Public Libraries Struggle to Meet Internet Demand

New study shows libraries need support to sustain online services
by John Carlo Bertot, Charles R. McClure, and Paul T. Jaeger

early every U.S. public library offers free access to computers and the internet, but overall libraries are challenged to provide enough workstations to meet demand, pay for ongoing upgrades to the technology. That's the conclusion of Public Libraries and the Internet 2004: Survey Results and Findings, a report issued in June by the Information Use Management and Policy Institute at Florida State University in Tallahassee (www.ii.fsu.edu) and funded by the Bill and Melinda Gates Foundation and the American Library Association.

The 2004 study queried 6,865 U.S. public library outlets based on poverty, metropolitan status, and state designations, which represents a sample of the total of 16,192 outlets in the United States. The survey was primarily conducted via the Web. Letters and instructions were also mailed to the directors of the sampled libraries. In addition, researchers worked with state data coordinators nationwide to encourage participation. The survey achieved a response rate of 73.2% (5,023 responses) for outlets and 68% (3,084) for systems. The large sample enabled national as well as state (in most cases) projections, in addition to projections based on poverty (calculated based on census data) and metropolitan status (rural, suburban, or urban) categories assigned to each branch and system.

The 2004 study built upon previous studies, data gathering, and analysis by the authors between 1994 and 2002, but also explored new areas of internet-based services and resources. Selected goals of the study included determining the levels of internet access in public libraries, the ways in which public libraries meet the technology needs of their local communities, the extent to which public libraries filter content, and the sources of funding for information technology in public libraries. A particular objective was to produce data regarding public library internet activities based on poverty and metropolitan status.

The numbers tell the story

Key issues identified from this research project show that public libraries are:
- Continuing to increase internet availability and provide an important link to technology for library patrons. Compared to 1994 when only 20.9% of public libraries were connected to the internet, 99.6% of public library outlets in the United States were connected to the internet in 2004, which tops even the 98.7% connectivity rate in the 2002 study.
- Providing public access. Nearly all connected public library outlets (98.9%) offer public access to the internet, which is an increase from 95.3% in 2002.
- Struggling to meet public demand. Only 14.1% of public library outlets report that there are always sufficient terminals to meet patron needs. Of the other outlets, 70.2% have insufficient terminals to meet patrons' needs at certain times of the day, while 15.7% have insufficient terminals to meet patrons' needs on a consistent basis.
- Continuing to increase their connectivity bandwidth. The speed of connectivity most common in public libraries is now between 769kbps and 1.5mbps, with 27.4% of outlets having connectivity within that range. While 42% of public libraries have connection speeds of 769kbps or greater, 73% of urban libraries have connection speeds of greater than 769kbps, compared to only 34% of rural libraries.
- Exploring wireless internet connectivity for patrons, with 17.9% of public libraries already having wireless internet access, and 21% planning wireless access within the next year. The majority of outlets (61.2%) have no plans to make wireless access available.
- Continuing to filter public access workstations. Nearly 40% of public library outlets use one or multiple methods to filter public internet access. The most common method of filtering is blocking software installed on each public access workstation, used at

JOHN CARLO BERTOT is associate director and professor; CHARLES R. McCLURE, director and Frances Eppes professor; and PAUL T. JAEGER, manager for research development, Information Use Management and Policy Institute, College of Information, Florida State University, Tallahassee.
16.7% of libraries. Other methods of filtering are more systemic, ranging from filters for the entire library network (13.4%) to filters for the entire state library system (6.2%).

- Needing ongoing support to sustain public access computing. 13.3% of libraries reported a decrease in their budgets for technology in the previous year, and 50.6% indicated that their technology budgets stayed the same with no increase for inflation or demand for services.
- Reducing hours computers are available. In 7.6% of libraries, the total hours the library computers were available decreased in the previous year, while nearly 12% of urban libraries are now open fewer hours.
- Providing training to help raise patrons’ skill levels. Seniors, people without internet access at home, and adults seeking continuing education are the primary audiences for technology training. While a majority of libraries offer training, only 28% offer training on a scheduled basis (either weekly or monthly). That percentage drops to approximately 16% for patrons served by rural libraries, but increases to nearly 64% for patrons served by urban libraries.
- Lacking upgrade schedules for technology. Most libraries do not have plans for keeping systems running. Nearly 70% of libraries have no set upgrade schedule for hardware, 77.4% have no set schedule for software, and 96.4% have no set schedule for connection speed.

The have-nots and the have-nots
The data has implications for many issues that affect public libraries and the roles they play, or can play, in the networked society. Although the range of issues is extensive and discussed in more detail in the final report, there are a few that deserve particular attention in this summary article.

There continue to be significant disparities across the United States as to who has access and whose public access to the internet is adequate. Rural public libraries are much more likely to have lower levels of broadband connectivity. Access and bandwidth varies considerably on a state-by-state basis, and 85% of public libraries responded that there are times of the day when there are an inadequate number of workstations available for those who want to use them. The lack of adequate workstation access is particularly prominent in high-poverty and urban public libraries.

Internet connectivity in libraries may not be sufficient to ensure internet access for all people who would otherwise lack it. As the federal government brings more information and services into the electronic environment, many Americans with no home computer or low-speed connections will rely on public libraries as their link to e-government.

Many libraries, however, have low connection speeds; some have run out of space to provide additional public access workstations while others have minimal resources to maintain and/or upgrade existing workstations. Due to these limitations, the public library may not be able to ensure internet and e-government access for all citizens—particularly for those who rely on public libraries as their primary source of internet and computing access.

The relationships between the Children’s Internet Protection Act (CIPA), its filtering requirements, and obtaining e-rate discounts are complex and create many issues for public libraries. Under CIPA, public libraries that do not filter access to the internet can be denied e-rate discounts as well as other federal funding such as Library Services and Technology Act grants. With approximately 40% of libraries now filtering internet access in some way, those individuals who rely on the public library for access to internet-based information or services may be unable to access government, legal, health, or other important content that filters will block automatically.

The post-9/11 policy environment creates new dilemmas in the public library community’s attempts to enhance public access to networked information services. New issues of recordkeeping, patron privacy, and patron apprehension can affect what patrons wish to do in terms of networked information and services—situations in which many librarians may feel that they have been forced to choose between supporting patrons’ rights to free expression and trying to monitor what patrons are doing in the online environment in accordance with national priorities that now focus on security.

The data and findings from this study provide a basis for a nationwide debate as to national, state, and local policies that are needed to support the various roles of public libraries in the networked environment. That debate and its resulting recommendations are crucial if public libraries are to flourish in the national and global networked environment. These issues and the subsequent dialogue are also vital to defining the national, state, and local areas of advocacy for the public library community in the coming years.

What remains unclear is the degree to which policymakers and the public library community wish to engage in this debate, make recommendations, engage in advocacy, and then work to implement a new framework of public library policies that will support and enhance the health, vitality, and economic development of the United States.

The complete 2004 report, including information on its methodology and goals as well as previous studies, is available at www.ii.fsu.edu/plinternet/.