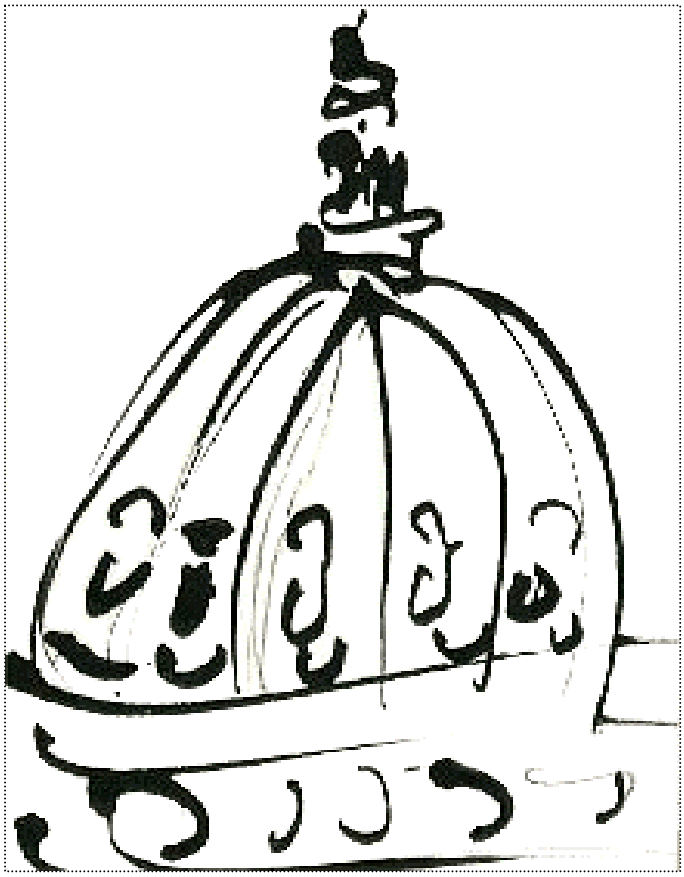
Information Use Management and Policy Institute
College of Information, Florida State University



# Public Libraries and the Internet 2006: Study Results and Findings

John Carlo Bertot, Ph. D.
Associate Director and Professor

Charles R. McClure, Ph. D.
Director and Francis Eppes Professor

Paul T. Jaeger, Ph.D. and J. D.
Assistant Professor

Joe Ryan
Senior Research Associate

September 2006

Information Use Management and Policy Institute
College of Information
Florida State University
Tallahassee, Florida 32306-2100
http://www.ii.fsu.edu/

Funded by the
Bill and Melinda Gates Foundation
and the American Library Association

## ACKNOWLEDGEMENTS

Large-scale national surveys and site visits in five states such as this involve substantial effort and support from a number of individuals and groups. While we cannot feasibly mention each individual or community that helped, we would like to highlight the efforts of those who provided substantial assistance.

The study team wishes to express their gratitude to the Bill & Melinda Gates Foundation and the American Library Association (ALA) whose support and participation have made this study and the previous 2004 study possible. Also, we thank ALA and the Gates Foundation for their assistance in securing a high survey response rate.

The study team would like to recognize the significant efforts of the state librarians, the state data coordinators, and other state library agency staff members. As with the 2004 study, the amount of time, energy, and support that the state library community invested in this study contributed directly to the survey's high response rate – we cannot thank them enough for all of their efforts.

We also extend a debt of gratitude to all the public librarians who completed the survey and participated in the site visits. Thank you for taking the time to work on this study. Without your interest and your participation, we simply would not have any data. Without data, this study would have no ability to affect policy, practice, and engagement in networked services by public libraries. The time you take to provide the data in this report offers valuable information for national, state, and local policymakers, library advocates, researchers, practitioners, government and private funding organizations, and others to understand the impact, issues, and needs of libraries providing public access computing. The data also provide public librarians with the opportunity to advocate for the communities that they serve.

We are also in debt to the study's Advisory Committee. These individuals assisted us in a number of key study areas including issue identification, question development, survey pretesting, survey website development, and providing perspectives on study findings. Our thanks to Nancy Ashmore (Prarie du Chien Public Library), Robert Bocher (Wisconsin Department of Public Instruction, Division for Libraries), Diane Carty (Massachusetts Board of Library Commissioners), Beverly Choltco-Devlin (Mid-York Library System), Denise Davis (Office of Research and Statistics, American Library Association), Judith Hiott (Houston Public Library), Neal K. Kaske (National Commission on Libraries and Information Science), Keith Curry Lance (Library Research Service), Peggy D. Rudd (Texas State Library and Archives Commission), Rivkah K. Sass (Omaha Public Library), Karen Schneider (Librarians' Internet Index), and Patricia Wallace (Enoch Pratt Free Library).

Finally, the study team thanks other members of the Information Institute staff who provided assistance on this project. Na Ding participated in website testing, analyzing data, and making tables. Lesley A. Langa supported many aspects of the survey, from pretesting questions to analyzing data to constructing the final report. John T. Snead assisted in a number of editing and production activities. Susan Thomas provided critical support structure that kept the Institute staff organized on the project. Paragon New Media also deserves mention for their tremendous efforts in developing and maintaining the survey website.

John Carlo Bertot
Charles R. McClure
Paul T. Jaeger
Joe Ryan

## TABLE OF CONTENTS

## LIST OF FIGURES

V. DATA ANALYSIS AND MAJOR FINDINGS



VI. NATIONAL BRANCH DATA (OUTLET DATA)



VII. NATIONAL SYSTEM LEVEL DATA



VIII. STATE BRANCH LEVEL DATA

IX. STATE SYSTEM LEVEL DATA



X. QUALITATIVE SURVEY DATA FINDINGS

# EXECUTIVE SUMMARY

This report presents national and state data from the *2006 Public Libraries and the Internet* survey and site visits funded by the Bill & Melinda Gates Foundation and the American Library Association. The primary goal of the study is to provide current information that describes public library activities in the networked environment. This information has importance not only to the public library community, but also to policymakers at local, state, and federal levels; manufacturers of information and communication technologies; library funding agencies; and the communities served by public libraries. This report summarizes findings at both the library outlet level and the system level for all questions on the survey.[1]

The 2006 *Public Libraries and the Internet* study collected data through two integrated approaches: 1) a national survey of public library Internet connectivity, use, services, involvement, and sustainability issues; and 2) a case site component which sought to identify successfully networked public libraries and how these libraries meet and resolve the challenges with maintaining, enhancing, and continually moving forward their networked services and resources. The survey received 4,818 responses for a 69.0% response rate. The cases involved site-visits, focus groups, and interviews at more than 30 libraries in five states. The study continues national surveys of public libraries and the Internet conducted by the authors since 1994.[2]

## *Key Findings*

### Libraries as Community Public Access Computing and Internet Access Points

Public libraries continue to provide important public access computing and Internet access in their communities:

- 98.9% of public library branches are connected to the Internet.
- 98.4% of connected public library branches offer public Internet access.
- 36.7% of public library branches offer wireless Internet access, up from 17.9% in 2004.
- 100% of high poverty branches—those with greater than 40% poverty in the service area—are connected to the Internet and offer public Internet access.
- Public library branches have an average of 10.7 public access computers, with rural libraries having an average of 7.1 workstations and urban libraries having an average of 17.9 workstations.

### Continued Improvements

Public libraries continue to enhance their public access computing and Internet access services:

[1] The term "outlet" refers to a public library facility (e.g., main branch or branch). The term may also refer to bookmobiles, but this study excluded bookmobiles. A library "system" comprises all facilities (i.e., main branch and all branches).

[2] Information and reports regarding the various studies is available at: http://www.ii.fsu.edu/plinternet.

- In 2006, 34.4% of connected public library branches have connection speeds of 769kbps-1.5mbps compared to 27.4% in 2004.
- In 2006, 28.9% have connection speeds of greater than 1.5mbps compared to 20.3% in 2004.
- Bandwidth continues to increase, with 63.3% of public library branches having connection speeds of greater than 769kbps in 2006 compared to 47.4% in 2004.

## Future Developments

In the future, public libraries plan to add and/or replace workstations and make other enhancements to their public access computing and Internet access services:

- 16.6% of public library branches plan to add more workstations within two years, while 28.6% of branches are considering doing so.
- 72.8% of public library branches plan to replace some workstations within two years. Of the 72.8% of libraries, 35.3% have plans to replace a definite number of workstations, with an average replacement of 7.2 workstations.
- 23.1% plan to add wireless access within two years, which means that over 60.0% of public libraries would then offer wireless access.

## Challenges Remain

Challenges remain as public libraries continue to improve their public access computing and Internet access services:

- Roughly 45.0% of public libraries reported a decrease (6.8%) or flat funding (36.6%) in their overall budget as compared to the previous fiscal year. Given inflation and increased personnel and benefits costs, flat funding equates to a cut in funding. Thus, nearly half of public libraries essentially experienced reductions in funding.
- Public libraries face increased demands to supply public access computing in times of natural disasters such as the 2005 hurricanes and to support federal, state, and local e-government services, e.g., applications for the federal prescription drug plan.
- 45.5% of public library branches indicate that their connection speeds are inadequate to meet user demands some or all of the time.
- One-quarter of public library branches have 3 or fewer workstations, two-quarters of public library branches have 6 or fewer workstations, and three-quarters of public library branches have 12 or fewer workstations.
- Only 20.7% of public library branches indicate that the number of workstations they currently have is adequate to meet patron demand.
- 45.4% of public library branches have no plans to add workstations in the next two years.
- Space (79.9%), cost factors (72.6%), and maintenance (38.8%) most commonly influence decisions to add or upgrade public access Internet workstations.
- Rural public libraries tend to have fewer public access workstations, lower bandwidth, and are less likely to offer wireless access.

- Public access computing and bandwidth are important parts of public access, but there is a need to continually upgrade technology and provide sufficient bandwidth to meet increasingly demanding applications, digital content, and services.
- Public libraries in some states collectively lag behind the public libraries nationally in terms of number of computers, connectivity speeds, and other important factors.

## Successfully Networked Public Libraries

A successfully networked public library (SNPL) provides high quality traditional library services as well as networked services. Networked services include electronic information resources and/or services, such as Internet access, email, chat, online reference, subscription databases, and other web-based services. In the context of this study, network services comprise three primary areas: 1) networked services offered within the library; 2) the library's virtual branch, meaning web-based external services; and 3) the infrastructure needed to support both. SNPLs have exceptionally high quality leaders who successfully and actively engage the political process. Factors describing SNPLs in 2006 also include:

1. ***Networked services within the library***
    - SNPLs offer public access copiers, fax, printers, scanners, and computing workstations, and may also lend a variety of equipment including digital cameras, GPS equipment, ipods, MP3 players, and even telescopes. Often, SNPLs provide the first introduction to a new type of information technology (IT) and serve as the access point of first and last resort for their communities and visitors to various types of IT.
    - SNPLs offer an integrated library system (ILS) including an online public access catalog (OPAC) of library materials.

2. ***Library's virtual branch***
    - SNPLs view their website as an additional branch or as a virtual branch.
    - They seek to offer the same or equivalent services, such as answering reference questions, as those offered within the library in addition to those only available virtually.
    - Though the services are available, the provision of virtual branch management, staff, resources, and budget equivalent to a traditional branch may not yet be established.
    - Virtual branch evaluation is performed, but the evaluation data are not integrated with results of physical branch evaluations.

3. ***Network infrastructure***
    - SNPLs have sufficient IT staff to make certain types of networked library services possible. Having such staff can save the library money. For some libraries, however, the difference between not having and having dedicated IT staff must be experienced before being believed.
    - They conduct extensive, continuous, formal and informal network service planning.

- SNPLs have sufficient bandwidth to meet the needs of patrons and staff and to offer or plan to offer wireless connectivity. However, they also anticipate an impending future need for additional bandwidth as video, music, and large file transfers become more common.
- They generally have enough public workstations but cannot meet peak demand.
- They provide necessary IT (including software) and training so that all staff members are proficient in the IT-related aspects of their jobs.
- SNPLs have built or are considering building facilities better tailored to the networked environment.
- SNPLs recognize and capitalize on the potential of the Internet as a shared information infrastructure where hardware, software, resources, services and staff expertise may be shared between branches.

**4.** ***SNPL Advocacy Strategies***

- SNPLs engage in a wide range of advocacy strategies for continued public library and networked services support. The following is a summary of SNPL qualities that influence theses advocacy activities:
    - *Proactive:* A distinguishing characteristic of all of the SNPLs, when compared to other public libraries, is their proactive approach. SNPLs proactively partner with local and state governments and non-profits for mutual benefit. SNPLs actively look for opportunities to show what the library was already doing to address local, state, and regional issues, and actively seek partners and funding to address these issues. SNPLs do not wait to be invited to participate in local issues.
    - *Opportunistic:* The SNPL managers are masters at perceiving an opportunity to make the library's worth visible to others and to obtain funding or support, particularly when the source does not specifically mention libraries. SNPL managers recognize that financial support was only one of many types of support that successful libraries need.
    - *Prepared:* SNPLs are often, but not always, better prepared than peer government agencies to make known their contributions to the community and to explain their funding needs. Part of this preparation includes assembling relevant evidence and arguments based on the evidence.
    - *Relationships:* SNPL managers have a year-round positive relationship with elected and appointed officials, community opinion makers, and government agency and nonprofit leaders. SNPL managers are not meeting with strangers when they go to the annual library budget hearing.

