1 NC LIVE,2 the Power Library in Pennsylvania3 and FindIt Virginia.4 These resources serve students, entrepreneurs and lifelong learners using in-library computers, as well as those with remote access from home or work.

North Carolina5 and Virginia6 both have statewide telecom initiatives under way, but libraries in all four states struggle to provide adequate bandwidth to staff and patrons. Whether via dial-up (which is rare), or by tapping into a 3 Mbps network, library staff consistently have identified needing more bandwidth as one of their top priorities required to improve technology access in their locations. Several libraries have delayed purchasing popular online resources, such as the interactive homework help site tutor.com, in an effort not to exacerbate already slow access speeds. In addition to library staff, several trustees identified high-speed Internet access as one of the most valued technology services available to the public. “This is what gets people here. When I come in, all the computers are full,” one North Carolina board member said.

A More Complex Technology Environment

More than a decade after libraries first began offering public access to computers and the Internet, the level of sophistication and complexity in managing these technology resources continues to increase. In addition to nearly ubiquitous online catalogs, libraries are building impressive suites of online services—including audio, video and digital collections—and managing access to computer resources via reservation and time and

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print management systems. These technology solutions to a common need (to monitor time on computers so as to offer the most access to the most people in the community) relieves staff of maintaining manual lists of users, but adds another layer of technology to troubleshoot and manage. In North Carolina and Virginia, many libraries also are moving aggressively forward with RFID (radio frequency ID) of library collections and self-checkout stations in their new libraries.

In addition to general public access computers, many libraries offer “express” computers for business travelers, tourists and others seeking quick access to email or Internet-based information, along with computer labs for projects that take more time than that allowed within the general computer area—such as writing a resume, taking an online exam or writing a school research paper. One New York library has 21 Internet access computers in the adult room, two computers devoted to online databases, three devoted to word processing and spreadsheet applications, one dedicated to language learning software, one for people with visual disabilities and another six computers in youth services.

Finally, where libraries have adequate staff and/or available volunteers, they are beginning to triage technology support for library patrons using computer aides. In many cases this is an adaptation that maximizes the technology skills of high school and college students to assist patrons with troubleshooting and routine tasks, rather than having these students shelve books or do other routine library tasks. This intervention, particularly common in staffed library computer labs, allows reference staff to focus on higher-level issues, including formal and informal computer training and Web content development. It should be noted, however, that many libraries lack the staff necessary to provide this level of triaged service, and most libraries report that they struggle to meet the diverse technology needs of their patrons on a day-to-day basis.

It is this complexity and variety of public use that may confound many local governing agencies at the city and county level, which are more familiar with the computing needs of civil servants or even their own personal home computer use. While library directors are grateful for financial and technical support from city and county IT departments, several mentioned that one of the barriers they face to improving technology access is a lack of governing agency understanding about public computing needs. For example, one city IT department ran updates on its systems (including the library) on a weekend, while most city staff members were off work and unaffected. But, the library’s online catalog and resources were brought down on one of its busiest service days. Another example is a level of network security that blocks access to many of the downloadable media library patrons seek. Some don’t understand the need for more frequent replacement of computers due to the intensive use by members of the public at all skill levels. This is an ongoing educational issue library leaders are working to address.

**Expenditures and Fiscal Planning**

Most libraries visited and interviewed as part of the focus groups reported stable—if often inadequate—funding. Virginia’s libraries, in general, were the exception. Many libraries in the eastern part of that state reported greater than cost of living increases in the past five years. Such increases are expected to end with the growing downturn in the national economy. There was a 4 percent cut in Virginia state aid in FY2008; a few libraries also reported cuts in local funding in the current year and projected for FY2009. In every state except Pennsylvania, local support accounts for more than 80 percent of library funding. Pennsylvania libraries, which rank 44th in the nation in terms of local support, receive 61.5 percent of their funding from local sources and 22.6 percent from state sources (making it 4th in the nation for state support).

Where tax funding has been mostly flat, many libraries have stepped up private fundraising efforts. More libraries of all sizes are reporting they’ve established library foundations and/or endowments that assist with maintaining or growing services during sluggish economic times. At least a few libraries are beginning to leverage these more discretionary funds to pilot innovative projects. One North Carolina library created an Opportunity Fund within its foundation to designate seed money for new technology. “We want to be able to prototype and to help justify (projects) to the county,” a foundation board member said. “This allows the library to stay on the vanguard.”
There appeared to be a slight increase from last year in the number of libraries that reported technology was a line item in their operating budgets. It is consistently true that larger libraries are more likely to have dedicated technology funding than their smaller, rural counterparts. Several directors reported that they strive to have technology funding at a level similar to their materials budgets—around 10 to 15 percent of their overall budget. Several libraries told the research team that their income from fines and fees was dedicated to funding technology expenditures. Most libraries reported they had some plan for technology in the library—often as part of state or federal grant requirements—and are working toward three- or five-year PC replacement cycles.

Although larger libraries as a general rule are more likely to have dedicated technology funding, library regional cooperative systems—funded in whole or part by the state—play an important role in supporting technology. New York is well-known for its state-funded public library consortia. The state’s 23 public library systems facilitate resource sharing among member libraries, and provide cooperative programs and services. These regional systems have had a particular impact on technology access, providing even the smallest libraries with IT support, training for library staff and board members, and joint purchasing and price negotiation for hardware and software. They also manage computer networks for managing circulation and access online catalogs, and provide access to electronic information, databases and e-books. Pennsylvania’s district library centers play a similar role, but are less robust in the level of support they are able to offer their libraries and communities.

**Patron Technology Needs**

After visiting libraries in eight states over two years, the research team has identified six main groupings of patron technology use. These groupings, consistently reported by both staff and library users, are:

- Communication (including email, chat and social networking)
- Employment (preparing resumes, reading ads, submitting job applications)
- E-government (unemployment, disability, Medicare, Department of Motor Vehicles, IRS, etc.)
- Education/information (including online classes, homework, news reports, genealogy, medical)
- Entertainment (including sports, games, music and movies)
- Routine tasks (including bill paying, shopping, banking and travel)

Email is the single greatest use of library computers. It is used for communication with friends and family and is essential when applying for jobs and for many routine tasks. Seniors, travelers and visitors from other countries highly value email for helping them communicate with loved ones in faraway places. For young people, social networking sites such as MySpace, BlackPlanet and hi5 are the preferred means for staying connected. A few libraries block these sites, either because of bandwidth issues or because of objectionable material. Few people complain about filters, although a man in Virginia noted that the library’s filter blocks the state law mandating filters.

As in states visited last year, library users are far more likely to express appreciation than complain about library technology. Even at a library in Pennsylvania where the Internet connections had been down for two weeks, a man who said he hated to complain observed, “I’m paying taxes for this. It’s like paying for roads. I should be able to complain if it’s not working.” Those who do make suggestions tend to focus on more computers, faster connection speeds and requests for more quiet spaces. There are occasional requests for items like color printers or scanners or wireless connections.

There is an ongoing need for bandwidth in almost all libraries visited—large and small. Slowdowns during peak use hours—especially after school and often around lunch time and weekends—are common. “Even with two T1 lines, the more people we bring in, the slower the speed. The computers are so popular,” said one

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7. For more information on services offered by these organizations, please see *Library Networks, Cooperatives and Consortia: A National Survey*, a report by Denise M. Davis, director, ALA Office for Research & Statistics. Published December 3, 2007. [http://www.ala.org/ala/ors/Lncc/LNCC_Final_report.doc](http://www.ala.org/ala/ors/Lncc/LNCC_Final_report.doc)
North Carolina board member. The growing popularity of distance education, video, gaming, downloadable music and books greatly adds to the strain. Many library administrators, who recognize that the problem is bigger than that faced by libraries, have called for a national mandate to provide universal broadband Internet access at affordable prices for libraries and other educational institutions.

Employment and e-government were increasingly mentioned as growing areas of online use. Interviews with users confirmed staff observations that much computer use in libraries is job-related, especially in— but not limited to— high poverty areas. Even minimum-wage jobs such as grocery store shelf stockers require online applications. “When we started out, the idea of filling out an online job application just was not on anybody’s radar. Now . . . my daughter did her entire job search, her entire apartment search, online—there was not a written piece of paper involved. More is expected to be done online,” said one Pennsylvania librarian.

Libraries in all four states reported growing use of e-government. The Commonwealth of Virginia now requires that all state job applications be filed online and directs members of the public to libraries. In addition to looking up information, library computer users report performing a variety of other e-government tasks, such as filling out forms for disability and Social Security, making appointments with immigration officials, filing court petitions, taking driver’s tests and paying fines online.

Education is another primary use of the library’s computers. Many students, especially distance education and community college students, come to the library either because they do not own computers or find the library a quiet and convenient place to do class work. In addition to research, they go online to check and submit course assignments. Many libraries report they provide test proctoring for distance education students. “We are a player in the campus of learning,” said one North Carolina director.

It is universally acknowledged that computers have brought many new people to the library, especially men, young adults and low-income people. Many staff noted that seniors and people seeking jobs have little or no computer experience. Computer classes continue to be popular in most of these libraries, but much assistance is provided one-on-one. Everyone interviewed—staff and public—acknowledge the role of libraries in bridging the digital divide. While affordability is the primary issue, the training provided by libraries is also seen as key. Said one library user: “It’s very important for people like me. I know I can come here and use a computer and get help.”

Seventy percent of library patrons interviewed said they use a computer at the library at least once a week and often three or more times a week.

**Staff**

For first-time users, a computer is only as good as the library staff available to orient them to skills that include how to use a mouse, open an email account, upload family photos to a Web page, and search the Internet effectively. “The dam broke. People expect answers faster. And the breadth of questions we get about technology is huge,” said one North Carolina librarian. One library director noted that in the decade since public access to computers and the Internet really began, there has been very little staff growth, even as the number of computers and their use has skyrocketed. “The technology was brought in, and a whole new service was created, without additional staff. It was just double the work for no more money, you know.” In fact, with rising health care and pension costs, library directors in every state described the difficulty of adding staff. One director with eight full-time and four part-time staff to support one central library and three branches said she has asked unsuccessfully every year for more staff. While the reported average is about 50 percent, some library staff members estimate that as much at 80 percent of their time in a given day may be spent on technology-related tasks. While the reported average is about 50 percent, some library staff, particularly those on library reference desks and in libraries that manually manage computer time limits, estimate that as much as 80 percent of their time is spent in any given day on technology-related tasks.
In addition to day-to-day troubleshooting and questions to library reference staff and/or computer aides, most libraries report that their computer classes are full, with long waiting lists. Classes include introduction to Google, advanced email, introductory classes in office software products and classes focused on genealogy, online health and job Web sites. More libraries also are offering patrons the ability to schedule one-on-one sessions with library staff. Reference staff at a library with a high rate of database use said they make a point of introducing library patrons to databases, even giving them a telephone number to call for help. They explained that teaching is an integral part of the library’s commitment to customer service. “People who don’t want to teach self-select out.”

With the rapid pace of technology, most libraries described some level of difficulty providing adequate and ongoing staff training. “(Staff) feel frustrated because they just learned this big new thing, like YouTube, and here comes the new thing five minutes later. They feel like they can’t keep up.” In addition to attending conferences, state library trainings and community college courses, library staff described a range of continuing education efforts for staff that include:

- Weekly two-hour classes on Friday afternoons led by the IT director on topics identified by library staff;
- Monthly 30-minute classes right before the building is opened, led by IT and HR staff on topics identified by library staff;
- Weekly “homework” assignments to use library Internet services so they are better equipped to orient and help library patrons; and
- Incentives for adding content and using the library intranet.

“Part of the problem is that we’ve had some great training, but it was four years ago, and we’ve all forgotten how to use some of that stuff.” This issue is more pronounced in libraries serving geographically isolated communities with fewer than five staff members. Lack of staff coverage, long travel times and inclement weather all inhibit efforts for in-person trainings offered. Overall, there was great appreciation for the training and support offered to member libraries by the 23 state-funded library systems in New York.

As in the 2006–2007 study, the need for dedicated IT staff continues to be pronounced. For libraries with dedicated IT staff, demand still outpaces supply. One New York library with four full-time and two part-time IT staff serves 42 locations covering 4,000 square miles. A North Carolina IT director reported that he has 0.8 IT staffers per 100 computers in the library.

Advocacy

“If I didn’t have an advocacy plan, I’d be up a creek. I’ve taught myself. I’ve taken time away from other things to do community relations and marketing.”

—North Carolina library director

The need for and interest in advocacy is growing in the four states visited. The most successful libraries have positioned themselves as leaders in technology, as well as traditional library services. They see local governments as clients and work with them on improving community bandwidth that can also serve schools and community organizations. More than one library hosts their city’s Web site. They share successes, as well as needs, when seeking more funding. They build community partnerships by providing valuable services.

It was very clear that thriving libraries have strong, creative directors who command trust and respect and are actively involved in their communities. Activist directors are more likely to develop activist board members. Many commented that about half their boards take on advocacy roles, with the newer, younger members more likely to be active and to value technology as a selling point for the library.

There was much discussion about the need to educate both board members and government officials about libraries. Most of the state libraries produce trustee manuals that are helpful, but many board members said they would like to receive more training. In North Carolina, directors and trustees valued and
spoke highly of trustee training provided through the state library. Directors and board members in all four states described creative activities, such as orientations for new legislators and programs for local government officials that offer lunch and demonstrations of technology. They ensure that communications with government officials continue outside the budget season. One North Carolina director encourages her board and staff to consistently promote the library’s role in community building, economic development and education.

Not surprisingly, who’s on the board matters. It is important to have well-connected board members. Some libraries have appointed liaisons from local government, and others seek out former city or county council members, or other local leaders. The more active board members interviewed describe one-on-one sales to “tell anyone and everyone that the library is the best thing.”

**METHODOLOGY**

The site visit planning and execution employed 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
- 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.
- Meeting with state library agencies, public library directors and other key local stakeholder communities (e.g., library trustees, local government, private local funding groups).
- 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 research team to support the detailed data reported by individual libraries by “grounding” those data in governance and funding realities of a library community.

The site visits allowed the research team to “drill down” in order to learn more about the challenges public libraries presently face in providing and sustaining sufficient high quality services and high-speed bandwidth for a range of public access services.

The following states were selected for site visits:

- New York
- North Carolina
- Pennsylvania
- Virginia
Communication with Selected States
The research team contacted staff in each of the four state libraries, who were asked to recommend public library directors to participate in focus groups. The research 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 financially 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. The research team also scheduled between eight and ten site visits to libraries in each state in consultation with state library staff.
NEW YORK CASE STUDY

New York stands out among the four states visited for its state-funded public library consortia. Created in the late 1950s, the state’s 23 public library systems facilitate resource sharing among member libraries and provide cooperative programs and services. These regional systems have had a significant impact on technology access, providing even the smallest libraries with IT support, training for library staff and board members, and joint purchasing and price negotiation for hardware and software. These regional systems centrally manage system-wide computer networks, together with circulation and public access online catalogs, and provide access to cooperatively purchased electronic information, databases and e-books.

Technology and public access computing are key services in New York’s public libraries. These services are bringing in many new users of online services, such as email, job applications, social networking, genealogy databases and more. Even a small library with a total budget of $80,000 per year has offered wireless since 2006, offers downloadable books and proctors exams. Small libraries, nonetheless, report being challenged to meet the need for computer classes, and most libraries report considerable waiting times for computers.

It is estimated that staff in New York’s public libraries spend as much as 60 percent of their time on technology work and services. The training provided by the Bill and Melinda Gates Foundation more than five years ago was considered very beneficial, and there is a great need for more training, as well as for the time to participate in training. More expert and experienced IT staff are also needed. Overall, the library staff have adjusted well to technology, thanks to previous training, and appreciate being able to serve people better and faster.

Advocacy is seen as a staff function by many board members, though younger and newer trustees are more likely to take an activist role and see technology as a positive selling point to secure increased funding. Many of New York’s public libraries have strengthened their community position and support by developing powerful local partnerships with school districts, colleges, county health departments, a women’s resource center and other local organizations. The greatest needs are for more and better marketing, more computers and space for technology, dedicated IT staff, and especially improved bandwidth.

Overview: Governance and Statistical Information

New York has 754 public library systems with 1,068 physical library locations and eight bookmobiles to serve more than 18.9 million residents. New York’s public libraries are predominantly (92.2 percent) single library outlets that are organized primarily as non-profit associations (47.7 percent), as municipal government libraries (26.8 percent) and as library districts (24.1 percent). 8

In FY2005 (the most recent year for which national statistics are available), New York’s public libraries recorded more than 107.8 million visits; answered almost 26.5 million reference questions; and circulated more than 141.6 million items (e.g., books; films; sound recordings; audiobooks). New York’s public libraries borrowed or loaned an additional 9.6 million items on behalf of its residents, who are served by 13,000 employees. Of these employees, 3,448 hold a master’s degree in library and information science (MLIS), and 655 work as librarians but do not hold a master’s degree.

Other than in New York City and its surrounding metropolitan area, the majority of the state’s public libraries are located in rural communities. Approximately 46.7 percent of New York’s public libraries serve fewer than 5,000 residents, and the average square footage of these libraries is between 2,416 and 4,235. Another 18.7 percent of New York’s public libraries serve communities between 5,000 and 9,999 residents; those libraries average 7,166 square feet in size.

**Funding Summary**

Eighty percent of New York’s public library funding comes from local sources (tax dollars). The remaining balance comes from state sources (4.8 percent); other sources (14.6 percent), such as private fundraising, gifts, bequests, fines, and fees; and federal sources (.6 percent).

Nationally, New York ranks 3rd in the nation in total operating revenue support; 11th in state support; third in local support; and 1st in “other.” New York’s public libraries are well above the national average in every category of funding except state support ($2.70, versus the national average of $3.26).

For New York’s public libraries, expenditures by category are above national averages. New York’s public libraries rank 3rd in total operating expenditures ($50.47 spent per capita versus $31.65 nationally); 3rd in staff ($33.10 per capita versus $20.06 nationally); and 13th in collections ($5.35 per capita versus $4.18 nationally). The largest percentage (70.1 percent) of library expenditures are spent on staff (salaries, benefits, retirement), with 10.6 percent spent on collections, and the remaining 19.3 percent spent on other things, such as programming, building maintenance and utilities, computer hardware, and software.

Capital expenditures totaled $110.2 million in FY2005, exceeded only by California. With 39.9 percent of New York’s public libraries reporting zero capital expenditures, 42.8 percent (approximately 322 libraries) reported expenditures under $50,000; 6.4 percent (approximately 48 libraries) reported expenditures between $50,000 and $99,999; and 10.9 percent (approximately 82 libraries) reported expenditures over $100,000.

**Connectivity Summary**

At a time when many states in the region, including New Jersey and Maryland, were adopting statewide standards for telecommunication and broadband providers, including requirements for service to educational institutions (including libraries), the New York State government decided to let market forces determine telecommunications and broadband availability. As a result, in significant areas of the state, broadband service is not available at a reasonable cost, and in some areas, not available at all. This is not only a problem in rural areas: there are portions of major cities where providers have decided that broadband service would not be profitable and have therefore not provided broadband service in all areas of the cities they serve.

There is no state telecommunications library network nor is there a state telecommunications network to which public libraries have access. Some of the public and regional library systems (e.g., those that provide services to member libraries) have displayed remarkable entrepreneurial initiative and have become Internet, telecommunications and broadband providers themselves, funding their services to their member libraries by vending services to individual subscribers.

New York’s public libraries rank 21st in the number of public-use Internet computers available per building (11.28) as compared with public libraries in other states. New York ranks 35th in the number of Internet users as a share of the population at 56.8 percent, compared to 58.7 percent nationwide, and 36th in deployment of computers and Internet use in schools at 4.52.

**Summary of Major Challenges**

As part of an evaluation of the New York Online Virtual Electronic Library (NOVELNY) for the New York State Education Department, several barriers to public libraries’ use of the state’s online library of databases were identified, including:

- Unavailability of broadband access to the Internet.
- Lack of adequate equipment to provide public access to the Internet from the library.

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9. Ibid.
Lack of library staff with the skills needed to access the Internet, to access the NOVELNY databases and to instruct and assist users in use of the NOVELNY databases.

Of these barriers, the staffing issue is principally a matter of scale. The smallest libraries are too small to have staff with the range of skills needed in a modern library. The equipment issue, both computer and telecommunication equipment, has been substantially ameliorated by national grants (e.g., the Bill and Melinda Gates Foundation), but more remains to be done. The availability of broadband access remains beyond the control of local libraries.

Focus Group Summary
Two focus groups were conducted in New York on October 17, 2007, during the annual conference of the New York Library Association (NYLA) held in Buffalo. Three libraries were represented in the first group, and five in the second group. We are grateful to NYLA for graciously hosting the focus groups, and to Lisa Seivert at the New York State Library for her generous assistance in organizing the focus groups and site visits. We thank all the librarians who took time from their conference activities to participate. A list of participating libraries is included in appendix E.

Expenditures and Fiscal Planning
Even well-supported libraries find funding complicated and challenging. New York's public libraries often must go to the voters for funding increases, and some directors report that tax resistance is growing. However, one system director said, "I have libraries that are very well funded right now, because they have done it right. They've gone to the voters, they've done what needs to be done and they're OK. Those that just rely on the generosity of the town officials as a charity are in big trouble."

A director of a rural library said that about 300 of 1,500 people vote in their annual election, just before school starts. The tax issues pass, but the margin has become smaller, and they are very small increases. In contrast, a wealthy resort town passed a levy two years ago that increased the library's support 40 percent, with more growth each year, and passed a $7.8 million bond for a building. The bond issue was close, however, and the library is meeting increasing resistance from senior voters. Most libraries reported having had very little, if any, recent funding increases from city, county or state sources. One library system had a 25 percent budget cut in 2005 and closed 15 of its member libraries.

Several librarians mentioned active Friends of the Library groups that raise funds for the library. One director said their Friends donations make up 8 percent of the budget. Another mentioned that the Friends had just bought six laptops for public use. Another librarian reported, though, that some Friends prefer to support traditional library services and do not welcome requests for technology funding. Many libraries do not have technology plans in place and are challenged by boards that do not understand the need for an adequate technology budget. "We're dealing with library boards who say, 'What do I need to buy a new computer for? I just bought one seven years ago.'" One participant suggested that the profession should develop standards that specify the percentage of a library's budget that should be spent on technology materials.

Regional system support is important for technology equipment, staffing, training, and joint purchasing/price negotiation of databases. The more affluent libraries have not encountered obstacles for funding technology, and were not as likely to report bandwidth problems. The smaller libraries all reported problems with slow connections. One director said that cable is not available in their rural area—and all need more computers. There was considerable discussion in one group about how bandwidth should be a basic utility available to public institutions like schools and libraries. "You compare the U.S. with other countries with sophisticated infrastructure—we don't compare well."
Meeting Patron Technology Needs for Internet Services

Use of the Internet in all the libraries is growing, and the services used most are for education, communication, job-seeking and e-government tasks including:

- Email
- Word processing
- Genealogy databases
- Language-learning software
- e-government and tax forms
- Job application
- Social networking sites

Well-funded libraries offer downloadable e-books and media, and report high use of wireless. “We're busy every moment we're open, and they're actually outside with their laptops before we open, just checking their email. . . . So you know, you're having the best technology, which we should have, with the fastest connection, with directed service and a nice well-lit, heated-cooled facility—I mean who wouldn't want to sit here all day?”

There was general agreement that computers have brought in new people of all races, ages and nationalities. Computer classes are offered by most libraries, including one library’s classes in Spanish for migrant workers that are popular. The less affluent libraries reported a need for more funding to meet the demand for computer training. One library has a partnership with the Office of the Aging to provide training on Medicare and other topics of interest to seniors, and offers personalized one-on-one tutoring provided by volunteers.

Focus group participants reported a significant appetite for technology in libraries. One participant stated that technology equipment and services are like money—the more you have, the more you need, and there is never enough. One director mentioned that the time management software used on the patron computers provides useful information about how long people have to wait to use computers.

Impact on Staff

Staff’s need for and interest in training has exceeded expectations, and libraries report that training provided through early Bill and Melinda Gates Foundation grant programs has been greatly beneficial. Yet many staff members report that they are spread so thin that it’s difficult to have time for needed training. One library director said that the cost of technology has created a budget crunch, and now staff members receive no benefits beyond Social Security. Finding and keeping good IT staff is also a challenge. The director of a system that provides IT services for members over several thousand square miles said, “Our automation department could be called the Sophie’s Choice Department. Every day you have to make so many decisions based on what will get done and what won't get done. We have four IT people, and we have two others that are almost full-time IT. And I'd double that.”

There was general agreement that library staff deal with technology issues some 30 to 60 percent of their time. There may be fewer traditional reference questions, but more need for help with how to navigate the technology that keeps changing—from floppy disks to flash drives and more. Training remains the greatest staffing challenge—keeping one step ahead and dealing with change.