**5.** ***SNPLs Need Sustainable Support***

- Stable and sustainable funding is key to SNPLs, as such funding enables realistic multi-year planning:
    - SNPLs conduct continuous, systematic environmental scans seeking to match community needs, related IT, and funding opportunities.
    - Most SNPLs are transitioning from national grant-based funds to increased local support for networked services.

- Support for networked services is not limited to money, as shared hardware, resources, staff time, and staff training, among other benefits, are equally important.

*Importance of Public Access Computing*

Programs and local advocacy efforts that demonstrate the role of public libraries in providing public access computing can contribute to the long-term viability of public libraries. Findings from both the national survey and the case site visits document the importance of public access computing and Internet access provided by public libraries. Public libraries are often the first choice for many people to access the Internet and engage in networked services such as applying for a job, applying for and engaging in government services, obtaining health information, and much more. But the need to continually enhance information technology, telecommunications, and networked services often puts considerable strain on already stressed library budgets.

## Challenges in Moving Forward

The networked environment continues to increase in scope, service, resource possibilities and capabilities, and complexity. There are now multiple uses of bandwidths, different levels and types of access provided by public access computers, licensed resources from numerous sources, the increasing demands for wireless access, content that needs increasing bandwidth, the introduction of new technologies, and advent of popular interactive websites, among others. It is in this context that public libraries offer their public access computing services and resources.

The impacts on libraries of this new and substantially more complex environment are potentially significant, and effect library service and resource provision, staff skills, training requirements, and public access computing and Internet access requirements. As user expectations rise, combined with the provision of high quality services by other providers, libraries are in a competitive and service/resource rich information environment. Providing "bare minimum" public access computing and Internet access can have two detrimental effects: 1) relegate libraries to places of last resort, and 2) further digitally divide those who only have PAC and Internet access through their public libraries.

As the complexity of the networked environment impacts public library services, roles, and demands on librarians, any assessment of public library public access computing and Internet access must also account for the increased complexity of the actual environment. Thus, another major impact of the complexity of the networked environment is the ability of studies such as these to measure adequately library connectivity, public access computing, the range and type of networked services provided, and the depth and extent of the library's information technology infrastructure. The increased complexity is replete with measurement challenges.

# I. INTRODUCTION

This report presents the national and state data from the *2006 Public Libraries and Internet* study. The 2006 survey continues the research of previous surveys conducted by Drs. Bertot and McClure, with others, since 1994.[3] The 2006 study most closely parallels the 2004 study, which broadened the scope of the study to include a number of new issues.[4] As such, the data and findings from the 2006 survey allow for some ongoing longitudinal analysis, while also establishing new lines of inquiry that subsequent studies can undertake.[5] The data collected by this survey can provide national and state policymakers, library advocates, practitioners, researchers, government and private funding organizations, and a range of other stakeholders with a better understanding of the issues and needs of libraries associated with providing Internet-based services and resources.

The 2006 study also incorporated two new elements of data collection. First, the survey included an open-ended question in the outlet level portion of the survey. It was intended to produce qualitative data from libraries that would both: 1) provide further insight into the perspectives of librarians regarding the impacts of the Internet and public access computing, and 2) serve as a conceptual bridge between the quantitative data from the survey and the data gathered in the site visits. Almost 4,000 libraries answered the open-ended question.[6] The result was a wealth of qualitative data that added substantial depth to the quantitative findings of the survey.

The 2006 study also included a series of more than 30 case studies from site visits of public libraries. These case studies revealed the stories of rural, urban and suburban public libraries or systems that have addressed significant challenges to provide a range of innovative public access Internet services. The case studies provided a range of evidence to better understand factors affecting successfully networked public libraries and to better define the context, issues and potential strategies useful to understanding and improving Internet services offered by public libraries.

## Objectives of Study

The main objectives for this study were to provide data that would determine the extent to which public libraries are able to:

- Provide and sustain public access Internet services and resources that meet community public access needs;
- Install, maintain, and upgrade the technology infrastructure required to provide public access Internet services and resources;

[3] Information about the reports from the 1994-2006 is available at: http://www.ii.fsu.edu/plinternet.
[4] Bertot, J. C., McClure, C. R., & Jaeger, P. T. (2005). *Public libraries and the Internet 2004: Survey results and findings*. Tallahassee, FL: Information Institute. Available: http://www.ii.fsu.edu/plinternet.
Bertot, J. C., McClure, C. R., & Jaeger, P. T. (2005). Libraries struggle to meet Internet demand: New study shows libraries need support to sustain technology services. *American Libraries, 36*(7), 78-79.
[5] The study team kept questions on the 2004 study the same to the extent possible for comparisons with previous survey data.
[6] The open-ended question and responses are detailed in Section IX of this report.

- Serve as a public Internet access venue of first choice within the libraries' communities for content, resources, services, and technology infrastructure (e.g., workstations and bandwidth), rather than the access point of last resort/only option; and
- Serve as key technology and Internet-based resource/service training centers for the communities that the libraries serve.

The findings detailed in this report address these objectives.

## II. METHODOLOGY

The study employed a web-based survey approach to gather both the quantitative and qualitative data, with a mailed survey participation-invitation letter sent to the directors of libraries in the sample.[7] The letter introduced the study, provided information regarding the study sponsors and the research team, explained the study purpose and goals, provided instructions on how to access and complete the electronic survey, and provided contact information to answer any questions that participants might have.

The study sought data that enabled the following types of analysis:

- Metropolitan status[8] (e.g., urban, suburban, and rural);
- Poverty[9] (less than 20% [low], 20%-40% [medium], and greater than 40% [high]);
- State (the 50 states plus the District of Columbia); and
- National.

Finally, the survey explored topics that pertained to both public library system and outlet (branch) level data. Thus, the sample required for this study was complex.

The study team used the 2002 public library dataset available from the National Center for Education Statistics (NCES) as a sample frame, which was the most recent file at the time the geocoding process began. The study team employed the services of the GeoLib database (http://www.geolib.org/PLGDB.cfm) to geocode the NCES public library universe file in order to calculate the poverty rates for public library outlets. Given the timeframe of the study, GeoLib was able to geocode 16,457 library outlets. From these totals, the researchers used SPSS

[7] See Appendix 1 for a print version of the 2006 survey.

[8] Metropolitan status was determined using the official designations employed by the Census Bureau, the Office of Management and Budget, and other government agencies. These designations are used in the study because they are the official definition employed by NCES, which allows for the mapping of public library outlets in the study.

[9] In previous studies, the authors have used the less than 20%, 20%-40%, and greater than 40% poverty breakdowns. Though previous studies by the authors have employed these percentages, the data from this study can be analyzed at different levels of granularity, if desired. The poverty of the population a library outlet serves is calculated using a combination of geocoded library facilities and census data. More information on this technique is available through the authors as well as by reviewing the 1998 and 2000 public library Internet studies:
Bertot, J. C., and McClure, C. R. (2000). *Public Libraries and the Internet 2000: Summary Findings and Data Tables*. Washington, D.C.: National Commission on Libraries and Information Science. Available at: http://www.nclis.gov/statsurv/2000plo.pdf; Bertot, J. C., and McClure, C. R. (1998). *Moving Toward More Effective Public Internet Access: The 1998 National Survey of Public Library Outlet Internet Connectivity*. Washington, D.C.: National Commission on Libraries and Information Science. Available at: http://www.nclis.gov/statsurv/1998plo.pdf

Complex Samples software to draw the sample for the study. The sample needed to provide the study team with the ability to analyze survey data at the state and national levels along the poverty and metropolitan status strata discussed above. The study team drew a sample with replacement of 6,979 outlets.

The study team developed the questions on the survey through an iterative and collaborative effort involving the researchers, representatives of the funding agencies, and members of the Study Advisory Committee. The study team pre-tested the initial surveys with public librarians and the state data coordinators of the state library agencies and revised the survey based on their comments and suggestions.

The survey asked respondents to answer questions about their branch and about the library system to which each respondent library belonged. The 2006 *Public Libraries and the Internet* survey sampled 6,979 public libraries based on three library demographics—metropolitan status (roughly equating to their designation of urban, suburban, or rural libraries), poverty level of their service population (as derived through census data), and state in which they resided. The survey received a total of 4,818 responses for a response rate of 69 percent.

As a further part of the *2006 Public Libraries and the Internet* study, researchers visited public libraries in five states representing different regions of the country in an effort to identify the attributes of successfully networked public libraries and the issues they face. By examining in detail how libraries approach issues related to computing, Internet, networks, telecommunications, integrated library systems, and related electronic resources, this aspect of the study was designed to suggest a roadmap for public libraries to use when assessing their networked services and planning for the future. These data were gathered through site-visits, focus groups, and one-on-one interviews at more than 30 libraries in five states.

Finally, the national survey included an open-ended, qualitative question on the survey. Question 9 of the branch portion of the 2006 Public Libraries and the Internet survey was open-ended. It was intended to produce qualitative data from libraries that would both: 1) provide further insight into the perspectives of librarians regarding the impacts of the Internet, and 2) serve as a conceptual bridge between the quantitative data from the survey and the data gathered in the site visits. A total of 3,887 libraries answered the qualitative question. Answers ranged from a length of fewer than five words to more than 100 words. From the 3,887 responses, researchers coded a representative sample of 785 responses (20% of the total). Using a pre-tested, preliminary codebook, which was modified through the course of the data analysis, four researchers each coded one quarter of the sample. These results were then compared between researchers through crosschecking by the researchers as a group and through statistical analysis using SPSS software.

## Outlet (Branch) versus Systems

The designed survey actually deployed a two-stage approach that included questions regarding sampled outlets (branches) and questions regarding an entire library system. For roughly 85% of public libraries, there is no distinction between a branch and system, as these are single facility systems (i.e., one branch, one system). The remaining roughly 15% of public

libraries, however, do have multiple branches. Thus there was a need to separate branch and system-level questions.

Questions 1 through 9 of the survey explored branch level issues (e.g., Internet connectivity, speed of connection, workstations, etc.). Questions 10 through 14 posed questions regarding the entire library system (e.g., E-rate applications, funding for information technology, patron and staff information technology training, etc.). Upon completion of questions 1 though 9 for all sampled branches, respondents were then taken to the system level questions. Given that the actual respondent for the system level data might be different than for the branch level data, users were permitted to leave and reenter the survey for completion. See Appendix 1 for a print version of the survey. The analysis of system and branch level data required different approaches, considerations, and weighting schemes for national and state analysis.

The next sections review the study's key findings, look across the survey and case study data, discuss a number of factors which impact public library public access computing and Internet access services, and draw conclusions based on the study's overall findings. Sections VI through XI present that survey data tables and in-depth case study findings.

## III. RELATING SURVEY FINDINGS TO CASE STUDY FINDINGS

The biennial *Public Libraries and the Internet* studies, conducted since 1994, provide a longitudinal portrait of public library involvement with and use of the Internet. Over the years, the studies demonstrated the growth of public access computing and Internet access provided by public libraries to the communities that they serve. Internet connectivity rose from 20.9% to essentially 100% in less than 10 years; the average number of public access computers per library increased from an average of two to nearly 11; and bandwidth rose to the point where 63% of public libraries have connection speeds of greater than 769kbps in 2006. This dramatic growth, replete with related information technology developments, occurred in an environment of budgetary, staffing, and other challenges.

In addition to the national survey, the 2006 *Public Libraries and the Internet* study included site visits at public libraries to identify factors that contribute to being a successfully networked public library (SNPL) and current issues confronting these libraries in maintaining, enhancing, and moving their connectivity and networked services forward. This approach allowed the study team to compare and contrast findings from both data collection efforts to better understand the current context of public libraries and their use of the Internet. This section of the report briefly notes a number of issues and conclusions enabled by linking these two data collection efforts.

### Recognizing the Human Factor

Since the original 1994 study, there has been a steady improvement in the percentage of public libraries providing public access computers, the number of workstations per library, increased bandwidth, and the types and number of services and resources offered to library users. The case sites clearly demonstrate that some public library administrators are adept at finding ways to improve their library's information technology infrastructure. Indeed, the human face on the statistics is that significant public library leadership and perseverance is necessary to continue the advances in public access computing.

Data from the site visits provide insights into the various innovative techniques used by library directors to obtain additional support for public access computing. While it is clear that a range of local advocacy efforts are essential, it is equally clear that local situational factors require consideration in any strategic plan to enhance existing or obtain new public access computing services. The advances made by public libraries in public access computing came, in part, because of strong local leadership, tenacity, and advocacy by library administrators to move libraries forward. The human factor—based in the efforts of individual librarians—is a critical component that contributed to increases and advances in public access computing in public libraries.

### Increasing Range of Services

The survey data indicate significant improvements in public access computing over the years while the case site visits found that these improvements came with virtually no reduction in the provision of traditional public library services. In short, libraries added a range of additional

public access computing services and networked services to an already heavy load of traditional services. In related work conducted by the study team, federal, state, and local governments have recently added yet another significant level of services to public libraries by "requesting" that they provide numerous e-government services, e.g., social services, prescription drug plans, health care, disaster support, etc.[10]

Thus, the maintenance of traditional services, the addition and expansion of public access computing and networked services, and now the addition of a range of e-government services tacitly required by federal, state, and local governments, may stretch public library resources beyond their ability to keep up. Two key questions are: 1) how much longer can public libraries add to and extend their electronic services without a corresponding increase in their resource support? 2) Can libraries continue to add services and resources which require substantial retraining and retooling of librarians and library technology infrastructure?