Advocating Support for IT Services

Few libraries advocate specifically for technology or technology-based services. It is considered just part of the package of library funding needs. Many boards see advocacy to be more of a staff function, and some board members see a conflict of interest if they also are school employees or have other government positions. Still others said technology has been a positive selling point for increased funding, and younger or newer board members are more likely to take an activist role.
One library hosts orientation sessions for new legislators, with demonstrations of new technology—and food is always provided. There is agreement that more time and effort should be invested in convincing legislators of the value of libraries and technology in libraries. Some boards also are helpful in obtaining funding from foundations, but it is difficult to get grants for computers because they are seen as part of basic operating expenses. One participant mentioned Verizon as a good potential funding source, and the company does help with hardware purchases.

Another library works with a school-educational cooperative that gives every child a laptop. Students must leave the laptops at school, but they can come to the public library to use computers there and continue learning about technology. In a similar collaboration, a public library is providing support—serving as the school library—for a new high school.

Another participant suggested that national advocacy is needed to support consistent and adequate bandwidth and to integrate libraries as part of government services. “Libraries need to work together to do this, versus everybody fighting for their own little piece of the pie.”

**Biggest IT Needs**

When asked about priorities for improving technology access, focus group participants prioritized marketing, improved bandwidth, more computers, more space for technology, and dedicated IT and webmaster staff. Everyone noted that support and leadership from the Bill and Melinda Gates Foundation have been vital: “It got us on the road to adding technology in our libraries.”

**Site Visit Summary**

The research team visited eight libraries with populations served ranging from 1,300 to more than 960,000, based on the 2000 Census. The interviewers spoke with library staff, trustees and patrons. A list of visited libraries is included in appendix E. The findings below are summarized by broad themes.

**Expenditures and Fiscal Planning**

**Securing adequate financial support is an ongoing challenge:** Although funding for New York libraries is above the national average, most libraries report that they struggle to meet community needs with existing funding. Library funding includes a complicated mix of revenue from several cities/towns, school districts, some county support, very little directly from the state, grants and donations.

One of the large city/county libraries visited serves a city with a 40 percent poverty rate and 30 percent illiteracy rate. Many big companies have moved out. The library system is still recovering from a funding crisis in 2005 when the county—following promised property tax reductions—cut 25 percent of its support. The library was forced to close 15 of 52 branches and cut 100 positions. In December 2007, the county legislature passed a budget that provides $1.6 million for public libraries. This will bring the library’s support back to its 1998 level.

A beautiful new (2004) library that overlooks a lake serves an affluent community that has transformed from a resort into a suburb. This library’s budget was cut in 2007 when a tax increase measure failed by 40 votes. Business growth has been restricted, and there is resentment that property tax is the only source of revenue. In another community in transition from small town to commuter destination, the library’s most recent ballot proposal for a funding increase was voted down 3–1 in an “anti-library, anti-tax” campaign. The school budget on the same ballot passed.

In an example of a shared funding model, the director of a public library serving four municipalities with a total population of 26,000 described a sizeable endowment built by a banker and other board members. The endowment supports materials, but local governments must invest in all other expenses. When one mayor learned about the endowment, he tried to eliminate library funding. Thanks to strong community support, he did not succeed. This library is launching a capital campaign with a goal of $1.5 million and is trying to build a Friends group.
A small library has its budget passed each year, but it is funded at $25 per capita, which is well below the state average. “It is stable and growing and not enough.” The smallest library visited is a one-room, 900-square-foot facility with a full-time director, half-time assistant and one volunteer. Funding from two towns, the school district and the county adds up to a total budget of $80,000 per year. Technology has been funded primarily through grants and about $5,000 from the annual budget. There are four public access and two staff computers. The library first made public computing available in 1995. About 100 people use the library each day in a town of about 1,300 residents. The director is the IT support, though she sometimes hires an outside tech at $75 per hour and gets advice from her son.

**Meeting Patron Technology Needs for Internet Services**

Technology and public access computing are considered to be mainstream services in all the libraries visited, and fully used by the people they serve: Even the smallest library visited has had wireless since 2006, offers downloadable books via their library system, proctors online exams for distance education students, and has patrons commenting, “It’s essential. It gives the whole community access to everywhere.”

Nearly all of the libraries visited frequently have people waiting to use the computers. “Sometimes we have them stacked up like an air traffic controller.” A creative branch librarian in a low-income neighborhood offers teenagers an extra half hour on the computer if they read while they’re waiting. A trustee of a suburban library said, “One woman was waiting at the library every day for it to open. Her daughter was in Iraq. Every morning she checked her email before she went to work, and I thought, ‘What a service.’”

During interviews, library staff and patrons cite email, research for school/work, e-government, job applications, social networking, and recreational activities as the most common uses of library computers. The research team was told that many people read newspapers online. Most libraries provide computer classes, and do test proctoring. A director commented that it is sometimes difficult to find staff to teach computer classes because many librarians do not have these skills. Several staffers reported growth in use of their library’s Web site, primarily for downloadable books and placing holds. “Reserves/holds that used to take two weeks now take two days.”

The technology services offered go far beyond providing basic access, and there are impressive programs and partnerships reported. One library works with two local colleges, offering a College Resource Center, where students sign in and get staff assistance, the use of special software, and are allowed unlimited computer time. The library also received grant funding to develop a Patent and Trademark Center with trained staff and special materials to serve local inventors. A local history digitization project, supported by a foundation, has scanned more than 500,000 pages and is helping to preserve the legacies of Susan B. Anthony and Frederick Douglass.

To provide job training and assistance, one library has a Career Job Center staffed by a counselor. Another library partners with the local Women’s Resource Center to provide computer training in the library’s lab. One director said, “The reference librarians are career counselors.” The library keeps a book at the circulation desk to collect stories and comments from patrons, including one from a patron who used library computers to get a law degree. Another library director said a homeless man found a job using library computers. A system staffer also shared a favorite story: “A local businessman came into the library waving a disk and saying he had to do a presentation in two hours and his computer had crashed. He wanted to know if we had Excel. We saved the day for him.”

These New York public libraries’ wish list includes the usual—more computers and more room for them—plus computer labs with full-time staff, more IT staff, more bandwidth/speed, computer space for teens, more classes—especially for seniors, a better OPAC and “state-of-the-art everything.”

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12. UPDATE: A ballot issue in November 2007 passed by a comfortable margin, and the library is expanding its open hours.
Impact on Staff

Similar to administrators interviewed in the focus groups, staff at libraries visited agreed that 40–50 percent of staff time is spent on technology: They indicated that most staff has adjusted well. One director summed it up by saying, “Change is always tough. Eventually it gets to be old news. Now they’re dependent on it. Once they get through it, they’re OK.” Many front-line librarians are enthusiastic about being able to provide better answers for people, more quickly and they enjoy helping people learn computer skills. “It’s very exciting to turn people on. It’s like a light has gone on. They’ve learned to do email or read a magazine online. It’s a good feeling.”

One director took over a library from a long-term predecessor who allowed no technology. When change came, she was concerned some staff would be resistant, but they love it. All library staff agree that training is key; they get good help from their systems to keep staff skills current. A library with a very tech-savvy director does training for staff in the summer to show off new databases and equipment such as scanners. “If we’re not ahead of the curve, we’ll be left behind.”

There is general agreement that time management software has helped to reduce the time staff spend monitoring computer use, but some expressed frustration with the system because of software complications that cause delays. A library director said that technology has a physical impact on staff. They need better furniture, but that is a big expense. Almost everyone agrees on the need for more full-time IT staff.

Advocating Support for IT Services

In the discussion of advocacy, many directors mentioned partnerships with local community organizations, schools and government agencies. For example, the YMCA does health tests using the library computers at one location, and the county health department is supportive. Another library works with local schools, demonstrating databases for teachers and school librarians, and hosting a teacher orientation program at the library with information on resources and library cards—including “work-in-district” cards. The library’s Web site has a portal so students can get to their school files.

Library board members and directors interviewed agree that only about half of current library trustees are activists. And as one director said, “Some board members don’t like anything to do with technology.” Many boards appoint their own members, there are seldom term limits and there are more old trustees than young ones. Still, there were impressive stories of board activism for overall library support. One board member—a film producer—made a five-minute DVD before the library election, and board members showed it to some 60 community groups. One trustee said, “I talk about the resources available at the library to my acquaintances, neighbors, even my auto mechanic. I set an example by using the library and its online access. I even give presentations at work about how to access the library catalog and databases from home and work.” This activist also mentioned that he did not receive a handbook until five months into his service and would like better training on how he could be a successful library trustee. A county legislator said, “Libraries are sacred for us . . . A lot of people can’t afford to have computers at home. To some people, computers are more important than books. They even read newspapers online. Everyone (on the legislature) agrees technology is important. As the years go by, libraries will become more important if they have the right personnel, hardware and software.”

One library director summed up the advocacy situation: “We have to change the relationship from begging to ‘You help us, we’ll help you, and together we can help the community.’”
NORTH CAROLINA CASE STUDY

The late 1990s and beginning of the new millennium brought significant economic hardship to the state of North Carolina. In interview after interview with library staff and trustees, there was an emphasis on jobs lost in industries ranging from textiles to tobacco to furniture-making. In one community, the estimated loss was nearly 50 percent from 1999–2002. In this economic climate, the role of North Carolina public libraries in economic development and continuing education emerged to the forefront.

Site visits confirmed a 2007 study that found that North Carolina ranks in the bottom one-fifth (42nd) of the nation in terms of Internet users as a share of the population. Particularly in high poverty communities, fewer than half of library users have computers and/or Internet access at home. Online job searching and applications are the most often reported use of library technology by library staff and users. “As plants close in this county, we get waves of people coming in to do resumes or go to job Web sites. We have a lot of first-time users that have been on production lines and so on.”

At the same time, North Carolina public libraries are well below the national average in every category of funding. At $18.66 per capita, the state’s public libraries rank 43rd in overall funding. Several of the public libraries recently built were funded in large part or solely through private fundraising efforts. Most library directors indicated they work in a fiscally conservative environment that restricts libraries to flat budgets or small increases within the margin of the cost of living.

With 85 out of 100 of the state’s counties considered rural, developing affordable access to high-speed Internet connections also has been a key concern—leading to the development of Rural Internet Access Authority (now called the e-NC Authority) in 2000.

Overview: Governance and Statistical Information
North Carolina has 75 public library systems with 383 physical library locations and 40 bookmobiles to serve more than 8.5 million residents. North Carolina’s public libraries are organized primarily as county libraries (53.3 percent). Another 20 percent are organized as multi-jurisdictional libraries (e.g., operated jointly by two or more local governments), as municipal or city government (13.3 percent), as nonprofit associations (6.7 percent) or as city/county libraries (2.7 percent).

In FY2005 (the most recent year for which national statistics are available), North Carolina’s public libraries reported serving more than 34 million visitors; answered more than 10.4 million reference questions; and circulated more than 46.6 million items (e.g., books, films, sound recordings, audiobooks). North Carolina’s public libraries borrowed or loaned an additional 91,000 items on behalf of its residents, who are served by 2,973 employees. Of these employees, 648 hold a master’s degree in library and information science (MLIS), and 31 work as librarians but do not hold a master’s degree.

The majority of North Carolina’s public libraries are part of county library systems serving counties with 25,000 to 249,999 residents. Approximately 12 percent of North Carolina’s public libraries serve fewer than 25,000 residents. The square footage of library buildings tend to be larger as a result of the larger units of service (e.g., county). Eighty-seven percent of North Carolina’s libraries are multiple-outlet libraries (a central library with branch libraries) averaging from 6,453 square feet (branch libraries) to 32,609 square feet (central libraries). Another 13 percent are single-building libraries with an average of 12,756 square feet.

14. E-NC is an initiative created by the N.C. General Assembly to link all North Carolinians—especially those in rural areas—to the Internet. http://www.e-nc.org.
Funding Summary
Almost 83 percent of North Carolina’s public library funding comes from local sources (tax dollars). The balance comes from state sources (9.1 percent); other sources (6.7 percent), such as private fundraising, gifts, bequests, fines and fees; and federal sources (1.3 percent).

Nationally, North Carolina ranks 43rd in the nation in total operating revenue support; 16th in state support; 42nd in local support; and 41st in “other.” North Carolina’s public libraries are well below the national average in every category of funding.

North Carolina’s expenditures by category also are below national averages. North Carolina’s public libraries rank 43rd in total operating expenditures ($19.29 spent per capita versus $31.65 nationally); 43rd in staff ($13.19 per capita versus $20.87 nationally); and 44th in collections ($2.57 per capita versus $4.18 nationally). The largest percentage (68.4 percent) of library expenditures are spent on staff (salaries, benefits, retirement), with 13.3 percent spent on collections, and the remaining 18.3 percent spent on other things, such as programming, building maintenance and utilities, computer hardware and software.

Capital expenditures totaled just over $19.3 million in FY2005, with 37.3 percent of North Carolina’s public libraries reporting zero capital expenditures. Thirty-six percent (approximately 27 libraries) reported expenditures under $50,000; 13.3 percent (approximately 10 libraries) reported expenditures between $50,000 and $99,999; and 13.3 percent (approximately 10 libraries) reported expenditures over $100,000.

Connectivity Summary
More than 90 percent of North Carolina’s public libraries have an Internet connection that is not dial-up—directly through a local telecommunications company, through the local school district, through the local city/county government or through a state telecom network. Some barriers to broadband connectivity include too many telecom companies and high cost.

North Carolina public libraries rank 10th in the number of public-use Internet computers available per building (13.22) compared with public libraries in other states. North Carolina ranks 42nd in the number of Internet users as a share of the population at 55.1 percent, compared to 58.7 percent nationwide, and 34th in deployment of computers and Internet use in schools at 4.75.

Summary of Major Challenges
Although all of North Carolina’s public libraries have a Web site, it is unclear how well local libraries are able to maintain them. There are also challenges regarding libraries’ ability to maintain or replace IT, as well as finding and hiring skilled local IT support.

Focus Group Summary
Two focus groups were conducted in North Carolina. On February 4, 2008, staff from five libraries met at the Hickory Public Library. On February 6, staff from another five county and regional library systems met at the Wilson County Public Library. We are grateful to Jennifer Pratt and Mary Boone at the North Carolina State Library for their advice and assistance in organizing the focus groups and site visits, and to all the librarians who shared their experience and perspective. A list of participating libraries is included in appendix F.

Expenditures and Fiscal Planning
The majority of libraries in North Carolina are county systems. Funding was reported as a challenge for all the systems represented in the focus groups. Although some have received annual budget increases, the

amounts are modest, budgets almost flat and the economy fragile. In the smaller, more rural counties, most comments were about the loss of jobs in the tobacco, textile and other local industries. It is a continuing challenge for all libraries to compete for city and county government support. “The biggest problem, probably, is the fact that libraries and everything we do in libraries is not mandated by the state, so at the local level we’re competing with police and other mandated departments.” Several libraries have had impressive success raising private funds for new buildings, but are now finding “there’s not much money there” for ongoing operations.

Smaller libraries have depended on grants from the state and private foundations for equipment, Internet connections and other technology expenses. These libraries don’t have dedicated IT staff and contract out for support. Almost all the libraries, large and small, rely on E-rate discounts, except one, whose director said the process is so complicated that his county refused to gather all the data required.

The larger systems have technology as a line item in the budget, and the local governments provide basic funding. Several libraries described various relationships with county IT departments for joint purchasing of equipment, maintenance and shared replacement schedules. For example, one library receives 90 percent of its technology funding from the county. The library uses the county contract for replacing PCs, and the county matches the library’s investment. The North Carolina Public Library Directors Association recently developed a computer replacement policy of three to five years. This was seen as a useful move, even though it “doesn’t have teeth” and requires negotiation with local governments.

Barriers to improved library funding included poor local economies, the high cost of maintaining technology or initiating new technology projects (such as RFID), and the misperception that most residents had computers and Internet access. Victories also were reported. “I think we’re beginning to make them see that the library is an economic development tool. It’s part of the structure that our county has to have to rebuild after all our industries left us.”

Meeting Patron Technology Needs for Internet Services

Discussions of the most used Internet services highlighted job seeking, distance education, email and social networking. In addition to access to library computers, one-on-one training and formal classes (ranging from how to set up an email account to workshops on job hunting) are critical to assisting many first-time computer users. “More and more folks are being required to put in their application with Food Lion or Wal-Mart, or whoever, online,” said a staff member at a library working with community colleges to offer classes in its lab and partnering with Work First (North Carolina’s Temporary Assistance for Needy Families (TANF) program). Access to the state’s Employment Security Commission Web site, which offers job search databases and information on state unemployment benefits, also was specifically cited.

Educational uses included distance learning applications like WebCT and Blackboard, homework help, applying for higher education, financial aid and test proctoring.

Communications through email and social networking sites also were significant technology uses. “What I see when I walk around our libraries is people staying in touch, as well, when families are being splintered across the country, because of jobs and economic upturns and downturns.” A growing number of tourists and retirees turn to the library to stay connected with family and friends around the world.

Libraries were fairly evenly split on whether they blocked or restricted access to social networking sites. Many libraries cited bandwidth concerns as the reason for limiting access, while a few referenced teen behavioral problems, including gang activity. “We can only afford 256 kbps or 384 kbps (Internet connections) to our branches,” said one director, which is not adequate to support the graphics-heavy MySpace services.

Mention of online gaming and its popularity, particularly among young adults, inspired a discussion of what public libraries are for. “It wasn’t that awfully long go—some of us remember—when Harlequin Romances and comic books were not suitable. Should it all be non-fiction?”

Several of the participating libraries have taken action to find out who uses the computers and what kinds of services they want. One has a drop-down Web survey that asks each computer user to note their
age and ethnic group, gender and reason for using the library that day. Another director said they survey
users to support their case for increasing bandwidth, and the IT manager is able to pull data on the most
frequently used online resources.

**Impact on Staff**

All participants agree that technology has brought in many new people and greatly increased the pressure on
staff. Reservation software has helped to reduce the time spent monitoring computer time, but there are still
more people and more questions. “I think the Internet took what was a fairly quiet and peaceful place to work
and turned it into Grand Central Station, multiplied, you know, hundreds of times across the country.”

There is near unanimous agreement that library staff is busier than ever and often frustrated by not hav-
ing time to provide needed one-on-one assistance, and are struggling to keep up with new technology. “For
the people who run the reference and information desk, 75 or 80 percent of their time is managing the computers
in some fashion.” It also was mentioned that people using computers can be very demanding—more so than
library patrons were in the past.

Several libraries offer classes for staff and the public in their com-
puter labs and send staff to training provided by the North Carolina
State Library or regional library councils. Participants praised the State
Library’s Master Trainer Program, a train-the-trainer activity. “That’s
been one of the best things the State Library ever did.” Graduates of
the program at one library are now offering computer classes to the local
health department. Libraries also use Webinars for keeping their staff
up to speed. One regional system offers training to member libraries
every Friday from 2 to 4 p.m. on topics solicited from front-line staff.

The discussion also focused on the need for more trained IT staff.
One focus group participant suggested that standards or guidelines are
needed for how many IT staff members are required per the number of computers. “I’m in a system where
we have 120 public PCs, and I’ve got one person to support them.” One focus group participant forecast more
outsourcing and contract IT work because the library is unable to hire additional personnel. While many of
the county libraries receive support from county IT services, several reported they were ahead of the curve
in what their counties were willing or able to support. “We dragged our county into Internet technology. Now
they’ve decided they like it, but they would like to control how we use it . . . which has prevented us from doing
things like video production or other things we think would be valuable to our public.”

**Advocating Support for IT Services**

Perhaps because their community economic situations are so dire, focus group participants have a depth
of experience in advocating support for their libraries, and shared many creative ideas and strategies. These
directors said many of their board members are active advocates. They also collect and use stories of how
people have benefited from library technology services. In addition to collecting statistics and stories,
participants told us they:

- **Leverage funds:** Five libraries across the state started the North Carolina Digital Library, which
  provides downloadable audiobooks, music and video to residents in their communities. There are now
  16 members pooling funds to provide access to these materials. “In my county, I could not have afforded the
  price of this product by myself, especially on a yearly basis. It’s been the greatest thing for us.” Several libraries
  also are cooperating to purchase access to Ancestry.com. “I have people tell me that was the best thing I
  have done in my career . . . to give them access to those genealogy databases.” Another library director de-
  scribed how she used private foundation funding for computers as an incentive to encourage the town
  and county to make capital improvements and fund more hours open at a small library.

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Get involved in a community network that also solves problems for county government: Several library directors served on the steering committees for Internet development in their counties as part of the Rural Internet Access Authority (now called the e-NC Authority). In this capacity, they developed county-wide technology plans with other community partners. They also were able to position the library as being on the forefront of local technology issues. “If you’re perceived in the community as a success, and they like you, then they’re more inclined to fund some of the other things you are asking for.”

Are visible and creative: In addition to media outreach positioning the library as “cutting edge,” one library produces an annual calendar with library use data . . . and county commissioner birthdays. Several directors also talked about the importance of meeting and talking with elected officials outside of the budget season. “If the only time you go to the county commissioners and talk to them is at the end of the year, with your hand out, you may as well stay at home.” The library director takes along presentations and/or leave-behind materials showing the value of library services. “We have not had any of those counties, even in hard times, under-fund. I think it’s the constant reminder that here’s what you get for your money.” Another library hosts an annual luncheon for elected officials at all levels of government.

Forget fear: Be able to articulate what technology is able to do for the people who come to the library. Show the benefits, demonstrate what the technology can do and ask for the funding needed to implement new initiatives.

Biggest IT Needs
If money were no object, the focus group participants said they would like to have more trained IT staff—“one digital services librarian for each library”—more money for staff training, more bandwidth, more space, more hours open, a full-time grant writer, more support for the State Library’s marketing efforts, free laptops for school kids, and an easier E-rate application process or some other way of paying for bandwidth.

Site Visit Summary
The research team visited nine libraries in communities ranging in size from 2,000 to 356,000. The site visits included tours of the libraries and interviews with library directors, staff members, patrons, trustees and local government officials. A complete list of libraries visited can be found in appendix F. The findings are summarized by broad themes.

Expenditures and Fiscal Planning

Making do—well. Although North Carolina public libraries are well below the national average in every category of funding, the libraries visited appear well-used and respected by their communities. Most have received modest increases in funding but are struggling to keep up. A library trustee in one of the poorest counties in the nation said of the county government, “We always get about what we ask for. We know we can’t ask for a whole lot.” The director of one library described the funding situation as “pretty good—no cuts. The county commissioners understand our needs, but we’re still the red-headed stepchild—funded after sewers and jails.” Her county has a 34 percent illiteracy rate, and 27 percent poverty rate, with per capita income averaging $16,000 per year. Even in a thriving urban library a board member said, “The city is growing, but the economy is on the decline.” The library had about 40 people waiting for the library to open, and most raced to the computers.

Raising funds, building ownership: A lot was said about the decline and disappearance of local industry and agriculture, from textiles to tobacco to peanuts. Many retirees are moving to the state for the climate, low cost of living and cheap property. Some may not be enthusiastic about tax increases, but others are eager to get involved in and support community activities. In one community that had lost many jobs, the library staff, board, Friends and foundation worked for 12 years to raise funds for a new building that more than tripled their square footage. They positioned the library as a community
space and economic development engine. “People saw laid-off workers doing continuing education and job training. We had a lot of people needing to retool.” They raised more than the $5 million required for a new library in a community of 30,000. Library use has doubled in the new building.

**Building technology services:** Public access computing is now considered to be a mainstream service. For example, when one urban library was planning a new building in the mid-1990s, it found that the community already wanted more computers. It went from eight to 130 computers in the main library. The PCs are leased and replaced every three years. The library has maintained a regular budget line for technology and keeps the investment equal to the budget for traditional library materials. Several of the libraries visited are developing RFID projects, and several are migrating to new ILS systems. Many of the libraries share technology purchase and maintenance with their local governments. One library foundation has an Opportunity Fund that raises seed money for new technology projects. If the initiative is successful, it is added to the operating budget.

**Meeting Patron Technology Needs for Internet Services**

**Communication, entertainment, job seeking, education:** All public computers were in use in every library, with the exception of an early morning visit to one small town, where the community members emphasized the importance of technology nonetheless. “This library is the only place in many miles where people have access to computers and the Internet. It’s vital. At first I didn’t think so, but if you can’t apply for a job stocking shelves at Food Lion without a computer, it’s vital.”

The most used Internet services echoed those observed in other states, and they were reported with great enthusiasm. The director of a new suburban library said, “When we open, it’s a flood of humanity heading upstairs to computers. For many customers it’s a lifeline to the world.” The library opened two years ago and sees 1,500 people every day. Another director defended the popularity of computer use for social networking, chat and gaming saying, “People must have access to all electronic information. . . . If we cut people off from these tools we will be irrelevant. Even gaming skills overlap with other skills.”

Older adults use library computers mainly to stay in touch by email, look for jobs, read news, download tax forms, get directions and research personal interests (e.g., health, investments). Younger adults cited social networking via sites like MySpace, BlackPlanet and hi5 as their most frequent activity. While almost all the students use the library’s computers for homework, they say they use them more for entertainment.

The libraries are busiest after school, at lunchtime and on weekends.

**Weekly computer use:** Fifty-three people of various ages and backgrounds who were using computers were interviewed at nine libraries. Most (75 percent) use the library’s computers once a week or more. About 28 percent (15) said they use them daily.