## Gaining Support through Engaging the Political System

Local public policy decision making and the role of the library in that process may vary from community to community due to local and state laws and the local personalities involved in the process. Public policy making is essentially a socially agreeable way to make decisions. Stakeholders, the people affected by a social problem or issue, recognize that policies and decisions may be developed to deal with a particular library issue. Stakeholders often have conflicting value systems and have differing objectives in the resolution of an issue. Politics, and working the local political system, is the process by which public policy decisions and policies are made and those decisions promote the public library.

Engaging in the local political process is essential for advocacy and for becoming a SNPL. Public libraries now exist in a complex and ever-evolving electronic networked environment in which services and resources are often provided via a national, state, regional, or local networked environment. Local governing boards and residents may not understand the extent to which information technology and the networking environment are now the backbone of public library services and the basis for being "successful." Without a high quality technology information infrastructure and network, public libraries simply cannot compete in the information marketplace.

The SNPLs show that better linking of working within the local political process and advocating for the library – orchestrated by library manages – pays significant benefits for the library, and likely helped to increase public access computing services noted in the survey. Indeed, the site visits suggest that advocacy without working the local political system may have less impact than desired by library managers and local community members. More specifically:

[10] Bertot, J. C., Jaeger, P. T., Langa, L. A., & McClure, C. R. (2006). Drafted: I want you to provide e-government access. *Library Journal, 133*(13), 34-39.
Bertot, J. C., Jaeger, P. T., Langa, L. A., & McClure, C. R. (2006). Public access computing and Internet access in public libraries: The role of public libraries in e-government and emergency situations. *First Monday, 11*(9). Available: http://www.firstmonday.org.

- Library directors must be able to work within the local political process to successfully advocate for the public library.
- A picture or vision of what constitutes a successfully networked public library in a particular community is essential for local politicians, governing boards, and residents to then advocate for reaching that vision.
- Local situational factors have to be identified, understood, and considered in the advocacy plan for the library to reach a vision of being successful.

Advocacy and working within the political process has to be done in the context of accomplishing specific goals and working toward a vision of what a successfully networked public library in a particular community would be. Apparently, for many libraries, that vision included public access computing. But if there is no clearly articulated vision of what a successful library should be in a particular community, it will be impossible to reach such a vision.

**Sufficient and Quality of Connectivity**

In addition to connectivity speed, there are many other important issues related to public access computing and Internet access, such as maintaining adequate budget and sustainability; maintaining sufficient staffing and support; increasing services offered through the technology infrastructure; and evaluating the impacts of connectivity and public access computing on the communities that libraries serve. One pressing question, however, is what is sufficient and quality public access computing and Internet access? And, as a corollary to that question, what are measures and benchmarks of quality access? Survey data alone cannot answer these questions.

It is within this context that issues related to the quality of public access computing and sufficient connectivity speeds to Internet access reside. Research questions to explore include:

- Is it possible to define quality public access computing and Internet access in a public library context?
- If so, what are the attributes included in the definition?
- Can these attributes be operationalized and measured?
- Assuming measurable results, what ways can the library, policy, research, and other interested communities employ to impact public library movement towards quality public access computing and Internet access?
- Should there be "standards" for sufficient connectivity and quality public access computing in public libraries?

These questions are a starting point for a larger dialogue that needs to occur in the research, practitioner, and policy-making communities.

As both the survey and case site visits demonstrated, arbitrary connectivity speed targets, e.g., 769kbps, do not in and of themselves ensure quality public access computing and sufficient connectivity speeds. Public libraries are connected to the Internet and actively provide public access services and resources. It is time to move beyond connectivity type and speed questions

and consider issues of adequacy, quality, and the range of networked services that should be available to the public from public libraries.

## Need for Public Policy

Not addressed in the national survey but addressed in many of the site visits was the need for a national and state public policy related to the role and support of public libraries. Generally, 85-90% of public library support comes from the local community. Federal and state aid provides another 5-7%, and other sources of support account for 2-3% of public library funding. Both the survey and the site visits provide findings that many public libraries see themselves as having inadequate resource support for the tasks and roles they perform in today's society.

There are only limited public policy statements that describe the role and responsibilities of public libraries from federal and state governments. The federal and state governments, relatively speaking, provide minimal direct support to assist public libraries perform their tasks and roles. Given the increased set of tasks being expected from public libraries in terms of public access computing and provision of networked services (including e-government responsibilities), there is a need to reevaluate a number of public policy issues related to public libraries. Such issues include:

- What roles and responsibilities should public libraries provide to assist residents to be successful in today's and tomorrow's society?
- To what degree are librarians adequately prepared to offer these roles and activities successfully?
- Are adequate resources being made available to public libraries to accomplish these roles and activities?
- How successful are public libraries in meeting public access computing, networked services, and e-government roles and responsibilities?

It is possible to pose other public policy questions. These questions with supporting data from the survey and site visits, however, can foster national, state, and local discussions intended to reevaluate what public libraries should be doing in terms of public access computing, networked services, and e-government, as well as how they should be resourced to perform these activities successfully. Increasingly, public libraries must address a range of unfunded federal and state mandates.

## Evolving Roles for Public Libraries and Librarians

The findings of the *Public Libraries and the Internet* studies, over the years, parallel substantial changes to the public library service environment. As libraries connected to the Internet and became more familiar with Internet-enabled services and resources, libraries offered an increasing array of network-based services. This required changes in library building needs, technology infrastructure, staff skills and expertise, and services that meet both user demands and the possibilities of new and rapidly changing technologies. The combination of an evolving

technology environment and the enabling capabilities of technology creates both new roles and pressures for public libraries.

These new services can bring new users to the library as well as different uses of library resources. They can even foster new societal roles for public libraries, such as community technology access points, e-government providers, technology and information literacy training, and others. However, these increased services also place additional burdens on public library budgets, staff, buildings, and facilities. Beyond traditional librarianship training, public librarians need to be teachers, e-government facilitators, technology literate in an increasingly complex technology environment, politically savvy in an increasingly competitive resource context, and persuasive advocates for the role of public libraries in the community and networked environment. In short, public librarians require a host of skills that promoters of "traditional librarianship" do not sufficiently acknowledge, at the peril of public libraries.

## Extending the Research

The usefulness of the *Public Library and the Internet* data over the years has been, and continues to be, significant. Adding the SNPL component to the 2006 study added an additional set of insights that previously had not been tapped. The success of these efforts is largely due to the participation from the public library practitioners who completed the surveys and agreed to the site visits. Unfortunately, the range of research conducted thus far regarding public libraries and the Internet, the deployment of public access computing, provision of networked services, appropriate roles of public libraries in the networked environment, obtaining adequate support for public library public access computing and networked services, and related issues, remains limited.

In developing the national survey, the initial number of questions of interest is roughly triple the number that is ultimately included in the final survey. There is simply not enough room to ask all these questions in a single survey, particularly since excessively long surveys tend to receive a limited number of Reponses. Such is also true with the site visits; additional visits would have increased our knowledge of SNPLs. The same number of visits to "unsuccessfully" networked public libraries would also have provided additional insights.

In short, many compelling research questions regarding public libraries and public access computing and networked services remain unaddressed. Ongoing and additional support from a range of funding agencies will be essential if this work is to continue and be expanded. Further, findings from such efforts need to be usable to policy makers and also translated into practical and realistic strategies and recommendations that public librarians and use and implement successfully for improved public access computing.

# IV. STUDY CONCLUSIONS: IMPACTS, ISSUES, AND POSSIBLE FUTURE STEPS FOR PUBLIC ACCESS COMPUTING

To a large degree, public access computing in the nation's public libraries is now taken for granted as an expected and reliable service. Since virtually all public libraries have some amount of public access computing available, key conclusions and findings from the 2006 study go beyond basic connectivity and the availability of public access computing. Of increasing interest are the impacts, issues, and possible future steps for public libraries that extend connectivity and public access.

Findings from both the national survey and the case site visits document the importance of public access computing and Internet access provided by public libraries. Public libraries are often the first choice for many people to access the Internet and engage in networked services such as applying for a job, applying for and engaging in government services, obtaining health information, and much more. But the need to continually enhance information technology, telecommunications, and networked services often puts considerable strain on already stressed library budgets. Moreover, there are new demands on public libraries in their role as providers of public access computing.

This section of the 2006 report identifies and discusses key impacts and issues, and describes several issues arising from the survey and the case site visits. As such, it highlights those impacts and issues that have significant importance for considering public library roles, responsibilities, and strategies for the future in relation to the networked environment. It is not possible to discuss all the significant topics here; instead, these provide a selection of those seen as most important by the study team.

## Comparing Selected 2006 Findings to 2004 Findings

The final report of the 2004 *Public Libraries and the Internet* survey offered a number of findings. The study team believes it is useful to compare some of these findings to those from the 2006 study.

### *Good Enough Connectivity*

The 2004 study asked: "What constitutes 'good enough' connectivity?"[11] The 2006 data show that although public libraries continue to increase their connectivity speeds we are no closer to an understanding of what is "good enough" connectivity. Specifics include:

- In 2006, 34.4% of connected public library branches have connection speeds of 769kbps-1.5mbps compared to 27.4% in 2004.
- In 2006, 28.9% have connection speeds of greater than 1.5mbps compared to 20.3% in 2004.
- Bandwidth continues to increase, with 63.3% of public library branches having connection speeds of greater than 769kbps in 2006 compared to 47.4% in 2004.

[11] Bertot, J. C., McClure, C. R., & Jaeger, P. T. (2005). *Public libraries and the Internet 2004: Survey results and findings*. Tallahassee, FL: Information Institute. Available: http://www.ii.fsu.edu/plinternet. Pg. 8.

Indeed, the study team now believes that "good enough" connectivity should not be confused with sufficient and quality connectivity. Earlier in this report the study team noted that the quality and sufficiency of connectivity was dependent on a broad range of factors including the nature of the library's information technology infrastructure, the number of workstations and wireless access points off the main connection, and the applications and types of services provided by the library or used by the patron (to name but some of the factors).

The study team arbitrarily uses 769kbps as "high speed" and computes the number of libraries that had 769kbps or greater connection speeds. But is 769kbps or greater really high speed, sufficient, and quality connectivity in a public access computing environment? While focusing on a specific number (whether approximate or arbitrary) is necessary for survey research, employing a specific number to indicate sufficient connectivity is not sufficient to truly gauge the quality and sufficiency of many public libraries' public access connectivity. In short, given the demands now on public libraries for a range of networked services (uploading content, video, music downloads, e-government, etc.), many public libraries may incorrectly believe they have "good enough" connectivity—based on what was sufficient even just a few years ago—when in fact they may have neither sufficient nor quality connectivity. Nonetheless, little progress has been made between 2004 and 2006 in determining sufficient and quality connectivity for public access computing.

It is in this context that issues regarding quality public access computing and sufficient connectivity speeds to Internet access reside. Research questions to explore include:

- Is it possible to define quality public access computing and Internet access in a public library context?
- If so, what are the attributes included in the definition?
- Can these attributes be operationalized and measured?
- Assuming measurable results, what ways can the library, policy, research, and other interested communities employ to impact public library movement towards quality public access computing and Internet access?
- Should there be "standards" for sufficient connectivity and quality public access computing in public libraries?

These questions are a beginning point to a larger dialogue that needs to occur in the research, practitioner, and policy making communities. Public libraries are indeed connected to the Internet and do provide public access services and resources. It is time to move beyond connectivity type and speed questions and consider issues of adequacy, quality, and the range of networked services that should be available to the public from public libraries.

### *Wireless Connectivity*

In 2004, 17.9% of public library branches offered wireless Internet access and in 2006 that number increased to 36.7%. This increase is significant. First, it signals a possible change in why people come to the library. Since users must have laptops that can access a wireless network, their choice for coming to the public library for connectivity may indicate that their primary reason to come to the library is to have public access computing and not to use more

traditional library services. Increased growth in wireless connectivity (and use) may signal the need for significant improvements in the library's overall information technology infrastructure.

In addition, one can speculate that this increase in wireless connectivity occurred in many instances without significant improvements in the library's basic connectivity from its provider – thus, as suggested above, degrading overall quality and sufficiency of the library's connectivity. Or, if libraries augmented their bandwidth to accommodate the wireless service, libraries incurred additional costs to provide the service – at a time when library budgets largely stayed the same from previous years (thus, in effect, a cut due to personnel costs and inflation).

Finally, in the case site visits, librarians reported an interesting phenomenon that "patrons" came to the library's parking lot or in close proximity to the library in order to access the free wireless connection being offered at that library. They did not come into the library itself, they did not come to check out a book or use a library computer. Rather, they simply came close enough to the library to access the wireless network. Implications of this new "service" being provided to library "users" are not well understood, except possibly the increased stress on the library's technology infrastructure, but such "library use" is likely to increase.

### *Training*

The 2004 study asked: "Given the limited funding that is available to many public libraries, what priority should such [information technology] training activities receive?"[12] In 2004, 31% of library systems reported that they were unable to provide information technology training to patrons. In 2006, that number had dropped to 21%, suggesting that the amount of training in information technology had increased significantly during this time period.

In this two-year time period, libraries appear to have allocated more resources to support patron training in the use of information technology. Thus, one might also ask now in 2006, from where did those additional resources come to support training? Or were resources reallocated from other existing library services? The impacts of this additional support for training, however, raise a range of interesting issues such as the degree to which the training resulted from increased demands on the library for such training, if such additional training results in increased use of library public access computing, and is the library filling a void in community services by providing such services?