Most people said they do not have to wait for a computer. About one-third (18) said they sometimes wait, usually less than 15 minutes.

Fewer than half (24) of the library users interviewed own their own computer, and less than 30 percent (14) have Internet access at home. As is true generally, African Americans living in poorer communities and senior citizens were least likely to have computers at home. At one urban library, six of seven people interviewed did not own a computer. The one person who had a computer could not afford Internet access.

At libraries serving more affluent communities, about two-thirds of the users interviewed (14 of 19) said they have computers at home. Their reasons for using the library included lack of Internet access or a printer at home or a broken computer. Some said they want to get out of the house or they like the library environment.
The teaching role: There is a great emphasis on teaching basic computer skills. Most libraries provide classes and one-on-one training, and some go beyond basics with classes in word processing, Internet research, email, Excel, blogging, etc. In six months, one urban library offered 108 classes, with 836 attendees. They also rent out their computer lab and conduct classes in partnership with local organizations. Another library has a Teen Tech program, with high school students volunteering to help people learn to use computers.

At libraries that offer computer classes, most of the people using the computers (90 percent) said they were not aware of the classes.

User satisfaction: Not surprisingly, people using computers at libraries with more and newer computers expressed a high level of satisfaction with their experience. But users at less well-equipped libraries also expressed strong satisfaction. Few had suggestions, but those who did most frequently mentioned needing more/faster computers, scanners and more quiet space. Teens were more likely to make suggestions or have concerns about filters.

Impact on Staff

Great expectations. The reaction of staff to new technology was mostly positive, but front-line staff were candid about the challenges they face. “The dam broke. People expect answers faster. And the breadth of questions we get about technology is huge. People see the library as cutting-edge, and it is really hard to keep up with it all.”

Staff reported that it was hard to stay current with new technology offerings, and a lot of training happens on-the-job. Other training takes place through the State Library and community colleges.

There is also the challenge of educating county workers about library IT services. “We sometimes get the county IT department to help. They consider us problem children. They don’t understand the library’s role.”

Advocating Support for IT Services

Advocacy is alive and thrives in North Carolina libraries: Library directors and board members interviewed are very active in their communities. They join the local chambers of commerce, build community partnerships, host events for local government officials, and are perceived locally as ahead of the curve in technology. A city manager said, “The library director is effective at getting revenue. The community respects the library and its director. Library service is very important.”

One director said, “If I didn’t have an advocacy plan, I’d be up a creek. I’ve taught myself. I’ve taken time away from other things to do community relations and marketing.” She encourages staff to be active mentors, providing excellent customer service focused on new technology as well as traditional services. They have built an activist board. “The library focuses on three messages: community building, economic development and education. When the board talks about technology, they focus on showing how it supports all three of these fundamental activities of the library.”

Several library trustees mentioned that they work very hard to educate county commissioners. They get involved, attend commission meetings and make sure that libraries stay on the agenda. These libraries also have current or former county officials on their boards.
The challenges to libraries posed by technology are magnified in Pennsylvania, where there are many small association libraries. These libraries rely heavily on state funding and private fundraising. Pennsylvania ranks 4th in state operating revenue per capita support for libraries, 44th in local support and 10th in “other” funding.

Many libraries are struggling to meet increased demand for service, especially computing services, with local funding that is often tenuous. Declines in mining, manufacturing and agriculture have taken their toll on the state’s economy, and many local officials are reluctant to raise taxes. Local funding is not mandated, and some communities do not contribute support to the library. Only one of six libraries visited had received an increase in operating funds in recent years. Some librarians noted that a number of libraries are still recovering from a major cut in state funding in 2003. Some have had to decline matching grants, and one very small library turned down a donation of two computers because there was no room for them.

District library centers, funded by the state, play a critical role in delivering technology services. These centers, generally based at a county library, provide hardware, software and technical support for member libraries. While appreciative, library directors interviewed reported that the district libraries are not able to fully meet their needs. Many directors reported computers that slow down or crash during peak periods, generally after school. Some expressed frustration with long wait times for equipment and technical assistance, as well as a lack of control over network systems administered by the district centers. They also noted that increased use of interlibrary loan due to online reservations is adding to staff workloads.

Troubleshooting computers and assisting people without computer experience is especially burdensome for small libraries that report they have neither the time nor money to send staff for technology training. Library directors agree that computers have attracted many new people to the library—especially men, young adults and low-income people who cannot afford computers or Internet access. Setting up email accounts and help filling out job applications are among the most popular services being requested. Most of these libraries offer no computer training classes. The directors’ biggest wish: computer labs with expert staff to teach both the public and their staffs.

A bright spot is the eiNetwork, a cooperative network of libraries (all types) in Allegheny County (www.einetwork.net). The system is able to provide a high level of bandwidth and IT staffing thanks to a system of funding that includes a 1 percent county sales tax, as well as state funding and private support. The system has benefited from active advocacy by trustees and administrators of member libraries.

Overview: Governance and Statistical Information
Pennsylvania has 458 public libraries with 635 physical library locations and 35 bookmobiles to serve roughly 12 million residents. Pennsylvania’s public libraries are organized primarily as association libraries (85.2 percent). The rest (14.8 percent) are organized in other ways, including combined public/school libraries.20

In FY2005 (the most recent year for which national statistics are available), Pennsylvania’s public libraries recorded more than 43.4 million visits; answered more than 8 million reference questions; and circulated more than 63.6 million items (e.g., books, films, sound recordings, audiobooks). Pennsylvania’s public libraries borrowed or loaned an additional 4 million items on behalf of residents, who are served by 4,656 employees. Of these employees, 1,019 hold a master’s degree in library and information science (MLIS), and 1,488 work as librarians but do not hold a master’s degree.

Pennsylvania’s public libraries are predominantly single-building libraries (87 percent) and average 7,077 square feet. Thirteen percent of Pennsylvania’s public libraries are multi-outlet (having a central library

and branch libraries); the average size of the central libraries is 24,780 square feet, and the branch libraries is 6,065 square feet. In a largely rural state, 91 percent of Pennsylvania’s public libraries serve communities with fewer than 50,000 residents; 42.6 percent serve communities with fewer than 10,000 residents.

**Funding Summary**

Most (61.5 percent) of Pennsylvania’s public library funding comes from local sources (tax dollars). The balance comes from state sources (22.6 percent); other sources (14.7 percent), such as private fundraising, gifts, bequests, fines, and fees; and federal sources (1.1 percent).

Nationally, Pennsylvania ranks 38th in total operating revenue support ($25.51 per capita, compared with $33.87 nationally); 4th in state support ($5.77 per capita); 44th in local support ($15.69 per capita); and 11th in “other.” The national average for local support is $27.59 per capita, 43 percent more than in Pennsylvania.

Expenditures by category also fall well below the national averages. Pennsylvania ranks 35th in total operating expenditures ($24.63 spent per capita versus $31.69 nationally); 37th in staff ($15.45 per capita versus $20.87 nationally); and 38th in collections ($3.32 per capita versus $4.18 nationally). The largest percentage (62.7 percent) of library expenditures are spent on staff (salaries, benefits, retirement), with 13.5 percent spent on collections and the remaining 23.8 percent spent on other things, such as programming, building maintenance and utilities, computer hardware, and software.

Capital expenditures totaled more than $37.7 million in FY2005. With 71 percent of Pennsylvania’s public libraries reporting zero capital expenditures, 18.3 percent (approximately 84 libraries) reported expenditures under $50,000; 2.4 percent (approximately 11 libraries) reported expenditures between $50,000 and $99,999; and 8.3 percent (approximately 38 libraries) reported expenditures over $100,000.

**Connectivity Summary**

The Pennsylvania State Library reported that 90 percent of public libraries in the state have an Internet connection that is direct, “always on” and not a dial-up connection. This is provided directly through local telecommunications companies, local school districts, local city/county government, regional telecom networks and regional library telecom networks. However, even with this range of telecom options, Pennsylvania public libraries do not have statewide access to broadband connectivity due to availability and high cost. A lack of local expertise also hinders Pennsylvania’s public libraries from gaining broadband Internet access. “In Pennsylvania, there are many small libraries, most of which do not have IT staff. Those libraries that are not part of a system and those belonging to poorer systems may have difficulty keeping up with and maintaining newer technologies,” state library staff wrote in response to the 2006–07 Public Library Funding & Technology Access Study.

Pennsylvania public libraries rank 24th in the number of public-use Internet computers available per building (11.04) compared with public libraries in other states. Pennsylvania ranks 26th in the number of Internet users as a share of the population at 59.7 percent, compared to 58.7 percent nationwide. Pennsylvania ranks 20th in deployment of computers and Internet use in schools at 5.36.

**Summary of Major Challenges**

The State Library estimates that as much as 32 percent of Pennsylvania’s public libraries may be challenged in achieving stable and successful networked services. The challenges include maintaining and upgrading equipment to respond to patron demand, adequate IT support, and funding. Older computers simply cannot

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support access to more technologically advanced services (e.g., distance learning and Web 2.0 applications). Poor funding only makes this issue more troublesome, as libraries are forced to choose between providing traditional services and those supported by up-to-date technology. In Pennsylvania, there is no level of government that is mandated to fund public libraries, which creates a constant struggle to receive local government funding.

Staff training also is needed. In a predominantly rural state with harsh winter weather, travel for in-person technology training is challenging. Further, finding IT expertise to serve these rural areas is also difficult.

Focus Group Summary
The research team conducted two focus groups in Pennsylvania, one at the Helen Kate Furness Free Library in Wallingford (Delaware County) on September 24, 2007, and one at the Kittanning Community Library in Armstrong County on September 26. Six directors participated in the group on September 24. Staff from five libraries participated on September 26. They included three directors and two IT managers from district systems. Our thanks to everyone who participated and to Bonnie Young at the Office of Commonwealth Libraries for her help in arranging the focus groups. A list of participating libraries can be found in appendix G.

Expenditures and Fiscal Planning
Participants generally agree that the fiscal climate for their libraries is “status quo,” even as library use is on the rise. Many of these libraries receive as much or more of their funding from the state as they do from local sources. They also rely heavily on private fundraising (an annual appeal and special events), which along with fines and fees, may provide as much as a third of their annual budgets. There is no formula for local support, and township officials are reluctant to raise property taxes. One library director said local officials were shocked when the library was able to pass a referendum. “I think they realized we’re not going away, and it’s what their constituency wants.” While a few directors said they will continue to seek budget increases, most are not optimistic about any near-term increases in funding at either the local or state level.

Most smaller libraries do not have budgets and staff earmarked for technology. They depend on district library centers funded by the state, but participants agreed the district funds are not adequate to meet community needs. It was noted that 250 computers have been sitting at a district center for more than a year because there is no staff available to install them. “I think the greatest obstacle for the entire county is the fact that while they get grants for the hardware, there’s no money available for humans to install, to maintain, to upgrade. So you’ve got this equipment that just sits there.” Another district library center has a technology budget of about $60,000, which is used to pay for library automation software, databases, hardware and Internet charges for 10 library sites. There are two full-time IT staff. While local libraries may have small ($1,000–$5,000) equipment funds, this money often is used for photocopier, AV and other expenses, that are not necessarily computer-related. “There’s no real money available for the smaller libraries to do any replacements. It’s pretty much the upkeep on what they have.”

There is concern about the additional costs posed by a new statewide automation system and matching grants in general. While local libraries will receive $6,000 grants to offset start-up costs, they will be responsible for upkeep after the initial three-year grant period. A director noted that some small libraries have turned down matching grants because they did not feel they could raise the needed match. Others report they do not have adequate space in which to add computers.

Participants indicated that public access technology is not a hard sell, but funding for infrastructure—automation and staffing—is. Several of the libraries have received special support for technology.
One county gave a special $50,000 grant in 2000 for a new automation system. Another community foundation is providing $10,000 for the development of a Web site for four county libraries, only one of which currently has a Web presence. A district system has received donations of used computers from local school systems. Boeing gave $5,000 for computers. Friends groups and private donors have also contributed toward purchases of wireless and computers.

**Meeting Patron Technology Needs for Internet Services**

Several participants observed that half or more of the people coming into their libraries use computers. There was general agreement that computers bring new people to the library, including many young adults, men, and people who may not be recreational readers. In general, they say computer users span all age groups from young to old, both men and women. They include truck drivers, immigrants and seniors who communicate with family members in far-away places. Several library directors, especially in financially depressed and more rural counties noted that, while some low-income families may own computers, they often cannot afford or do not have access to Internet service.

Participants reported the most frequent uses of library computers are:

- Email
- News and information
- Social networking (Facebook, MySpace)
- Job searches/resumes
- Recreation, including games
- Education
- Genealogy databases and Web sites

One county district library has five computers dedicated to genealogy, six used exclusively by children and three for homework use. Some patrons come in specifically to print out boarding passes, get directions or other routine activities. Some use government Web sites such as Social Security or the Veterans Administration. One library hosts a Dance Dance Revolution Night popular with teens and tweens. Most of these libraries do not offer classes but will provide one-on-one computer training, time permitting. This training is especially popular with seniors. "I think the most gratifying times are when people come in—usually they're senior citizens and they don't even know what to ask for...they're just so happy to be connected, to get an email finally and to know what email is—this mysterious thing."

All the participants feel strongly that public access technology makes a difference in their communities, especially for low-income people and those who are geographically isolated. One told of a “regular” who found a job in California using the library's computers. Another man finds jobs on cruise ships. Others report positive feedback about the Pennsylvania Power Library (http://www.powerlibrary.org), which provides online access to thousands of full-text magazine articles, newspapers and reference materials for all ages. One recalls helping a woman upload a picture from a disk to the National Missing Children Center. "Later that day, I saw a poster with the same picture around town in a couple of places. . . . I never heard the final result, but that was kind of like 'OK, this is why you get up and go to work in the morning.'"

The slowness of Internet access is the most common complaint library staff report receiving from patrons.

**Impact on Staff**

Focus group participants report that library staff are increasingly frustrated and embarrassed by slow Internet connections and network systems they cannot control. "The network right now is so slow that a computer crashes almost daily. It's nothing to do with the hardware itself, although the hardware is old. Everything is at least five years old for the public—unless it's been replaced, and it's probably been replaced with a reconditioned CPU."

Audiobooks and sites such as YouTube are not used much because they take too long to download. Participants said the solution—fiber optic broadband—is too expensive for most library budgets. And while
they understand that networks need to be administered centrally, they would like to be able to make quick fixes rather than waiting for district staff and to have more control over things like filters. “They [the county] never had enough staff to maintain the network, so they literally configured the system to require the least amount of maintenance. . . . Everything is at the server level.”

Another major impact is the increase in resource-sharing generated by online holds. Participants reported that the number of ILL requests has doubled and tripled in the last year, without a corresponding increase in delivery or processing staff. One director said processing has gone “from a one-person job to include whoever is available.” Teaching people how to place holds online has also added to staff’s workload. “It seems like there’s always somebody to step into the brink, but it’s a terrible way to run a library.”

Staff development continues to be a challenge with new services being introduced on an ongoing basis. Staff turnover is another factor. Focus group participants said staff need more training to become both competent and comfortable in the use of computing and telecommunications. Participants noted that many people who volunteer their time or are willing to work for low salaries are older and not tech-savvy. While the state library and district library centers offer some classes, small libraries with only one or two staff find it difficult to send someone to a class.

Having the time to anticipate trends is another area of concern. Participants said they rely on professional reading, conferences and personal observation to keep current. “When McDonald’s has wireless, you know, you had better get on the wireless bandwagon."

Participants noted that much of the work with computers is time intensive (e.g., sitting down and showing someone how to sign up for email), but it is not reflected in use statistics. One director of a small library that still does not have time management software said monitoring time limits is “the single most time-consuming staff function.” She lost a reference librarian who said she did not want to spend her time being a gatekeeper.

**Advocating Support for IT Services**

As has been commonly reported in this study’s other focus groups, these focus group participants say that their trustees are more active in advocating for funding for a new building or operating funds, than specifically for technology. One of the larger systems, however, reported a higher level of involvement. The director said its trustees are active in attending township meetings and reporting on what the library has accomplished, such as wireless access. Several said they have township, county or school officials who serve on their boards or have a liaison role. All agreed that such exchange is a good thing. “They need to know what’s going on. It’s their money we’re spending. And they have to keep account of what we are doing with it.”

Several directors indicated that their trustees are not active advocates, especially for technology. Nor do they feel that they or their trustees have time to be out in the community. One director said she plans to demonstrate the library’s Web site to her board members. “I know there are board members—including our board president—who have no clue what our Web site looks like and what’s on it.” One board member has been a trustee for 50 years. Another said, “I know that they get their opinion out there—but there are so many voices, and our boards work full-time and they’re very busy people.” One librarian who works full-time, attends college and has two young children, explained that she simply doesn’t have time to attend community meetings, especially in the evening.

One director said her library has made an effort to publicize the availability of wireless at meetings of community groups and county supervisors to let them know that “we’re not the library of 25 years ago.”
Biggest IT Needs

“I would shudder to say there are still rural libraries in Pennsylvania that use a 56k dial-up. I’m sure there are still some using technology that should’ve been phased out 10 years ago.”

The top needs that participants cite are more and better computers with faster connections—ideally, a separate computer lab, along with skilled IT staff to manage, monitor and teach technology to staff and the public.

There also is talk of regional technology consortiums that could encompass more than one county and be more cost-effective than the current system. Some participants note that this would be cooperation on a scale that most libraries in Pennsylvania have not been comfortable with in the past. Currently not all counties even have systems. “There is no better way to distribute technology than under one central administrative umbrella. . . . At some point, they have to stop saying, ‘You, me, she, he,’ and it has to become ‘They and us.’”

Site Visit Summary

The project team visited five libraries that serve populations ranging from about 5,000 to 85,000. These site visits included interviews with library staff members, library patrons, trustees and community leaders. The team also met with representatives of the Carnegie Library of Pittsburgh and the eiNetwork, which has enjoyed great success in funding and administering technology. The director of a district library was interviewed by phone. A complete list of libraries visited can be found in appendix G. The findings are summarized by broad themes.

Expenditures and Fiscal Planning

Library use is going up; budgets are not: This finding continues a pattern reported in our study last year. All libraries reported increased use, especially of computers, but only one reported an increase in funding. As is typical in Pennsylvania, these libraries depend heavily on funding from the state and private fundraising. Support from local government, many of which are fiscally challenged, cannot be assumed. “Sometimes it’s what they have left from the previous year . . . You pray a lot.” Only one library visited receives a dedicated millage (property tax funding) from two boroughs. While most directors reported their libraries’ funding has been stable, they also said it is not enough, especially for technology. “Every library needs more money. We’re competing more than in the past.” Another director said, “Our local government supports us at a high level, but there isn’t enough money for what you’d like to see for a service that serves the entire community and state.”

Libraries struggle to support technology: Almost all of the libraries depend heavily on district library centers, funded by the state, to plan, purchase and maintain technology. Except for two larger and more affluent libraries, the libraries have small ($5,000 or less) budgets for technology. Everyone agreed the district libraries are not funded to meet public demand, and small libraries especially struggle to stay current with technology and technology applications. One library director said his IT department has a coordinator and four full-time assistants (two of the positions are vacant) to maintain 500 computers at 30 locations. None of the member libraries have technical staff, although one is about to hire someone. Recruitment is difficult because of the low salaries offered. The district library director said skilled IT people want more money than he is making. One director of a small library (with a master’s degree) said she makes $20,000 per year.

Two libraries have received funding for technology in addition to that from the original Gates grants in 2001. One was able to replace seven computers with grants from a local corporation and foundation.
Another used state Library Service Technology Act (LSTA) funds to install wireless and upgrade computers. “Usually there’s money for equipment. It’s the ongoing costs—buying more bandwidth and staffing—that are tough.”

**Cooperation pays:** A notable exception to the technology funding struggles is Allegheny County, where almost every library belongs to the eiNetwork (Electronic Information Network). Launched in 1996, the eiNetwork provides a high-speed network and technical support for close to 2,000 PCs. Members enjoy a high level of technology support with funding coming from a combination of public and private sources, including a 1 percent sales tax, corporate and foundation grants, and state funding administered by a Regional Asset District. While these funds also are used to support parks, arts and educational programs, libraries are the biggest beneficiary. Bandwidth has increased every year. Every library has a T1 line, and fiber optics are being phased in over time.

### Meeting Patron Technology Needs for Internet Services

- **Library technology is critical in economically depressed communities:** Residents in these areas are heavy computer users. They use the technology to connect with friends and family, to seek employment, keep up with the news, and access government agencies such as Social Security or the Veterans Administration. Students depend on the library for homework and as a source of entertainment. “This is the only place they can come. They might be able to afford a computer but not the software or Internet connections.” Several staff note that “regulars” spend more time online and are more likely to engage in social networking and gaming activities. Others come to the library to accomplish specific tasks related to life maintenance (e.g., shop online, fill out a job application, send email to family and friends). Two libraries reported high use of the language learning software, as well as use of genealogy Web sites and databases.

- **Technology has expanded the library’s role as a community center:** As reported previously, public access technology has brought in many new people, especially men, young adults, less affluent people and nonreaders who may surf the Web, bring their child to a program or borrow DVDs, but aren't interested in books. Library staff in these communities noted that while use may peak after school when students arrive, computers are used heavily throughout the day by people of all ages. They also note that many seniors are logging onto library computers in increasing numbers.

- **Library users are satisfied with technology:** Overall, library patrons expressed satisfaction with library services. A possible explanation is that many library users have little experience with computers and don't fully understand their potential (e.g., they are not aware of things like downloadable books or movies). Some appreciate that the library's Internet connections—while not the fastest—are often faster than what is available at home. The fact that the service is free may also outweigh inconveniences such as waiting times or slow connections. Said one staff member: “Most of the public doesn't know what we don't have. They're more surprised by what we do have.” Users offered few suggestions. They were generally for more time/more computers. Even at a library that had been having server problems for two weeks, users say their overall experience was good. But one added: “I'm paying taxes for this. It's like paying for roads. I should be able to complain if it's not working. I can't see it taking two weeks to fix.”

### Impact on Staff

- **Staff are generally more frustrated with technology than the public:** Their biggest concerns are systems that are too slow; not enough IT support; lack of training opportunities; outdated; and an
insufficient number of computers. “In most libraries you're stumbling along, trying to keep things going. We teach ourselves, and we try to help each other. It should be easier.” One director said she had lost six reference librarians who said technology made their jobs too stressful. Another said that when a hard drive crashes or someone steals the trackball from a mouse, it can take a week for the district’s IT person to fix them. “It comes down to me. I'm learning as I go along.”

Technology takes time—and saves time: Staff say they spend a significant amount of time—25 to 60 percent—assisting the public, but less than before. “The public is more computer savvy.” They say computers make getting information faster and facilitate interlibrary loan. It also makes circulation and reporting of library statistics easier. One director said she now produces all of the library’s publicity flyers in-house and puts the money she saves into programming for teens. She is also able to communicate on a regular basis with teachers via email. An assistant director said, “It’s changed how we serve and how we think.” He said the library is turning its Web site into an e-branch.

Training is still an issue: The directors say most of their staffs are reasonably confident and competent in dealing with technology, but that staying current is an ongoing challenge. Small libraries don’t have IT specialists who can teach other staff. Nor can staff get away easily to attend workshops. Ideally, they would like training close to home that is customized for their library.

Advocating Support for IT Services

“They’re (public officials) not against the library. It’s just sometimes they’d rather put in a baseball field.”

Libraries need to do a better job of telling their story—both to the public and to public officials: Both library staff and trustees agree they could do more to tell their story, especially when it comes to technology. As was true in previous site visits for this study, trustees are most active as advocates for more operating funds or a new building. One director said she and her colleagues don’t ask enough. “Sometimes that’s all it takes. But you have to keep greasing the wheel.” Another said, “Educating the township officers is an uphill battle. One township supervisor says he doesn’t read. A lot of them are older farmers who don’t use computers.” The director of a district library said he thinks most library directors are overwhelmed and short-staffed. “They’re just so busy doing the day-to-day activities, they can’t do one more thing.” He said library directors in general need to get out into the community more. “It’s the same 100 people who get things done. You need to get to know those 100 people.”

Who’s on the board matters: Two libraries with a higher level of support from their communities have well-connected members of the community on their boards, including representatives of local schools, business and government. One director said, “The library matters to them. They get very involved.” A trustee from another smaller library said her board doesn’t attract the kind of person who will be aggressive in seeking support. One director noted, “You need to find people who are going to the cocktail parties that politicians attend.”

Start by educating the board. The Office of Commonwealth Libraries has published a trustee manual24 with a section on advocacy, and several directors and trustees mentioned using it. One director said her board “is beginning to see the need for more advocacy but they haven’t gotten organized to do it in a systematic way.” Several trustees said they did not know much about technology. In Allegheny County, where funding for technology has been a priority, it was noted that board members are more active than they used to be and have enjoyed success. “Technology is a relatively easy sell. You can show the benefits, especially when you focus on people.”