### *Public Library Public Access Computing as Enabling the Digital Revolution*

The 2004 report demonstrated that public libraries served as critical community-based access points to a wide range of digital content. The 2006 study reinforced and expanded on this vital role of public libraries to their communities. Indeed, it is possible to assert that public libraries serve as both the source of first resort as well as the source of last resort (safety net) for information. In response to the qualitative survey question, nearly three-quarters of libraries indicated that the most important social roles of the Internet access provided by public libraries

[12] Bertot, J. C., McClure, C. R., & Jaeger, P. T. (2005). *Public libraries and the Internet 2004: Survey results and findings*. Tallahassee, FL: Information Institute. Available: http://www.ii.fsu.edu/plinternet. Pg. 9.

remain access for those who would not otherwise have it and help for who need assistance with the Internet.

Qualitative data that describe public library services in the gulf coast states during the 2005 hurricane season provides strong evidence that the public library was not only a first choice, but often times the best source for a range of e-government information and services. Further, additional research on this topic suggests that federal, state, and local governments place significant demands on public libraries to provide a range of e-government services and support that go well beyond providing public access computers.[13] Further, it is evident that governments provide minimal to no support to public libraries in meeting these demands. There is a need for additional research on the role of public libraries in e-government and national disasters.

*Internet Access from the State Perspective*

Comparing some of the findings from the state data between the 2004 and 2006 studies produces some interesting results. Some of the more interesting points are the continuities between the 2004 and 2006 results.

Most states had fairly similar, if not identical, percentages of library outlets offering public Internet access between 2004 and 2006. For the most part, changes were increases in the percentage of library outlets offering patron access. An exception, however, were the library outlets of Washington DC, where the percentage of outlets offering patron access declined steeply.

The average number of hours open per week in 2004 (44.5) and in 2006 (44.8) were very similar, as were the percentages of library outlets reporting increases in hours per week, decreases in hours per week, and no changes in hours per week. Data across the states indicate that physical space is the primary reason for the inability of libraries to add workstations.

In terms of overall operating budgets, two of the states with highest percentages of library systems with increases in total budget—Delaware and Rhode Island—were among the top states in 2006. On the other had, Ohio was one of the top three in terms of highest percentages of library systems with decreases in budgets in both 2004 and 2006.

There is also consistency in the findings related to upgrades and replacement schedules. In both 2004 and 2006, Delaware and Rhode Island were the states that had the highest percentage of libraries that are able to follow their replacement and upgrade schedules, while North Carolina was one of the states with the highest percentage of libraries not able to follow their replacement and upgrade schedules in both 2004 and 2006.

However, there were some clear areas of difference between 2004 an 2006, as well. For example, the percentage of library outlets with wireless access was an area of significant change among the states. In many states the increases in wireless access were quite large. Most of

[13] Bertot, J. C., Jaeger, P. T., Langa, L. A., & McClure, C. R. (2006). Public access computing and Internet access in public libraries: The role of public libraries in e-government and emergency situations. *First Monday, 11*(9). Available: http://www.firstmonday.org.

leaders in percentage of library outlets offering wireless access changed in the period between the studies, with the exceptions of Kentucky and Virginia. West Virginia was also a consistent, being among the states with highest percentage of library outlets with no plans to add wireless access in both 2004 and 2006. The specific reasons for these differences is unclear, and may reflect budgetary, staffing, and various issues.

These similarities and differences among the states indicate that the evolution of public access to the Internet in public libraries is not necessarily an evenly distributed phenomenon, as some states appear to be consistent leaders in some areas and other states appear to consistently trail in others. While the national picture is one primarily of continued progress in the availability and quality of Internet access available to library patrons, the progress is not evenly distributed among the states.

### *Federal Information Policy*

The 2004 and 2006 studies collected information on E-rate as well as views on other information policy issues that affect public access computing and technology deployment. The 2004 study concluded:

> While the public library community has adopted more and greater networked technologies, it has yet to re-think the federal policy framework that supports libraries. Instead, with policy initiatives from (among others) CIPA, the Telecommunications Act of 1996, the E-Government Act of 2002, and the USA PATRIOT Act, a range of piecemeal policies have placed public libraries in a reactive rather than proactive position. For libraries to better advocate for their needs and the needs of their patrons, they must move from a reactive to a proactive stance in addressing issues of national policy. Viewing these legislative changes holistically, the public library community will be better able to reassess its priorities and abilities in the new policy environment.[14]

The study team finds that libraries are largely still reactive to a policy environment that has a substantial ability to impact the role of public libraries in the networked environment. Since the last study, for example:

- Congress reauthorized, and the President signed, the USA PATRIOT Act, which still permits access to library patron and other records with little oversight;
- Congress is considering a new telecommunications act which may discontinue the E-rate, among other things;
- DOPA, the Deleting Online Predators Act (H.R. 5319), requires schools and libraries to block access to a broad selection of web content such as MySpace from schools or libraries, as well as access to a wide array of other content and technologies such as instant messaging, online email, wikis, and blogs.

There is a need for an overall policy strategy that secures the roles of public libraries in the networked environment, and removes barriers that impede their ability to serve as unfettered

[14] Bertot, J. C., McClure, C. R., & Jaeger, P. T. (2005). *Public libraries and the Internet 2004: Survey results and findings*. Tallahassee, FL: Information Institute. Available: http://www.ii.fsu.edu/plinternet. Pg. 13.

access to increasingly important digital content. If libraries remain passive, they will continue to face impediments to public access computing and Internet access.

## Public Libraries and E-government

As shown from the findings from the qualitative question on the national survey, public libraries are a key provider of e-government access and services in the United States. Government agencies rely on the fact that public libraries provide access, people with alternative means of access rely on the public library for assistance with e-government interaction, people with no other means of access rely on the public library for access to e-government, and entire communities rely on the public library for access to e-government for every day services, e.g., prescription drug sign-up and applications, a range of social services, and benefits services/information, and in times of crisis, e.g. the 2005 hurricane season in the gulf coast.[15] Ultimately, this provision of public access computing and Internet access makes public libraries one of the very few community-based public access points for e-government, but this effort needs recognition and support.

Public libraries serve three significant roles in meeting the e-government needs of their communities through their public access technology infrastructure: (1) individuals and communities in a crisis rely on public access computing and Internet access in public libraries as the first refuge for seeking assistance and beginning to rebuild; (2) individuals with no other means to access local, state, and federal e-government information and services rely on public access computing and Internet access in public libraries as the access point of last resort, the safety net for e-government access; and (3) individuals with access to computing technology and the Internet rely on the public library as a preferred place of access due to the capacity and support available.

These important roles remain unexplored and in wider considerations of the place of public libraries in a public policy and e-government context. Thus, a number of key research questions that require additional work include:

- What specific financial and personnel resources are the nation's public libraries currently allocating to emergency and e-government services?
- What is the extent to which federal, state, and local government agencies expect public libraries to provide access to e-government services?
- What are the specific roles and responsibilities that public libraries currently provide in support of various e-government programs and services?
- How can public libraries become better informed as to how best to provide these e-government services?
- How can public libraries better use their role in support of emergency services and e-government to advocate for increased funding?
- What is the current federal information policy related to the role of public libraries in emergencies and e-government and how should these policies evolve in the future?

[15] Bertot, J. C., Jaeger, P. T., Langa, L. A., & McClure, C. R. (2006). Public access computing and Internet access in public libraries: The role of public libraries in e-government and emergency situations. *First Monday, 11*(9). Available: http://www.firstmonday.org.

These are but a sample of possible areas for additional research. But overall, public libraries have responded to a number of unfunded government mandates to support public access computing for a range of e-government services.

## A Divide by Any Other Name

Though the discussion of the "digital divide" has become much less frequent, the state data from this study seem to indicate that there are gaps in levels of access between libraries in different states. While every state has very successful individual libraries in terms of providing quality Internet access and individual libraries that could be doing a better job, the state data indicate that library patrons in different parts of the country generally have different levels and quality of access available to them.

Higher percentages of library outlets in states that have more rural populations or more diffuse populations have lower connection speeds for their Internet access, have fewer average workstations, have lower levels of wireless access, and are more likely to connect to the Internet using an Internet Service Provider. Together, these characteristics indicate that residents of more rural, less populous states generally may not be able to receive the same kinds of Internet access as residents of more densely populated states.

Gaps in access are also evident between different regions of the country. For example, the highest percentages of library systems with increases in total operating budgets were concentrated in states in the Northeast, while the highest percentages of library systems relying on E-rate funding were concentrated in the Midwest and the Southeast.

Similarly, the leading states in adoption of wireless technology are concentrated in the Northeast and mid-Atlantic, while the libraries with the lowest levels of wireless were located in the Southeast. Southern states, particularly Arkansas, Louisiana, and Mississippi, also had the highest percentages of libraries not offering any Internet training to patrons. In contrast, libraries in the Northeast and mid-Atlantic had the highest percentages of libraries planning to add more Internet workstations. It is important to note with data from the Gulf States that the effects of Katrina may impact the results reported.

While the experience of individual patrons in particular libraries will vary widely in terms of whether the access available is sufficient to meet their information needs, the fact that the state data indicates a general divergence in the levels and quality of access between some states and regions of the country is worthy of note. An important area of subsequent research will be to investigate these differences, determine the reasons for them, and develope strategies to alleviate these apparent gaps in access.

## Demands for Enhanced and Expanded Networked Services

Given the widespread connectivity now provided from most public libraries, there continue to be increased demands for more and better networked services. These demands come from governments that expect public libraries to support a range of e-government services, from residents who want to use free wireless connectivity from the public library, and patrons that

need to download music or view streaming videos (to name but a few). Simply providing more or better connectivity will not, in and of itself, address all of these diverse service needs.

For example, in the Fall and Winter of 2005-2006 many public libraries provided assistance to seniors on selecting and applying for the part D Medicaid drug prescription plan. Many seniors did not know how to use or access the Internet; many were not familiar with interactive forms and applications; and librarians reported that many did not understand the particulars of the plan and application process. In short, public librarian support for this service went well beyond provision of Internet connectivity. Rather, the support services required significant and serious personal training and knowledge. The same conclusions are true with librarian services in the gulf coast states to support FEMA forms and related services during the 2005 hurricane season.

Increasingly, public access computing support will require additional public librarian knowledge, resources, and services. Examples of these services from the Medicaid prescription drug plan and the 2005 hurricane season are clear indications that public access computing will lead to increased demands for enhanced and expanded services. The degree to which public libraries can provide such enhanced networked services and maintain the traditional services is unclear. Without better local public library resource support it is unlikely that both enhanced and expanded public access computer services and traditional services can continue.

**Increased Complexity of the Networked Environment**

The networked environment continues to increase in scope, service and resource possibilities and capabilities, and complexity:

- The networked environment is such that there are multiple uses of bandwidth – public Internet access, staff access, wireless access, integrated library system (ILS) access, etc.
- Public access computers can provide access to the Internet, while some are only for online catalog (OPAC) use, and some are shared by staff (i.e., reference) and patrons.
- Licensed resources might be made available by the library itself – but it is equally likely that a library provides access to resources licensed by a regional consortium or state library agency.
- We are now in the Web 2.0 environment, which is an interactive Web that allows for content uploading by users (e.g., blogs, YouTube.com, MySpace.com, gaming).
- Streaming content, not text, is increasingly the norm.
- There are portable devices which allow for text, video, and voice messaging.
- Increasingly, users desire and prefer wireless services.

It is in this context that public libraries offer their public access computing services and resources.

This is the now the environment in which libraries provide public access to networked services and resources. It is an enabling environment that puts users fully in the content seat – from creation to design to organization to access to consumption. And users have choices, of which the public library is only one, regarding the information they choose to access. It is an

environment of competition, advanced applications, bandwidth intensity, and high quality computers necessary to access the graphically intense content.

The impacts on libraries of this new and substantially more complex environment are potentially significant, and effect library service and resource provision, staff skills, training requirements, and public access computing and Internet access requirements. As user expectations rise, combined with the provision of high quality services by other providers, libraries are in a competitive and service/resource rich information environment. Providing "bare minimum" public access computing and Internet access can have two detrimental effects: 1) relegate libraries to places of last resort, and 2) further digitally divide those who only have PAC and Internet access through their public libraries.

## Changing Priorities

The 2006 study may mark an important point in the development of public access computing in public libraries. Future key issues are likely to revolve around:

- Increasing the quality and sufficiency of connectivity rather than having some kind of connectivity that might be perceived as good enough.
- Developing new strategies to manage expanded and enhanced public access computing services.
- Managing the regular and ongoing upgrades of the public library's information technology infrastructure.
- Marketing networked programs and implementing local advocacy strategies that better demonstrate the role of public libraries in providing public access computing.
- Grappling with new expectations of public libraries, such as provider of e-government access and community lifeline in times of disasters.
- Obtaining technically savvy and service oriented librarians who excel in both the traditional and networked environment.
- Assessing, understanding, and incorporating new networked and interactive technologies into ongoing library services.

How public libraries continue to change and make the transition into a complex political, electronic, and service environment will have considerable impact on their long-term viability in tomorrow's society.