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VIRGINIA CASE STUDY

Most Virginia public libraries visited have enjoyed stable or growing budgets in recent years thanks to a strong state economy fueled by government, tourism and the military. Property values have been generally high with pockets of poverty scattered throughout the state. As is typical, these Virginia libraries receive most of their budgets (87.5 percent) from local sources, and the state ranks in the top one-fourth of the nation in terms of per-capita operating revenue in most categories.

A 2005 report commissioned by the Virginia State Library, however, drew attention to the wide variation ($8.25 to $136.72 per capita) in operating revenue across the state and raised concerns about the equity of library and information services offered across the Commonwealth.

However, FY2008 could mark the beginning of a change for the state. State funding was cut 4 percent midyear, and a further state cut is expected in the current fiscal year. Several library directors also forecast flat or decreased budgets as local communities are affected by the mortgage crisis and an economic slowdown verging on recession. An amendment to the state constitution is pending that would allow localities to lower property taxes by 20 percent. The state General Assembly must pass the amendment again in 2008 before it goes to voters.

Unlike other states visited as part of this 2007–2008 study, there are no district library centers or regional consortia specifically charged with technology support for member libraries. Most libraries supplement their technology budgets with private gifts, endowments and fundraising. Most have new or relatively new equipment, hardware replacement plans and wireless access, or plans that will add wireless in the coming year.

Despite the libraries’ seeming prosperity, there is general agreement that more is needed to meet the demand: more computers, more staff (to maintain, repair and teach technology skills) and more bandwidth. Needs such as a computer lab and dedicated IT staff rank highest with staff of small libraries, many of whom would like to expand their libraries’ teaching capacity. Bandwidth is an issue for libraries of all sizes.

Virginia’s public libraries continue to play a critical role in bridging the digital divide. Only one-third of 95 library computer users interviewed said they have Internet access at home. As seen elsewhere, a dominant use of computers is for communication. Older adults generally use email, while teens and younger adults prefer social networking sites, such as MySpace and BlackPlanet. Employment and e-government were cited as the fastest growing areas of use. Staff at these Virginia libraries were particularly enthusiastic about their role in teaching the public to use technology. While not every library offers classes, all provide one-on-one computer training, either informally or by appointment.

The library directors and trustees interviewed take a proactive approach to advocacy. Success stories include the board and Friends group who convinced the city to increase its support for an under-funded urban library by $1 million over four years. Similar to findings from other states, library boards with liaison relationships with local governments and schools enjoy a higher level of public support.

Overview: Governance and Statistical Information

Virginia has 91 public libraries with 343 physical buildings and 30 bookmobiles to serve 7.4 million residents. Virginia’s public libraries are primarily organized as county libraries (40.7 percent), as municipal government libraries (25.3 percent) and as multi-jurisdictional libraries (25.3 percent). Another 8.8 percent are organized as nonprofit association or agency libraries.

In FY2005, (the most recent year for which national statistics are available) Virginia’s public libraries reported that they served more than 33.3 million visitors; answered more than 7.6 million reference questions; and circulated more than 62.6 million items (e.g., books, films, sound recordings, audiobooks). Virginia public libraries borrowed or loaned an additional 208,000 items on behalf of its residents, who are served by 3,591 employees. Of these employees, 827 hold a master's degree in library and information science (MLIS), and another 159 work as librarians but do not hold a master's degree.

Sixty-eight (68) percent of Virginia's libraries are multiple-outlet libraries (a central library with branch libraries) averaging from 8,670 square feet (branch libraries) to 26,961 square feet (central libraries). Another 32 percent are single-building libraries with an average of 11,590 square feet.

**Funding Summary**

Most (87.5 percent) of Virginia's public library funding comes from local sources (tax dollars). The balance comes from state sources (7 percent); other sources (5.2 percent) such as private fundraising, gifts, bequests, fines and fees; and federal sources (0.3 percent).

Nationally, Virginia ranks 24th in total operating revenue support; 15th in state support; 23rd in local support; and 36th in "other." Virginia is near the national average for local operating revenue at $27.24, compared with the U.S. average of $27.59.

Virginia ranks 22nd in total operating expenditures ($30.85 spent per capita); 21st in staffing ($20.70); and 28th in collections ($4.08). The largest percentage of operating expenditures are used for staff costs (salaries, benefits, retirement), with 13.2 percent spent on collections, and the remaining 19.7 percent spent for other things, such as programming, building maintenance and utilities, computer hardware and software.

In FY2005, Virginia public libraries spent more than $10.9 million on capital expenditures (e.g., building repairs, renovations, new buildings). While 64.8 percent of the libraries had no capital expenditures, the largest single majority was in the $100,000 or more (15.4 percent) range. Approximately 12 percent of libraries spent less than $50,000, and another 7.7 percent spent between $50,000 and $99,999 on capital improvements.

**Connectivity Summary**

Between 76 and 90 percent of Virginia’s public libraries have direct, “always on” broadband Internet connectivity provided directly through a local telecommunications company, local school districts, local city/county government, and regional telecommunications networks. However, broadband connectivity is not available throughout all of Virginia, there are many telecommunications companies, and broadband connectivity costs are high.

“We pay $350 to $850 per location per month (for T1 access). Unfortunately, it is still not fast enough to provide the kind of access people want,” said one library director.

Of the 300-plus public library buildings in Virginia, 16 remain on 56K dialup. Three library systems had no Web presence at all as of spring 2007. Of those with Web sites, seven do not have Web-accessible catalogs. Many branch libraries lack sufficient bandwidth to support services currently offered and must think carefully before adding new services.

Virginia’s public libraries rank 13th in the number of public-use Internet computers per building (12.36) compared with public libraries in other states. Virginia ranks 18th in the number of Internet users as a share of the population at 63.6 percent, compared to 58.7 percent nationwide, and ranks ninth in the deployment of computers and Internet use in schools.

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In March 2007, the Virginia governor signed legislation requiring the state’s public libraries to install Internet filters to block child pornography, obscenity and materials deemed harmful to minors. A person authorized by the library board shall disable or otherwise bypass the technology protection measure required by this section at the request of a patron to enable access for bona fide research or other lawful purposes.  

Summary of Major Challenges
The two most significant challenges for Virginia’s public libraries are maintaining and expanding staff skills and knowledge with technology, and obtaining funding to replace and maintain IT.

The State Library estimates that 40 of Virginia’s public libraries have no dedicated library IT staff. Without adequate staff with technology skills, these libraries are unable to effectively plan for improving and maintaining adequate IT services for their libraries and the residents they serve.

The inability to fund replacement costs for IT is a serious issue, and the impact of aging computers remains an issue for 40 percent of Virginia’s public libraries.

Focus Group Summary
The research team conducted two focus groups with a total of eight participants on February 19, 2008, at the North Park branch of the Henrico Public Library in Richmond. The groups included staff from regional, non-profit association, municipal and county libraries with budgets ranging from about $150,000 to several million dollars. The director of another regional library submitted responses in writing. Our thanks again to the participants, to branch manager Louise Perry, and to Carol Adams at the Virginia State Library for their assistance. A list of focus group participants can be found in appendix H.

Expenditures and Fiscal Planning
Unlike many states, most Virginia focus group participants report stable or growing levels of local support. Local economies, driven by increasing property values and tourism dollars, have been strong, and more than half of respondents reported budget increases have kept pace or exceeded the cost of living. They expect the increases to come to an end, however, if the economy continues to decline. “We are going to have at least two to four years of rather tough times before it picks up again.”

Unlike New York and Pennsylvania, library staff said technology is funded and administered primarily at the local level. Their libraries receive most (40–80 percent) of their budgets from local governments. One library is scheduled to receive $7.3 million for technology and other improvements as part of a special city modernization fund, and another library that is able to carry funds from year to year has built up a reserve that it uses for capital improvements, including technology.

Association libraries report relying heavily (as much as 35 percent) on private fundraising, and the funds they receive from local governments are considered grants or gifts. While the state aid formula requires that local communities maintain a certain funding commitment, increases are not required. One library hopes to upgrade to a T1 line, and another said her goal “is not to be embarrassed” by the library’s technology. The Friends group at one of the small libraries recently gave $6,000 to upgrade the library’s computers. (“Before that it was little sacrifices every morning to the computer gods.”) Another recently established a foundation with about $600,000 in bequests that will mostly go toward technology.

Five of nine libraries reported having at least one dedicated IT staff person. Another expects to add a full-time IT staff member in the coming year. One library has dedicated staff and receives technical support from the city. More than one participant noted city or county IT support can be a challenge, as well as a benefit, as these non-library staff often do not understand the realities of computing in a public environment like the library. One library was able to hire dedicated IT staff as a result of a building referendum that included half a million dollars for technology and operating expenses. Smaller libraries report a dual

lack—not only because there are no dedicated library IT staff, but there is no city or county IT department at all. These libraries are more likely to outsource IT support.

There are no district library centers or regional systems with a specific technology focus, as in Pennsylvania, New York and North Carolina. While some libraries have engaged in joint purchasing, participants reported state and local procurement rules often make this difficult.

Focus group participants report that one of the biggest barriers they face in obtaining funding from local government is a lack of understanding about computing in a public arena. "The administration is thinking, 'Well, we just bought you computers last year. What's your problem?'" and what appears to be a universal reluctance to add staff. "They don't want more employees. That terrifies them. It's one more person they're going to have to buy insurance for and pay a pension to."

Meeting Patron Needs for Technology

"The digital divide is alive and well in our areas. We serve urban and very rural areas. They either cannot afford high speed or (service providers) do not go there."

Communication—whether by email or social networking sites such as MySpace, Facebook or BlackPlanet—was cited as a leading reason people use computers at libraries. Email, in particular, is essential for job seekers and especially popular with foreign students who work in the tourism industry. "We have maybe 20 languages spoken in the library in an average day, and they're using the Internet all the time."

The communication function was followed by the 4 E's and a variety of life maintenance tasks:

- Employment
- e-government
- Education (e.g., online classes, homework)
- Entertainment (e.g., games, movies, Web surfing)
- Routine tasks (e.g., shopping, banking, news, maps and travel information)

"Jobs. Jobs. Jobs" is how one director summarizes computer use at her library. There is unanimous agreement that preparing resumes, checking job ads and submitting job applications is a big—and still growing—category of use, as is e-government. Several participants report that schools, senior centers and, increasingly, state agencies direct people to libraries if they do not have Internet access at home. The Virginia Department of Revenue has stopped printing tax forms. The Virginia Employment Services closed several satellite offices with computers and posted notices directing people to their local libraries with no advance notice.

"I think every agency that says, 'Go to your public library has to buy me a computer,'" one director joked. Another focus group participant describes spending most of one day helping a woman re-establish her disability payments after the patron’s daughter recommended she go to the library for help. "You can't look for a job. You can no longer go to the Virginia employment office. You have to do it online. And that's what I did all day Tuesday."

Participants noted that virtually all college classes make use of email, chat groups and Blackboard to post assignments online. Although all the libraries have time limits, the directors said students are allowed extra time if needed. They noted that many students, especially at community colleges, depend on the library’s computers. Some are the first generation in their family to attend college. "It's a tremendous, tremendous help. . . . they need the high speed because you've got to send all this stuff back and forth."

Focus group participants said computer training continues to be in demand, especially by job seekers, many of whom have no computer experience.

Impact on Staff

Keeping staff IT skills current is again cited as an ongoing challenge, especially for the smaller libraries. Several focus group participants praised the early computer training offered to library staff by the
Bill and Melinda Gates Foundation, and said more is needed. One director noted that staff may receive training, but if they are not called on to use it, will soon forget. She sometimes gives “homework” assignments to help keep her staff up to speed and affirmed, “It’s got to be my job to remember, or we’re all going to forget.”

As in previous groups, some note that public expectations of technology have greatly increased, which can be troublesome for some staff. “They (staff) don’t want to put themselves in the position of having somebody asking questions they don’t know the answer to.” One director said training is critical and budgets as much for training and travel as he does for hardware and software—$45,000. Another director, noting that his staff is not always quick to try new technology, said he offered a drawing for an iPod for anyone who used the staff intranet during a two-week period. “And what do you know? Everybody started using the intranet.” Continuing education includes conferences, mentoring front-line staff by dedicated library IT staff, and community college classes.

On the other hand, two library directors reported a need to keep young staff—both in IT and front-line librarians—engaged and challenged. One observed that IT staff is often eager to try things that are not necessarily appropriate or financially feasible for the library. Several libraries are working on more interactive online services, including blogs and online book reviews. Another, noting a decline in “traditional” reference questions, said he has tried to diversify the work of the reference staff to include content development for the library Web site, in order to keep them interested and productive.