Planning to become a successfully networked public library, as shown earlier in this report, is no small task. But leadership, planning, working the political environment, having a stable and adequate funding stream, and employing high quality technical literate staff are essential. The public access computing services provided by the nation's public libraries are now a core service that will likely only expand over time. How that expansion and the degree to which libraries become successfully networked are key topics to monitor in the years ahead

## Implications for Future Studies

As the complexity of the networked environment impacts public library services, roles, and demands on librarians, any assessment of public library public access computing and Internet access must also account for the increased complexity of the actual environment. Thus, another major impact of the complexity of the networked environment is the ability of studies such as these to adequately measure library connectivity, public access computing, the range and type of networked services provided, and the depth and extent of the library's information technology infrastructure. The increased complexity is replete with measurement challenges such as:

- Determining actual library bandwidth. Increasingly, libraries have multiple lines/services in operation within the library (e.g., for the ILS, public Internet access, wireless access). Moreover, bandwidth within a library facility may vary (wired versus wireless) and bandwidth between buildings (system versus branches) may vary. Capturing bandwidth accurately, therefore, is a substantial challenge.
- Capturing the full bandwidth picture. Should a library subscribe to DLS, for example, download speeds are greater than upload speeds. Thus, it is important to know the full picture of connectivity.
- Determining adequacy of bandwidth. Given the bandwidth picture, bottlenecks in throughput may exist in any number of places. Thus, determining adequate and quality bandwidth benchmarks may prove elusive.
- Access to services. It may be the case that libraries would like to upgrade their connectivity speeds (or other aspects), but simply do not have access to appropriate telecommunications services. For example, a library may only be able to subscribe to DSL services. Or, perhaps there is only one provider in the area which charges substantial rates for broadband capacity.
- Nature of networked services. The type, scope, and extent of networked services that libraries now provide and are likely to provide in the future are increasingly complex. Identifying these services, understanding impacts from the services on library management and users, and determining the impacts on the library's information technology infrastructure will only become more complex.
- The local context. Time and again, the qualitative data demonstrated that there were a number of local situational factors that impact a public library’s public access computing and Internet access suite of services/resources. National surveys tend to average out these local factors due to their need to capture data across a large number of libraries.

All of these factors, and more left unsaid, point to challenges in describing and measuring the public library networked environment. And yet, it is essential to capture the current state of public library network service provision as well as explore how libraries are meeting tomorrow’s needs.

# V. DATA ANALYSIS AND MAJOR FINDINGS

Looking across all the data collection efforts, the below are the key findings of the study

## Quantitative Data

Major findings from the quantitative data include:

1. In 2006, 98.9% of public library branches are connected to the Internet. Considering the margin of error, virtually every public library outlet in the United States has access to the Internet.
2. With 98.4% of public library outlets offering public Internet access, virtually all public library outlets in the United States not only have Internet access, but also allow public use of this access.
3. 100% of high poverty libraries are connected to the Internet and offer public Internet access.
4. Most library outlets now have either 769kbps-1.5mbps (34.4%) or greater than 1.5mbps (28.9%). In both of these levels of connection speed, there has been a significant increase from 2004, with the categories having been at 27.4% and 20.3%, respectively.
5. The average number of hours open per public library branch is 44.8. This number has increased slightly since 2004.
6. The number of public library outlets offering wireless access has roughly doubled from 17.9% to 36.7% in the two years from 2004 to 2006. Furthermore, 23.1% of outlets that do not currently have it plan to add wireless access in the next year. If libraries follow through with their plans to add wireless access, 61.0% of public library outlets in the U.S. will have it within a year.
7. The overall average number of public access Internet workstations in each public library branch is 10.7.
8. One-quarter of public library outlets have 3 or fewer workstations, two-quarters of public library outlets have 6 or fewer workstations, and three-quarters of public library outlets have 12 or fewer workstations.
9. In the next two years, 16.6% of outlets are planning to add more workstations, while a further 28.6% of outlets are considering doing so.
10. In the next two years, 72.8% of outlets are planning to replace some workstations. Of these libraries, 35.3% have plans to replace a definite number of workstations, with an average replacement of 7.2 workstations.
11. Space limitations (79.9%) and cost factors (72.6%) were by far the most common factors that influence decisions to add or upgrade public access Internet workstations.
12. In the majority of outlets (53.5%), the connection speed is adequate to meet patron needs at all times, while the connection speed is sufficient to meet patron needs some of the time in a further 29.4% of outlets. In 16.1% of outlets, the connection speed is inadequate to meet patron needs at all times.
13. The total operating budget of 45.1% of public library systems has increased since last year and stayed the same for 36.6% of systems, while decreasing for 6.8%.
14. The Internet-related technology budget of 18.6% of public library systems has increased since last year and stayed the same for 64.2% of systems, while decreasing for 5.0%.

15. Only 4.4% of public library systems receive E-rate discounts for internal connection costs, 22.4% receive E-rate discounts for Internet connectivity, and 39.6% receive E-rate discounts for telecommunications services.
16. For the majority of libraries that do not receive E-rate discounts, the most common reasons are the application process is too complicated (35.3%) and the discount is too low to invest the time in the application process (31.7%).
17. The most frequently offered public access Internet services by public library systems are licensed databases (82.8%), homework content (60.9%), digital reference or virtual reference services (55.1%), and e-books (37.9%).
18. The largest impacts of the public access Internet services offered by public library systems are providing education resources for K-12 students (63.6%), services for job seekers (46.1%), computer and Internet training skills (38.0%), and access to and assistance with local, state, and federal government electronic services (21.4%).
19. The types of information technology training offered by public library systems for patrons include providing information literacy skills (51.6%), providing general technology skills (42.7%), helping students with school assignment and work (41.9%), and offering technology-training opportunities to those who would not otherwise have any (41.2%).

The overall findings demonstrate that public library branches generally continue to expand the public access computing and Internet services that they make available to patrons. Virtually all public library branches are connected to and offer public access to the Internet. Connection speeds in library branches also continue to increase significantly.

While some library branches are now encountering physical or financial limitations on how much access they can provide, demand for access from patrons remains enormous. The addition and/or replacement of older workstations is a high priority at many library branches. Of particular interest is the fact that many libraries are using wireless access as a means to increase access, as wireless access overcomes space limitations within the library building.

## Qualitative Data

The open-ended survey question was: "In the space below, **please identify the single most important impact on the community** as a result of the library branch's public access to the Internet." All responding branches had the opportunity to answer the question, and respondents were able to write as long a response as they desired to the question. A total of 3,887 libraries answered the qualitative question. Answers ranged from a length of fewer than five words to more than 100 words.

The five most frequently cited impacts in the responses were:

1. A total of 71.7% of responses discussed issues of access for patrons who would not otherwise have access.
2. Many libraries (23.4%) also focused on educational purposes. Internet access was most often tied to support for local K-12 students. In some communities, the library provides Internet access that the schools lack entirely or have insufficient amounts of.

3. The responses of 19.4% of libraries related to the role of the Internet in supporting the place of the library in the community—bringing people into the library who would not otherwise be there and encouraging people to spend more time in the library.
4. Commerce-related activities, such as support for local businesse, plays a number of different important roles for library patrons, leading 15.5% of libraries to rate it as a primary impact of Internet access.
5. Communication was considered an important impact by 15.5% of public libraries and were viewed as particularly important for people who otherwise might not have access to them.

## Site visits

As noted above, the 2006 study included site visits to public libraries in five states to better describe those libraries that are successfully networked and successfully use information technology in their libraries. The report identifies specific factors that tend to be present in these libraries, discusses a number of issues related to being successfully networked public libraries, and offers a discussion related to how public libraries might become successfully networked in the future.

## Quality of survey data

Figure 1 (below) shows the response rate distribution of the survey. As the figure shows, the overall distribution of survey is representative of the population.

## Figure 1: Public Library Outlets by Metropolitan Status and Poverty.

| | Poverty Level | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Low** (Less than 20%) | | **Medium** (20%-40%) | | **High** (More than 40%) | | **Overall** | |
| | Responding Facilities As a **Proportion of All Respondents** | Responding Facilities As a **Proportion of National Population** | Responding Facilities As a **Proportion of All Respondents** | Responding Facilities As a **Proportion of National Population** | Responding Facilities As a **Proportion of All Respondents** | Responding Facilities As a **Proportion of National Population** | Responding Facilities As a **Proportion of All Respondents** | Responding Facilities As a **Proportion of National Population** |
| ***Metropolitan Status*** | | | | | | | | |
| Urban | 7.8% (378 of 4,818) | 10.0% (1,650 of 16,457) | 4.9% (234 of4,818) | 6.6% (1,092 of 16,457) | 0.6% (31 of 4,818) | 0.9% (148 of 16,457) | 13.3% (643 of 4,818) | 17.6% (2,890 of 16,457) |
| Suburban | 29.8% (1,434 of 4,818) | 30.2% (4,967 of 16,457) | 1.5% (71 of 4,818) | 2.1% (342 of 16,457) | 0.4% (2 of 4,818) | 0.4% (7 of 16,457) | 31.3% (1,507 of 4,818) | 32.3% (5,316 of 16,457) |
| Rural | 48.2% (2,320 of4,818) | 43.6% (7,182 of 16,457) | 4.9% (234 of 4,818) | 6.3% (1,040 of 16,457) | 0.2% (9 of 4,818) | 0.2% (29 of 16,457) | 55.4% (2,668 of 4,818) | 50.1% (8,251 of 16,457) |
| Overall | 85.8% (4,132 of 4,818) | 83.8% (13,799 of 16,457) | 13.4% (644 of 4,818) | 15.0% (2,474 of 16,457) | 0.9% (42 of 4,818) | 1.1% (184 of 16,457) | **100.0%** (4,818 of 4,818) | **100.0%** (16,457 of 16,457) |

*Based on geocoding of 16,457 outlets.*
Overall Response Rate = 69.0%

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

## VI. NATIONAL BRANCH LEVEL DATA (OUTLET DATA)

This section details the study findings for national branch level data (outlet data) by metropolitan status and poverty. A brief discussion of the findings follows each table.

**Figure 2: Public Library Outlets Connected to the Internet by Metropolitan Status and Poverty.**

| | Poverty Level | | | |
|---|---|---|---|---|
| **Metropolitan Status** | Low | Medium | High | Overall |
| Urban | 98.4%<br>±1.3%<br>(n=1,624) | 97.9%<br>±1.5%<br>(n=1,069) | 100.0%<br>±0.0%<br>(n=148) | 98.3%<br>±1.3%<br>(n=2,841) |
| Suburban | 99.5%<br>±0.7%<br>(n=4,943) | 100.0%<br>±0.0%<br>(n=342) | 100.0%<br>±0.0%<br>(n=7) | 99.5%<br>±0.7%<br>(n=5,292) |
| Rural | 98.9%<br>±1.0%<br>(n=7,105) | 97.3%<br>±1.6%<br>(n=1,012) | 100.0%<br>±0.0%<br>(n=29) | 98.7%<br>±1.1%<br>(n=8,147) |
| Overall | 99.1%<br>±1.0%<br>(n=13,672) | 97.9%<br>±1.4%<br>(n=2,423) | 100.0%<br>±0.0%<br>(n=184) | 98.9%<br>±1.0%<br>(n=16,279) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

The connectivity rate of public libraries to the Internet, as evidenced in Figure 2 (above), seems to have reached a plateau over the past several years. In 2002, the connectivity rate was 98.7%, while the connectivity rate in 2004 was 99.6%. In 2006, the rate is 98.9%. All three of these numbers are within the margin of error of one another, indicating a great deal of consistency in the level of Internet connectivity in public library outlets. Considering the margin of error, virtually every public library outlet in the United States has access to the Internet.

As was the case in 2004, 100% of high poverty libraries are connected to the Internet. Medium poverty libraries, at 97.9%, have the lowest levels of connectivity, which was also the case in 2004.

**Figure 3: Connected Public Library Outlets that Provide Public Access to the Internet by Metropolitan Status and Poverty.**

| | Poverty Level | | | |
|---|---|---|---|---|
| **Metropolitan Status** | Low | Medium | High | Overall |
| Urban | 97.6%<br>±1.5%<br>(n=1,611) | 97.4%<br>±1.6%<br>(n=1,064) | 100.0%<br>±0.0%<br>(n=148) | 97.7%<br>±1.5%<br>(n=2,823) |
| Suburban | 99.0%<br>±1.0%<br>(n=4,915) | 100.0%<br>±0.0%<br>(n=342) | 100.0%<br>±0.0%<br>(n=7) | 99.0%<br>±1.0%<br>(n=5,264) |
| Rural | 98.5%<br>±1.2%<br>(n=7,077) | 96.8%<br>±1.8%<br>(n=1,006) | 100.0%<br>±0.0%<br>(n=29) | 98.3%<br>±1.3%<br>(n=8,113) |
| Overall | 98.6%<br>±1.2%<br>(n=13,604) | 97.5%<br>±1.6%<br>(n=2,412) | 100.0%<br>±0.0%<br>(n=184) | 98.4%<br>±1.2%<br>(n=16,200) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

The overwhelming majority of public library outlets connected to the Internet provide public access to the Internet, as shown in Figure 3 (above). With 98.4% of public library outlets

offering public Internet access, virtually all public library outlets in the United States not only have Internet access, but also allow public use of this access. Accounting for the margin of error, this category also seems to have reached a plateau; in 2004, 98.9% of public library outlets offered public access.

By and large, public access is well distributed. High poverty outlets universally offer public access. Medium poverty rural libraries, at 96.8%, offer the lowest levels of public access.

**Figure 4: Average Number of Hours Open per Outlet by Metropolitan Status and Poverty.**

| | Poverty Level | | | |
|---|---|---|---|---|
| **Metropolitan Status** | Low | Medium | High | Overall |
| Urban | 51.6 (n=1,624) | 52.0 (n=1,078) | 57.4 (n=148) | 52.1 (n=2,850) |
| Suburban | 50.9 (n=4,940) | 46.5 (n=342) | 32.5 (n=7) | 50.6 (n=5,289) |
| Rural | 39.0 (n=7,142) | 36.0 (n=1,028) | 42.0 (n=29) | 38.7 (n=8,199) |
| Overall | 44.8 (n=13,706) | 44.5 (n=2,448) | 54.0 (n=184) | 44.8 (n=16,338) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

The average number of hours that public library outlets are open has increased slightly since 2004. In Figure 4 (above), the average number of hours open per outlet is 44.8. In 2004, that same number was 44.5 hours. High poverty outlets have the highest average hours open (54.0), while rural outlets have the lowest average (38.7).

**Figure 5: Public Library Outlet Change in Hours Open by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Hours Open** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Hours increased since last fiscal year | 12.0% ±3.3% (n=346) | 8.4% ±2.8% (n=449) | 9.6% ±2.9% (n=789) | 9.6% ±2.9% (n=1,321) | 10.2% ±3.0% (n=253) | 5.3% ±2.2% (n=10) | 9.6% ±3.0% (n=1,584) |
| Hours decreased since last fiscal year | 11.7% ±3.2% (n=339) | 3.3% ±1.8% (n=176) | 3.4% ±1.8% (n=278) | 4.5% ±2.1% (n=621) | 6.4% ±2.5% (n=158) | 7.8% ±2.7% (n=14) | 4.8% ±2.1% (n=793) |
| Hours stayed the same as last fiscal year | 75.5% ±4.3% (n=2,183) | 87.8% ±3.3% (n=4,667) | 86.5% ±3.4% (n=7,141) | 85.4% ±3.5% (n=11,782) | 82.8% ±3.8% (n=2,049) | 87.0% ±3.4% (n=160) | 85.0% ±3.6% (n=13,992) |
| Number of hours increased | 8.9 (n=346) | 5.4 (n=425) | 4.9 (n=733) | 5.5 (n=1,241) | 8.5 (n=253) | 2.3 (n=10) | 6.0 (n=1,504) |
| Number of hours decreased | 7.6 (n=321) | 6.2 (n=155) | 6.1 (n=250) | 6.7 (n=563) | 7.5 (n=149) | 4.0 (n=14) | 6.8 (n=726) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 5 (above) details the consistency of the hours that public library outlets are open. For 85.0% of libraries, their hours remained the same from the previous year. In 9.6% of outlets, the hours open increased; the average increase was 6.0 hours over the previous year. For the remaining 4.8% of libraries, the hours open decreased from the previous year, with an average

decrease of 6.8 hours. Urban outlets were both most likely to both have an increase and decrease in hours open.

**Figure 6: Public Access Wireless Internet Connectivity Availability in Public Library Outlets by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Provision of Public Access Wireless Internet Services** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Currently available | 42.9% ± 4.9% (n=1,211) | 42.5% ± 4.9% (n=2,240) | 30.7% ± 4.6% (n=2,492) | 38.0% ± 4.8% (n=5,165) | 28.1% ±4.5% (n=679) | 53.8% ± 5.0% (n=99) | 36.7% ± 4.8% (n=5,943) |
| Not currently available and no plans to make it available within the next year | 23.1% ± 4.2% (n=651) | 29.7% ± 4.6% (n=1,562) | 49.2% ± 5.0% (n=3,988) | 37.4% ± 4.8% (n=5,091) | 44.4% ± 4.9% (n=1,072) | 21.0% ± 4.1% (n=39) | 38.3% ± 4.9% (n=6,201) |
| Not currently available, but there are plans to make it available within the next year | 30.6% ± 4.6% (n=864) | 26.0% ± 4.4% (n=1,369) | 18.6% ± 3.9% (n=1,509) | 22.5% ± 4.2% (n=3,063) | 26.2% ± 4.4% (n=633) | 25.3% ± 4.4% (n=46) | 23.1% ± 4.2% (n=3,742) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

In 2004, 17.9% of public library outlets offered wireless access and a further 21.0% planned to make it available. Outlets in urban and high poverty areas were most likely to have wireless access. The majority of libraries (61.2%), however, neither had wireless access nor had plans to implement it in 2004.

As Figure 6 (above) demonstrates, the number of public library outlets offering wireless access has roughly doubled from 17.9% to 36.7% in two years. Furthermore, 23.1% of outlets that do not currently have it plan to add wireless access in the next year. Thus, if libraries follow through with their plans to add wireless access, 61.0% of public library outlets in the U.S. will have it within a year.

In 2006, wireless access was most likely to be available in urban, suburban, and high poverty outlets. Urban library outlets are also the most likely to have plans to add wireless access in the next year. The outlets that are least likely to have wireless access or a plan to add it are rural outlets and medium poverty outlets.

**Figure 7: Average Number of Public Library Outlet Graphical Public Access Internet Terminals by Metropolitan Status and Poverty.**

| | Poverty Level | | | |
|---|---|---|---|---|
| **Metropolitan Status** | Low | Medium | High | Overall |
| Urban | 14.7 | 20.9 | 30.7 | 17.9 |
| Suburban | 12.8 | 9.7 | 5.0 | 12.6 |
| Rural | 7.1 | 6.7 | 8.1 | 7.1 |
| Overall | 10.0 | 13.3 | 26.0 | 10.7 |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 7 (above) demonstrates that the overall average of public access Internet workstations in each public library outlet is 10.7. Urban outlets offer the highest number of workstations, with high poverty urban outlets offering the highest average number of

workstations at 30.7. The lowest number of workstations is generally in rural libraries, though high poverty suburban libraries offer the lowest average number of workstations at 5.0. The average number of public access Internet workstations has remained relatively steady over the past several years. In 2002, the average was 10.8, while the average in 2004 was 10.4.

**Figure 8: Average Age of Graphical Public Access Workstations by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Average Age** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Less than 1 years old | 10.4 | 5.8 | 3.2 | 4.9 | 6.5 | 17.4 | 5.3 |
| 1-2 years old | 9.0 | 7.9 | 3.7 | 5.8 | 6.5 | 13.4 | 6.1 |
| 2-3 years old | 13.1 | 7.3 | 3.8 | 5.7 | 10.6 | 8.2 | 6.4 |
| Greater than 3 years old | 10.0 | 6.0 | 4.3 | 5.3 | 7.0 | 10.0 | 5.6 |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 8 (above) shows the average age of the public access workstations in public library outlets. Overall, the age range of 2-3 years old includes the highest number of workstations, while less than 1 year old contains the lowest number of workstations. High poverty libraries have the greatest number of workstations that are less than 1 year old and 1-2 years old. Urban libraries have the greatest number of workstations 2-3 years old. Urban libraries and high poverty libraries share the highest number of workstations greater than 3 years old.

**Figure 9: Frequency Analysis of Public Library Outlet Number of Graphical Public Access Workstations.**

| Quartile | Number of Graphical Workstations Per Outlet |
|---|---|
| 1 (25%) | 3 |
| 2 (50%) | 6 |
| 3 (75%) | 12 |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 9 (above) provides a breakdown of the number of public access Internet workstations by quartile. One-quarter of public library outlets have 3 or fewer workstations, two-quarters of public library outlets have 6 or fewer workstations, and three-quarters of public library outlets have 12 or fewer workstations. These numbers differ slightly from those in the 2004 study. In 2004, the first quartile had 4 or fewer workstations, while the third quartile had 11 or fewer workstations.

**Figure 10: Public Library Outlet Public Access Workstations Upgrade Schedule by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Workstation Upgrade Schedule** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| The library plans to add workstations within the next two years | 16.5% ±3.7% (n=455) | 21.0% ±4.1% (n=1,087) | 13.7% ±3.4% (n=1,101) | 16.5% ±3.7% (n=2,209) | 16.5% ±3.7% (n=392) | 22.9% ±4.2% (n=42) | 16.6% ±3.7% (n=2,644) |
| The library is considering adding more workstations within the next two years, but does not know how many at this time | 31.9% ±4.7% (n=879) | 31.6% ±4.7% (n=1,633) | 25.6% ±4.4% (n=2,047) | 27.9% ±4.5% (n=3,733) | 31.7% ±4.7% (n=751) | 40.7% ±4.9% (n=75) | 28.6% ±4.5% (n=4,559) |
| The library has no plans to add workstations within the next two years | 43.7% ±5.0% (n=1,203) | 39.9% ±4.9% (n=2,063) | 49.5% ±5.0% (n=3,965) | 45.3% ±5.0% (n=6,067) | 46.3% ±5.0% (n=1,098) | 36.4% ±4.8% (n=67) | 45.4% ±5.0% (n=7,231) |
| The library has plans to reduce the number of workstations to a total of workstations within the next two years | * | * | * | * | -- | -- | * |
| Weighted missing values, n=525 | | | | | | | |
| The average number of workstations that the library plans to add within the next two years | 14.2 (n=455) | 6.0 (n=1,087) | 3.9 (n=1,101) | 5.6 (n=2,209) | 10.0 (n=392) | 22.8 (n=42) | 6.6 (n=2,644) |
| A total of workstations are available after the library reduces a number of workstations within the next two years | 4.0 (n=4) | 6.0 (n=10) | 2.3 (n=12) | 4.0 (n=27) | -- | -- | 4.0 (n=27) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 10 (above) shows the status of upgrade schedules for public access Internet workstations in public library outlets. In the next two years, 16.6% of outlets are planning to add more workstations, while a further 28.6% of outlets are considering doing so. High poverty outlets are the most likely to be planning or considering adding workstations. Of those planning to add workstations, the average number that outlets are planning to add is 6.6. High poverty outlets have plans to add the highest average number (22.8).

Nearly half of public library outlets (45.4%) have no plans to add or remove workstations in the next two years. Rural outlets are most likely to be not planning to change the number of workstations.

**Figure 11: Public Library Outlet Public Access Workstations Replacement Schedule by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Workstation Replacement Schedule** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| The library plans to replace workstations within the next two years | 33.9% ±4.7% (n=858) | 38.3% ±4.9% (n=1,808) | 33.7% ±4.7% (n=2,400) | 35.1% ±4.8% (n=4,187) | 35.5% ±4.8% (n=802) | 41.0% ±4.9% (n=76) | 35.3% ±4.8% (n=5,065) |
| The library plans to replace some workstations within the next two years, but does not know how many at this time | 43.4% ±5.0% (n=1,097) | 36.9% ±4.8% (n=1,742) | 35.9% ±4.8% (n=2,552) | 37.0% ±4.8% (n=4,409) | 40.1% ±4.9% (n=906) | 41.6% ±4.9% (n=77) | 37.5% ±4.8% (n=5,391) |
| The library has no plans to replace workstations within the next two years | 22.7% ±4.2% (n=574) | 24.8% ±4.3% (n=1,171) | 30.4% ±4.6% (n=2,159) | 27.9% ±4.5% (n=3,322) | 24.3% ±4.3% (n=550) | 17.3% ±3.8% (n=32) | 27.2% ±4.5% (n=3,903) |
| Weighted missing values, n=2,098 | | | | | | | |
| The number of workstations that the library plans to replace within the next two years | 14.8 (n=858) | 7.6 (n=1,808) | 4.1 (n=2,400) | 6.5 (n=4,187) | 9.7 (n=802) | 19.4 (n=76) | 7.2 (n=5,065) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 11 (above) shows the status of replacement schedules for public access Internet workstations in public library outlets. In the next two years, 72.8% of outlets are planning to replace some workstations. Of these libraries, 35.3% have plans to replace a definite number of workstations, with an average replacement of 7.2 workstations. High poverty outlets have plans to replace the highest average number of workstations. 27.2% of outlets have no plans to replace workstations. Rural outlets are most likely to plan on making no replacements.

**Figure 12: Public Library's Ability to Follow Its Upgrade/Replacement Schedule for Public Access Workstations by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Ability of Library to Follow Its Schedule** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Yes | 64.2% ±4.8% (n=1,621) | 63.7% ±4.8% (n=3,001) | 43.9% ±5.0% (n=3,075) | 54.4% ±5.0% (n=6,441) | 50.8% ±5.0% (n=1,127) | 72.2% ±4.5% (n=128) | 54.1% ±5.0% (n=7,697) |
| No | 15.7% ±3.6% (n=397) | 8.2% ±2.8% (n=388) | 10.9% ±3.1% (n=764) | 10.3% ±3.1% (n=1,225) | 13.3% ±3.4% (n=295) | 16.1% ±3.7% (n=29) | 10.9% ±3.1% (n=1,548) |
| The library has no workstation replacement or addition schedule | 14.6% ±3.5% (n=369) | 22.6% ±4.2% (n=1,066) | 39.5% ±4.9% (n=2,761) | 29.4% ±4.6% (n=3,481) | 31.7% ±4.7% (n=704) | 6.3% ±2.4% (n=11) | 29.5% ±4.6% (n=4,196) |
| Not applicable | 5.4% ±2.3% (n=137) | 5.5% ±2.3% (n=259) | 5.7% ±2.3% (n=399) | 5.9% ±2.4% (n=693) | 4.2% ±2.0% (n=92) | 5.4% ±2.3% (n=10) | 5.6% ±2.3% (n=795) |
| Weighted missing values, n=2,223 | | | | | | | |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 12 (above) reveals the number of outlets that are able to follow upgrade and replacements schedules for public access Internet workstations. A majority of outlets (54.1%) are

able to follow their schedules, and 10.9% are not able to follow their schedules. Almost a third of outlets (29.5%) lack a schedule. High poverty outlets are most likely to be able to follow their schedules. Rural outlets are the most likely to not have a schedule.