**Advocating Support for IT Services**

Focus group participants consider their library boards (all governing) to be active advocates, although less so for technology. This finding has been mostly consistent throughout site visits in all four states in 2007–2008. They also agree that the best advocates are library users who will testify on the library’s behalf—either in person or via letters. One director said, “We don’t get (county funding) unless we scream. And my way of doing that is by having patrons there who say, ‘I can’t do without this.’” Others said it helps to have a success story. The director whose library passed a referendum for a new, high-tech building said, “Now all the supervisors want their own area library.”

While most community partnerships are not focused around technology, focus group participants provided several examples of how they build and leverage local relationships to improve technology access. A more affluent library leverages its equipment and staff skills to host the Web sites of local non-profits. “What we get back is a deeper appreciation for the library. You can’t put a price on that.” Community groups sometimes conduct computer training at another library. One director has just initiated a technology committee with community representatives that will develop a technology plan tied into the library’s mission and with priorities for implementation. “The better the plan that we have, the easier it’s going to be for us to sell this to the county government as an essential component.” One library has free Internet service provided by local schools until a change of administration. Support for technology comes mainly from Friends groups or private fundraising.

For advocacy to work, focus group participants say there must be a library director who commands trust and respect from the local community. The library also needs to share its successes, as well as its needs. One director noted that it is important to know the culture of your funding body—what issues are important to them and what not to say. Recruiting and cultivating a champion on the city council or county board of supervisors is frequently cited as a tactic for success.

**Biggest IT Needs**

Directors of one large and two small libraries cited more bandwidth and two cited IT staff as their greatest need. Directors of two regional libraries said their libraries were “maxed out” and need more space—both for computers and in general. Another cited training for both staff and the public. Everyone agreed with a director who said he would like more affordable and user-friendly hardware and software, especially databases.
Site visit summary
The project team visited 10 libraries serving rural, suburban and urban populations in eastern Virginia. These site visits included interviews with about 50 library staff members (some in groups), 95 library patrons and six trustees (some responses were submitted in writing). A complete list of libraries visited can be found in appendix H. The findings are summarized by broad themes.

Expenditures and Fiscal Planning

- **Nice while it lasted:** Most libraries visited have benefited from a strong real estate market in recent years. Even the directors of small libraries serving high poverty areas said their funding increased substantially, although in one case, the budget is still lower than a few years ago. These directors said they and their boards have become more aggressive about seeking support, particularly for technology—sometimes at the expense of the collections budget. One revitalized Friends group raised $10,000 last year to replace computers dating back to 2001. A community group donated a computer lab at another small library. Several have established foundations to do fundraising.

  Most of the libraries visited have new or relatively new equipment and PC replacement plans. One city library recently completed a two-year technology initiative that tripled the number of computers available in the branches—from 10 to 30—after interviews with library users uncovered that the single greatest service issue was the limited number of computers and time available to use them. “I heard the same thing in every community—I always have to wait for a computer. I wait a long time. We had to bite the bullet and figure out what libraries would be like with 30 computers. Usage has gone up dramatically. Now the hardest thing for staff is that they are busy from when they open at 10 a.m. to close at 8 p.m.”

  While there were a few reports of computers being out of order for up to two weeks, most said library or IT staff could quickly fix most problems. Almost all of the libraries provide wireless access or plan to add it in the coming year.

  The library directors interviewed said they expect to feel the downturn in the economy in the coming year. One large library had to cut 7 percent in the current year’s budget and anticipates another cut because the city reduced its property assessments. The cut was absorbed in the materials budget and a cut at one of the branches. Directors also noted a 4 percent midyear cut in state funding, with an expectation for an additional .5 percent cut in the current fiscal year. A proposed amendment to the state’s constitution that would allow localities to lower property taxes up to 20 percent is before the General Assembly, who must pass the amendment for a second time before it goes to voters. “It will be a very bumpy ride over the next few years for everyone—not just libraries.”

- **Greater Needs:** Despite their libraries’ seeming prosperity, staff again agreed that more is needed:
  More computers, more staff (to maintain, repair and teach technology) and more bandwidth “The last time we added bandwidth, it was full by the end of the day.” Things like a computer lab and dedicated IT staff rank high with staff of small libraries, many of whom would like to expand their libraries’ teaching capacity. “There’s a lot we could do with technology to draw patrons in, but we can’t maintain the technology and train people.”

  Directors of some larger libraries note that their need for more space and staff, in general, is greater than their need for more computers. The head of a newly constructed city branch said she would like more software and equipment like digital cameras. “We have more ideas than money.” The IT director for a city library that has T1 lines places improved bandwidth at the top of his list, noting, “The trend over the past two or three years is away from the text to audio/video and interactive use. Two years ago it was reported in a science journal that they had discovered a new species of woodpecker in Arkansas. There wasn’t just text, but video of the bird flying and a recording of the sound it made. That’s where everything is going.”
Meeting Patron Technology Needs

**Waiting to compute:** Only 19 percent of those interviewed say they had to wait recently—usually for less than 15 minutes. Participants report longer and more frequent waits at smaller urban and rural libraries during after school hours and on weekends. Libraries in high tourism areas noted there are more waits between May and November when more travelers and service industry workers (many of them students from abroad) come to the library to use email. One library staff member reported waits of up to two days.

**Top uses:** The most cited use of library computers is email, especially popular with military families and seniors. Preparing resumes and seeking jobs online (which also demands email use and access) is another major category of use. Library staff reports that a growing number of businesses and government agencies are driving people into libraries—to fill out job applications, file taxes, apply for unemployment, take driver’s tests or pay fines. Many of these library patrons have no previous computer experience. For the first time, staff reported that probation officers require their clients to go to the library and apply for unemployment.

Young adults said they use computers to connect with friends via social networking sites such as MySpace, for entertainment (games, music, movies), and for school and other informational needs. Older adults say they use computers for a variety of life maintenance activities, e.g., reading newspapers, banking, paying bills, looking for a house, shopping and researching personal interests such as health, sports and cars.

Many staff noted intense computer use by college students, and most libraries will proctor tests these students take for their coursework. At the grammar and high school level, PowerPoint is often used for class assignments, as well as library databases.

As found in the site visits to other states, library computer users report a high level of satisfaction. Technology requests include color printing, scanners and the ability to burn CDs. About two-thirds said they use library computers once a week or more. One library also noted the high use of its online catalog and big increases in the number of holds placed on items—“It’s like Netflix or Amazon.com.” Wireless access is widely used in most libraries the research team visited.

**Libraries play a critical role in bridging the digital divide:** This key finding is again reinforced, with many library staff describing school children, job seekers and college students as the prime beneficiaries. “The city depends on us for two initiatives: They only accept jobs online, and they started an e-learning initiative one year ago. If people had no computer at home, they were sent to the library.”

Only one-third of 95 people interviewed said they have Internet access at home. At one urban library, nine of 10 people did not own a computer. Other than school or work, these library users said there is no other place for them to use computers for free. A reference librarian observed, “There is a whole group of people, which if the library weren’t here, would have no place to use computers. We provide a necessary service and can help them with continuing education, jobs, word processing.” Another said: “We used to think the pencil was a tool. Now computers are like pencils. You have to have them to function in school.”

Members of the public agree. A nursing student told us that, “Not everyone has access to a computer. It doesn’t mean they shouldn’t be able to do research. Everyone should have their fair chance to do anything they want.” An elderly African American pointed out that, “It’s very important to me. It saves on the phone bill, and I get answers right away.”
A fifth-grader whose mother was using a library computer to look for work put it this way, “It’s very important. If somebody loses their job, they can come to the library.”

- **Filters are a reality:** Virginia has a law requiring libraries to use filters to block child pornography and obscenity. Libraries can select their own filters, and staff interviewed said the filters are generally set at a minimum level. One librarian noted that his library’s filter blocks Yahoo! email. Another blocks MySpace because of its inappropriate material. One city took control of the library’s filters and increased the setting. “We had to work with the city to make sure the job applications didn’t set off the filter because some of the psych/social work applications talk about working with sex offenders. We also started to have problems with nursing students taking exams on human sexuality. It was quite an educational issue.” A user at that library pointed out that the filter blocks access to the state legislation requiring filters on library computers, as well as some material on some Christian sites.

**Impact on Staff**

- **Librarians take on IT teaching role:** Library staff interviewed take an active and enthusiastic role in teaching the public to use technology. Most see technology as a boon to their jobs, with some of them spending as much as 85 percent of their time on technology-related activities. Reference staff at a library with a high rate of database use said they make a point of introducing library patrons to databases, even giving them a telephone number to call for help. They explained that teaching is an integral part of the library’s commitment to customer service. “People who don't want to teach self-select out.” The head of reference at another library affirmed, “It's changing how we define reference work. We're about teaching people.”

While most staff and directors rated their comfort and use of technology above average, there also was high demand for additional staff training. One library system schedules 30-minute technology training sessions in each branch just before the library opens. Library IT and HR staff present on one topic identified by staff for about 10 minutes, then take questions. The library gave each of its staff members flash drives and taught them to use them so they would be better equipped to help library patrons. These initiatives have been well-received.

While not every library offers classes, every library offers one-on-one computer training, either informally or by appointment. In some cases, staff is supplemented by volunteer or paid help from high school/college students. The libraries do not always track informal assistance and do not do it in a consistent way. Some count technology questions as reference questions. A branch manager whose library does not track helping people with computers said, “We don't give ourselves enough credit for teaching.”

- **Technology triage:** It is becoming more common for libraries to add a layer of staff specifically focused on technology. Often employing high school or college students, these computer aides help patrons with immediate and confined technology concerns—including establishing email accounts, printing documents and general troubleshooting. This approach has freed reference staff to focus more on one-on-one training, teaching classes and developing online content. In another library, the computer aides roam among computers to further remove any barriers to assistance. “Helping people with technology is 100 percent of what we do. It's the whole job. People don't get how to find authoritative information. We spend a lot of time educating them, how to use the computer, where and how to find information.”

- **Reference work concerns:** Although several staff again noted the public’s desire for “instant answers,” they added concerns not heard before. The head of reference at a busy, urban library noted that, “Technology is sexy, but it also has negative implications. Everyone’s expectation is that everything is on the Internet, and that’s not the case.” He questioned whether librarians might be failing their mission. “Sometimes we fall into the trap—giving the easier information rather than the best. Having a line in front of the desk makes it tempting to do what’s good enough.” He also expressed concern about the impact of technology on confidentiality and digital rights management.
Keeping up: While almost everyone said staying current with technology is a challenge, most say their library staffs are doing a good job. One observed, “You can teach an old dog new tricks, but it doesn’t come naturally.” Another acknowledged, “It’s harder for older people. Thank goodness there are young people to teach the rest of us.” The head of adult services said it is important to hire staff who value self-development. As an adjunct professor, he makes a point of posting articles of interest on the staff wiki. An administrator with a two-person training department, noted, “The more change happens, the easier it is. Staff is taking it in stride now.” Most of the front-line staff interviewed said they feel their libraries are good at providing training in-house or sending them to classes. As is typical, staff at smaller libraries are more likely to say they teach themselves or learn from their colleagues.

Advocating Support for IT Services
The library directors and trustees interviewed take a proactive approach to advocacy and have reaped its benefits. Directors speak highly of their board members: “Whenever we need them (board/Friends), they are there with bells on.” Trustees credit their directors with doing a good job of keeping them informed and involved. In general, they agree that “advocating for technology is not a problem. It is not seen as frivolous or extra anymore. It is a part of people’s lives.”

Success stories include the one about the board and Friends group who convinced the city to increase its support for an underfunded urban library by $1 million over four years. They did this mainly through one-one contacts, which included convincing the mayor and a council member to make the library “their thing.” Another library received special funds to expand its bandwidth by making bandwidth access a community issue—not just a library issue. The difference a savvy director and energized board can make is particularly obvious in two small rural libraries. These libraries still struggle to catch up, but have made great progress since the appointment of new directors and board members.

Several library directors also are leading or working on teams at the city or county level to address community bandwidth issues and education concerns. In one city, the director leads the “quality education and lifelong learning” team, partners with parks and recreation on summer reading, and placed library kiosks in park buildings while a branch was being renovated. Another government-business group is working to get broadband access for its community. “We don’t have the population needed to make it cost-effective for vendors.” One library provides technology support to city and county agencies to develop their Web pages and hosts Web pages for local non-profits. The director also insisted that the library be represented on the local cable commission, which is now written into the law governing the commission.

While most of the six trustees interviewed have not had special training, several said they found a handbook published by the State Library helpful. One trustee described his role as “one-on-one sales.” Another said, “I tell anyone and everyone that the library is the best thing.” The barriers they see are competition with other departments (e.g., fire, place, roads); competition with other libraries; a declining economy; and a lack of public understanding about the role of libraries in the twenty-first century.

Clearly, library boards with strong liaison relationships with local governments and schools enjoy a higher level of cooperation. Support for one library increased considerably, after it added a city liaison to its board.