**Figure 13: Factors Influence Upgrade Decision for Public Access Workstations by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Factors influencing Workstation Upgrade Decision** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Space limitations | 81.6% ±3.9% (n=2,095) | 78.9% ±4.1% (n=3,844) | 79.9% ±4.0% (n=5,833) | 79.6% ±4.0% (n=9,773) | 81.2% ±3.9% (n=1,846) | 82.7% ±3.8% (n=152) | 79.9% ±4.0% (n=11,772) |
| Cost factors | 71.2% ±4.5% (n=1,830) | 66.1% ±4.7% (n=3,220) | 77.5% ±4.2% (n=5,653) | 72.7% ±4.5% (n=8,927) | 73.2% ±4.4% (n=1,663) | 61.6% ±4.9% (n=113) | 72.6% ±4.5% (n=10,703) |
| Maintenance, upgrade, and general upkeep | 37.5% ±4.8% (n=963) | 33.7% ±4.7% (n=1,643) | 42.6% ±4.9% (n=3,108) | 38.5% ±4.9% (n=4,727) | 40.4% ±4.9% (n=918) | 37.2% ±4.9% (n=69) | 38.8% ±4.9% (n=5,714) |
| Staff time | 21.4% ±4.1% (n=549) | 21.3% ±4.1% (n=1,040) | 17.7% ±3.8% (n=1,293) | 19.1% ±3.9% (n=2,352) | 21.0% ±4.1% (n=477) | 28.9% ±4.6% (n=53) | 19.5% ±4.0% (n=2,882) |
| Inadequate bandwidth to support additional workstations | 10.8% ±3.1% (n=278) | 11.1% ±3.1% (n=540) | 6.5% ±2.5% (n=476) | 8.3% ±2.8% (n=1,014) | 11.5% ±3.2% (n=261) | 10.7% ±3.1% (n=20) | 8.8% ±2.8% (n=1,294) |
| The library is purchasing laptops for in-library patron use instead of desktops | 3.5% ±1.8% (n=89) | 3.1% ±1.7% (n=150) | 1.7% ±1.3% (n=127) | 2.6% ±1.6% (n=318) | 1.9% ±1.4% (n=42) | 2.6% ±1.6% (n=5) | 2.5% ±1.6% (n=365) |
| The library is not adding more workstations, but is providing (or about to provide) wireless access for patrons with laptops to help to meet public demand | 16.6% ±3.7% (n=427) | 21.2% ±4.1% (n=1,032) | 11.3% ±3.2% (n=826) | 16.1% ±3.7% (n=1,976) | 12.9% ±3.4% (n=293) | 8.7% ±2.8% (n=16) | 15.5% ±3.6% (n=2,285) |
| The current number of workstations meets the needs of our patrons | 13.5% ±3.4% (n=347) | 18.1% ±3.9% (n=882) | 24.9% ±4.3% (n=1,819) | 21.3% ±4.1% (n=2,611) | 17.8% ±3.8% (n=405) | 17.3% ±3.8% (n=32) | 20.7% ±4.1% (n=3,048) |
| Other | 7.3% ±2.6% (n=186) | 4.5% ±2.1% (n=220) | 3.4% ±1.8% (n=251) | 4.1% ±2.0% (n=505) | 5.9% ±2.4% (n=134) | 9.5% ±3.0% (n=18) | 4.5% ±2.1% (n=657) |

Will not total to 100%, as respondents could select more than one option.

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 13 (above) provides the factors that influence decisions to add or upgrade public access Internet workstations. Space limitations (79.9%) and cost factors (72.6%) were by far the most common factors. Space was most likely to be a factor in high poverty outlets, while cost was most likely to be a factor in rural outlets. The next most frequent factor—maintenance, upgrade, and general upkeep—was only selected by 38.8% of outlets. Only 20.7% of outlets stated that the current number of workstations was sufficient to meet patron needs.

**Figure 14: 2006 Public Library Outlet Maximum Speed of Public Access Internet Services by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Maximum Speed** | **Urban** | **Suburban** | **Rural** | **Low** | **Medium** | **High** | **Overall** |
| **Less than 56kbps** | * | * | 3.7% ±1.9% (n=275) | 2.0% ±1.4% (n=245) | 2.7% ±1.6% (n=61) | 2.6% ±1.6% (n=5) | 2.1% ±1.4% (n=311) |
| **56kbps - 128kbps** | 2.5% ±1.6% (n=67) | 5.4% ±2.3% (n=264) | 15.2% ±3.6% (n=1,132) | 9.9% ±3.0% (n=1,237) | 9.5% ±2.9% (n=216) | 5.3% ±2.2% (n=10) | 9.8% ±3.0% (n=1,463) |
| **129kbps - 256kbps** | 2.7% ±1.6% (n=72) | 6.8% ±2.5% (n=332) | 11.1% ±3.1% (n=829) | 8.5% ±2.8% (n=1,067) | 7.3% ±2.6% (n=166) | -- | 8.2% ±2.8% (n=1,233) |
| **257kbps - 768kbps** | 9.1% ±2.9% (n=241) | 10.4% ±3.1% (n=504) | 13.4% ±3.4% (n=1,002) | 12.5% ±3.3% (n=1,557) | 8.4% ±2.8% (n=190) | -- | 11.7% ±3.2% (n=1,747) |
| **769kbps - 1.5mbps** | 33.6% ±4.7% (n=889) | 40.0% ±4.9% (n=1,945) | 31.0% ±4.6% (n=2,310) | 34.3% ±4.8% (n=4,286) | 34.6% ±4.8% (n=788) | 38.1% ±4.9% (n=70) | 34.4% ±4.8% (n=5,144) |
| **Greater than 1.5mbps** | 49.4% ±5.0% (n=1,304) | 31.6% ±4.7% (n=1,533) | 19.9% ±4.0% (n=1,488) | 27.4% ±4.5% (n=3,423) | 35.5% ±4.8% (n=808) | 50.5% ±5.0% (n=93) | 28.9% ±4.5% (n=4,324) |
| **Don't Know** | 1.9% ±1.4% (n=50) | 5.4% ±2.3% (n=263) | 5.7% ±2.3% (n=427) | 5.5% ±2.3% (n=685) | 2.1% ±1.4% (n=48) | 3.5% ±1.8% (n=6) | 4.9% ±2.2% (n=739) |

Weighted missing values, n=1,497
**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

As Figure 14 (above) demonstrates, the connectivity speed in public library outlets is primarily now at higher connection speeds. Most library outlets now have either 769kbps-1.5mbps (34.4%) or greater than 1.5mbps (28.9%). This compares to 27.4% (769kbps-1.5mbps and 20.3% (greater than 1.5mbps), respectively, from 2004.

The lower categories of connection speed have either decreased or stayed about the same since 2004. High poverty outlets and urban outlets are most likely to have a connection speed 1.5mbps or greater, while rural outlets are the least likely to have such high end connection speeds.

Another trend is that more outlets were able to report their connection speeds. In the 2004 survey, 21.7% of outlets answered that they did not know the connection speed. In 2006, that percentage decreased to 4.9%. Not only are public library outlets providing higher end connection speed for Internet access, library staff are becoming more aware of the connection speeds available.

**Figure 15: Public Library Outlet Public Access Internet Connection Adequacy by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Adequacy of Public Access Internet Connection** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| The connection speed is insufficient to meet patron needs | 14.9% ±3.6% (n=383) | 15.5% ±3.6% (n=746) | 17.0% ±3.8% (n=1,228) | 15.2% ±3.6% (n=1,855) | 20.9% ±4.1% (n=473) | 15.6% ±3.6% (n=29) | 16.1% ±3.7% (n=2,357) |
| The connection speed is sufficient to meet patron needs at some times | 33.0% ±4.7% (n=848) | 31.3% ±4.6% (n=1,513) | 26.8% ±4.4% (n=1,939) | 29.5% ±4.6% (n=3,597) | 29.5% ±4.6% (n=666) | 20.3% ±4.0% (n=37) | 29.4% ±4.6% (n=4,301) |
| The connection speed is sufficient to meet patron needs at all times | 51.9% ±5.0% (n=1,333) | 51.5% ±5.0% (n=2,487) | 55.5% ±5.0% (n=4,011) | 54.2% ±5.0% (n=6,599) | 49.3% ±5.0% (n=1,114) | 64.0% ±4.8% (n=118) | 53.5% ±5.0% (n=7,831) |
| Don't know | * | 1.7% ±1.3% (n=83) | * | 1.1% ±1.0% (n=133) | * | -- | 1.0% ±1.0% (n=140) |

Weighted missing values, n=1,829
**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 15 (above) shows the adequacy of Internet connections in public library outlets. In the majority of outlets (53.5%), the connection speed is adequate to meet patron needs at all times, while the connection speed is sufficient to meet patron needs some of the time in a further 29.4% of outlets. In 16.1% of outlets, the connection speed is inadequate to meet patron needs at all times.

## VII. NATIONAL SYSTEM LEVEL DATA

This section details the study findings for national system level data by metropolitan status and poverty. A brief discussion of the findings follows each table.

**Figure 16: Public Library System Total Operating Budget Status by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Total Operating Budget Status** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Budget increased since last fiscal year | 48.1% ±5.0% (n=297) | 56.8% ±5.0% (n=1,558) | 39.1% ±4.9% (n=2,195) | 45.6% ±5.0% (n=3,662) | 39.7% ±4.9% (n=354) | 54.1% ±5.0% (n=34) | 45.1% ±5.0% (n=4,050) |
| Budget decreased since last fiscal year | 8.1% ±2.7% (n=50) | 5.4% ±2.3% (n=148) | 7.3% ±2.6% (n=412) | 6.6% ±2.5% (n=526) | 8.5% ±2.8% (n=76) | 11.2% ±3.2% (n=7) | 6.8% ±2.5% (n=609) |
| Budget stayed the same as last fiscal year | 31.0% ±4.6% (n=191) | 26.1% ±4.4% (n=716) | 42.3% ±4.9% (n=2,375) | 36.1% ±4.8% (n=2,897) | 41.6% ±4.9% (n=371) | 23.6% ±4.3% (n=15) | 36.6% ±4.8% (n=3,283) |
| Weighted Missing Responses: n=1,036 | | | | | | | |
| Average percentage increased | 6.6% (n=297) | 6.9% (n=1,558) | 25.5% (n=2,195) | 17.9% (n=3,662) | 8.4% (n=354) | 5.3% (n=34) | 17.0% (n=4,050) |
| Average percentage decreased | 9.6% (n=50) | 9.5% (n=148) | 9.9% (n=412) | 9.2% (n=526) | 12.3% (n=76) | 26.6% (n=7) | 9.8% (n=609) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

As Figure 16 (above) demonstrates, the total operating budget in 45.1% of public library systems increased since last year, while the budgets of 36.6% stayed the same from last year. Suburban library systems (56.8%) and high poverty library systems (54.1%) were the most likely to have an increase. For systems where there was an increase, the average increase was 17.0%.

Budgets were most likely to have remained the same in rural library systems (42.3%) and medium poverty systems (41.6%). Total operating budgets were most likely to have decreased in high poverty libraries (11.2%). For systems where there was a decrease, the average decrease was 9.8%.

**Figure 17: Public Library System Overall Internet Information Technology Budget Status by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Total Internet-related Budget Status** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Budget increased since last fiscal year | 24.6% ±4.3% (n=152) | 25.9% ±4.4% (n=709) | 14.4% ±3.5% (n=810) | 18.2% ±3.9% (n=1,458) | 22.3% ±4.2% (n=199) | 23.1% ±4.3% (n=14) | 18.6% ±3.9% (n=1,671) |
| Budget decreased since last fiscal year | 8.4% ±2.8% (n=52) | 5.0% ±2.2% (n=137) | 4.7% ±2.1% (n=264) | 4.8% ±2.1% (n=385) | 7.0% ±2.5% (n=62) | 9.9% ±3.0% (n=6) | 5.0% ±2.2% (n=453) |
| Budget stayed the same as last fiscal year | 48.8% ±5.0% (n=301) | 55.9% ±5.0% (n=1,533) | 70.0% ±4.6% (n=3,932) | 64.9% ±4.8% (n=5,209) | 59.2% ±4.9% (n=528) | 48.0% ±5.0% (n=30) | 64.2% ±4.8% (n=5,767) |
| Weighted Missing Responses: n=1,087 | | | | | | | |
| Average percentage increased | 39.9% (n=152) | 20.3% (n=709) | 61.0% (n=810) | 45.2% (n=1,458) | 18.6% (n=199) | 22.9% (n=14) | 41.8% (n=1,671) |
| Average percentage decreased | 18.8% (n=52) | 15.0% (n=137) | 24.1% (n=264) | 19.9% (n=385) | 26.0% (n=62) | 22.4% (n=6) | 20.7% (n=453) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Only 18.6% of public library systems had an increase in their Internet information technology budget from the previous year, as can be seen in Figure 17 (above). The systems most likely to have an increase were suburban (25.9%) and high poverty (23.1%) systems. For systems where there was an increase, the average increase was 41.8%.

The clear majority of systems (64.2%) had no change in their Internet information technology budget. Only 5.0% of systems had a decrease in their Internet information technology budget from the previous year. For those systems with a decrease, the average decrease was 20.7%. High poverty (9.9%) and urban (8.4%) library systems were most likely to have a decrease.

**Figure 18: Public Library System Percentage of Libraries Receiving E-rate Discount by Category and by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **E-rate Discount Categories** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Internet connectivity | 32.0% | 16.9% | 24.1% | 20.4% | 38.6% | 46.7% | 22.4% |
| Telecommunications services | 53.1% | 33.7% | 41.0% | 37.2% | 58.8% | 69.8% | 39.6% |
| Internal connections cost | 10.4% | 3.3% | 4.3% | 3.4% | 12.6% | 19.0% | 4.4% |
| | n=617 | n=2,742 | n=5,619 | n=8,024 | n=892 | n=62 | n=8,978 |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

**Figure 19: Public Library System Percentage of Libraries Not Receiving E-rate Discount by Category and by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **E-rate Discount Categories** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Internet connectivity | 68.0% (n=419) | 83.1% (n=2,279) | 75.9% (n=4,266) | 79.6% (n=6,383) | 61.4% (n=547) | 53.3% (n=33) | 77.6% (n=6,964) |
| Telecommunications services | 46.9% (n=290) | 66.3% (n=1,819) | 59.0% (n=3,317) | 62.8% (n=5,040) | 41.2% (n=367) | 30.2% (n=19) | 60.4% (n=5,426) |
| Internal connections cost | 89.6% (n=553) | 96.7% (n=2,652) | 95.7% (n=5,379) | 96.6% (n=7,755) | 87.4% (n=779) | 81.0% (n=50) | 95.6% (n=8,584) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figures 18 and 19 (above) provide two perspectives on the same data. Figure 18 shows the library systems that are receiving E-rate discounts. Only 4.4% of public library systems receive E-rate discounts for internal connection costs (which is not surprising, given the difficulty libraries have in qualifying for internal connection discounts), 22.4% receive E-rate discounts for Internet connectivity, and 39.6% receive E-rate discounts for telecommunications services. High and medium poverty library systems were the most likely to be receiving discounts for all three categories of discounts.

Figure 19 demonstrates that few library systems are receiving E-rate discounts. Depending on the category of discount, between 60.4% and 95.6% of library systems do not receive E-rate discounts. Overall, suburban library systems were the least likely to be receiving E-rate discounts in each of the three categories.

**Figure 20: Public Library System Reasons for Non-Receipt of E-rate Discounts by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Reasons** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| The E-rate application process is too complicated | 29.7% ±4.6% (n=79) | 36.8% ±4.8% (n=614) | 34.9% ±4.8% (n=1,041) | 35.4% ±4.8% (n=1,621) | 34.2% ±4.8% (n=110) | 12.3% ±3.4% (n=2) | 35.3% ±4.8% (n=1,734) |
| The library staff did not feel the library would qualify | 3.3% ±1.8% (n=9) | 8.1% ±2.7% (n=136) | 8.6% ±2.8% (n=255) | 8.3% ±2.8% (n=380) | 6.1% ±2.4% (n=20) | -- | 8.1% ±2.7% (n=399) |
| Our total E-rate discount is fairly low and not worth the time needed to participate in the program | 20.4% ±4.0% (n=54) | 33.8% ±4.7% (n=564) | 31.5% ±4.7% (n=938) | 31.8% ±4.7% (n=1,456) | 30.4% ±4.6% (n=98) | 12.3% ±3.4% (n=2) | 31.7% ±4.7% (n=1,556) |
| The library receives it as part of a consortium, so therefore does not apply individually | 12.0% ±3.3% (n=32) | 24.9% ±4.3% (n=416) | 7.0% ±2.6% (n=209) | 14.1% ±3.5% (n=643) | 3.7% ±1.9% (n=12) | 12.3% ±3.4% (n=2) | 13.4% ±3.4% (n=657) |
| The library was denied funding in the past | -- | 4.4% ±2.1% (n=73) | 2.9% ±1.7% (n=87) | 3.1% ±1.7% (n=143) | 5.4% ±2.3% (n=17) | -- | 3.3% ±1.8% (n=160) |
| The library has applied for E-rate in the past, but because of the need to comply with CIPA, our library decided not to apply in 2006 | 11.3% ±3.2% (n=30) | 15.5% ±3.6% (n=259) | 15.6% ±3.6% (n=464) | 15.3% ±3.6% (n=700) | 15.7% ±3.6% (n=50) | 12.3% ±3.4% (n=2) | 15.3% ±3.6% (n=753) |
| The library has applied for E-rate in the past, but no longer finds it necessary | 3.7% ±1.9% (n=10) | 5.0% ±2.2% (n=83) | 6.5% ±2.5% (n=194) | 5.9% ±2.4% (n=270) | 5.2% ±2.2% (n=17) | -- | 5.8% ±2.4% (n=287) |

Weighted Missing Responses, n=535.
Will not total to 100%, as respondents could select more than one option.
**Key:** -- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

According to Figure 20 (above), for the majority of libraries that do not receive E-rate discounts, the most common reasons are the application process is too complicated (35.3%), the discount is too low to invest the time in the application process (31.7%), and the library does not want to comply with the CIPA requirements that accompany such funds (15.3%).

Libraries were given the opportunity to elaborate on their responses to this question. A number of respondents noted that they had not applied for E-rate because they did not know that the program existed. Also, a number of libraries relayed their problems with the application process and the organization that oversees the distribution of E-rate funds. Explanations included: "E-rate people said our library did not exist" and "received no further communication from E-rate upon application" and "No one returned calls or emails, so we gave up."

As a result of all of the problems that the libraries conveyed, many offered comments on fixing the program in general: "I wish they would just give a straight discount based on the school lunch program eligibility and skip all the photocopying!" and "We have received e-rate funds in the past, but the time and effort invested across the US in completing these forms, publicizing & administering the program seems ill-advised." And "The bureaucratic and CIPA requirements consume precious administration time for the yield."

**Figure 21: Public Library System Public Access Internet Services by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Public Access Internet Services** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Digital reference/virtual references | 65.4% ±4.8% (n=403) | 56.7% ±5.0% (n=1,555) | 53.1% ±5.0% (n=2,986) | 54.8% ±5.0% (n=4,400) | 57.0% ±5.0% (n=508) | 58.7% ±5.0% (n=36) | 55.1% ±5.0% (n=4,945) |
| Licensed databases | 95.4% ±2.1% (n=588) | 88.8% ±3.2% (n=2,434) | 78.5% ±4.1% (n=4,411) | 82.2% ±3.8% (n=6,595) | 88.0% ±3.3% (n=785) | 86.3% ±3.5% (n=54) | 82.8% ±3.8% (n=7,434) |
| E-books | 61.5% ±4.9% (n=379) | 51.0% ±5.0% (n=1,399) | 28.8% ±4.5% (n=1,620) | 38.2% ±4.9% (n=3,068) | 32.6% ±4.7% (n=291) | 63.2% ±4.9% (n=39) | 37.9% ±4.9% (n=3,398) |
| Video conferencing | 9.2% ±2.9% (n=57) | 6.4% ±2.4% (n=175) | 8.2% ±2.8% (n=462) | 7.7% ±2.7% (n=617) | 7.9% ±2.7% (n=70) | 9.9% ±3.0% (n=6) | 7.7% ±2.7% (n=694) |
| Online instructional courses/tutorials | 37.7% ±4.9% (n=232) | 30.4% ±4.6% (n=832) | 38.0% ±4.9% (n=2,135) | 35.2% ±4.8% (n=2,825) | 37.8% ±4.9% (n=337) | 59.9% ±4.9% (n=37) | 35.6% ±4.8% (n=3,200) |
| Homework content | 63.5% ±4.8% (n=392) | 63.7% ±4.8% (n=1,746) | 59.2% ±4.9% (n=3,326) | 60.7% ±4.9% (n=4,874) | 60.5% ±4.9% (n=540) | 81.0% ±4.0% (n=50) | 60.9% ±4.9% (n=5,464) |
| Audio content | 44.3% ±5.0% (n=273) | 36.4% ±4.8% (n=998) | 29.7% ±4.6% (n=1,671) | 32.7% ±4.7% (n=2,625) | 32.7% ±4.7% (n=292) | 42.1% ±5.0% (n=26) | 32.8% ±4.7% (n=2,943) |
| Video content | 25.9% ±4.4% (n=160) | 18.6% ±3.9% (n=509) | 23.9% ±4.3% (n=1,345) | 22.5% ±4.2% (n=1,808) | 21.5% ±4.1% (n=192) | 22.3% ±4.2% (n=14) | 22.4% ±4.2% (n=2,014) |
| Digitized special collections | 44.0% ±5.0% (n=271) | 28.3% ±4.5% (n=776) | 18.6% ±3.9% (n=1,048) | 22.7% ±4.2% (n=1,818) | 27.5% ±4.5% (n=245) | 50.8% ±5.0% (n=32) | 23.3% ±4.2% (n=2,095) |
| Weighted Missing Responses, n=367.<br>Will not total to 100%, as respondents could select more than one option. | | | | | | | |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

As revealed by Figure 21 (above), the most frequently offered public access Internet services by public library systems are licensed databases (82.8%), homework content (60.9%), digital reference or virtual reference services (55.1%), e-books (37.9%), and online instructional course and tutorials (35.6%). For most types of services, urban library systems and high poverty library system are most likely to offer the services.

Responding library systems were also able to list other services not included in the question options. Other services noted by library systems include: GED study guides, webcams, distance learning exams, genealogy and history indexes, birth and death record indexes, audio books, and interlibrary loan.

**Figure 22: Public Library System Community Impact of Public Access Internet Services by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Public Access Internet Services** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| Provide information for local economic development | 6.8% ±2.5% (n=42) | 3.3% ±1.8% (n=91) | 2.8% ±1.6% (n=155) | 2.9% ±1.7% (n=236) | 5.2% ±2.2% (n=47) | 6.6% ±2.5% (n=4) | 3.2% ±1.8% (n=287) |
| Provide information about state and local business opportunities | 5.5% ±2.3% (n=34) | 1.7% ±1.3% (n=46) | 3.0% ±1.7% (n=170) | 2.7% ±1.6% (n=214) | 3.3% ±1.8% (n=30) | 9.9% ±3.0% (n=6) | 2.8% ±1.6% (n=250) |
| Provide computer and Internet skills training | 46.5% ±5.0% (n=287) | 40.7% ±4.9% (n=1,117) | 35.7% ±4.8% (n=2,009) | 37.8% ±4.9% (n=3,036) | 39.2% ±4.9% (n=349) | 44.2% ±5.0% (n=27) | 38.0% ±4.9% (n=3,412) |
| Provide real estate-related information | * | 1.7% ±1.3% (n=46) | 1.1% ±1.0% (n=61) | 1.3% ±1.1% (n=103) | * | 6.6% ±2.5% (n=4) | 1.2% ±1.1% (n=111) |
| Provide community information | 25.4% ±4.4% (n=157) | 25.0% ±4.3% (n=685) | 18.4% ±3.9% (n=1,035) | 21.1% ±4.1% (n=1,695) | 18.5% ±3.9% (n=165) | 27.7% ±4.5% (n=17) | 20.9% ±4.1% (n=1,877) |
| Provide information for local business marketing | 2.5% ±1.6% (n=15) | 1.5% ±1.2% (n=42) | * | * | 1.8% ±1.3% (n=16) | -- | 1.0% ±1.0% (n=87) |
| Provide services for job seekers | 53.1% ±5.0% (n=328) | 47.7% ±5.0% (n=1,308) | 44.6% ±5.0% (n=2,504) | 46.4% ±5.0% (n=3,720) | 43.4% ±5.0% (n=387) | 52.0% ±5.0% (n=32) | 46.1% ±5.0% (n=4,140) |
| Provide investment information or databases | 5.1% ±2.2% (n=31) | 6.6% ±2.5% (n=182) | 2.2% ±1.5% (n=121) | 3.9% ±1.9% (n=311) | 2.7% ±1.6% (n=24) | -- | 3.7% ±1.9% (n=335) |
| Provide education resources and databases for K-12 students | 63.1% ±4.8% (n=389) | 66.3% ±4.7% (n=1,818) | 62.3% ±4.9% (n=3,501) | 63.7% ±4.8% (n=5,108) | 64.5% ±4.8% (n=575) | 42.1% ±5.0% (n=26) | 63.6% ±4.8% (n=5,709) |
| Provide education resources and databases for students in higher education | 15.0% ±3.6% (n=92) | 16.5% ±3.7% (n=453) | 18.3% ±3.9% (n=1,029) | 16.6% ±3.7% (n=1,334) | 26.3% ±4.4% (n=235) | 9.1% ±2.9% (n=6) | 17.5% ±3.8% (n=1,575) |
| Provide education resources and databases for home schooling | 8.0% ±2.7% (n=50) | 9.8% ±3.0% (n=267) | 14.6% ±3.5% (n=821) | 12.8% ±3.4% (n=1,030) | 11.6% ±3.2% (n=103) | 7.9% ±2.7% (n=5) | 12.7% ±3.3% (n=1,138) |
| Provide education resources and databases for adult/continuing education students | 14.8% ±3.6% (n=91) | 20.5% ±4.0% (n=563) | 19.7% ±4.0% (n=1,110) | 19.5% ±4.0% (n=1,567) | 21.2% ±4.1% (n=189) | 11.2% ±3.2% (n=7) | 19.6% ±4.0% (n=1,763) |
| Provide information for college applicants | 2.3% ±1.5% (n=14) | 3.3% ±1.8% (n=90) | 6.9% ±2.5% (n=387) | 5.3% ±2.2% (n=425) | 6.8% ±2.5% (n=61) | 9.1% ±2.9% (n=6) | 5.5% ±2.3% (n=491) |
| Provide access to local public and local government documents | 5.3% ±2.3% (n=33) | 4.7% ±2.1% (n=129) | 5.1% ±2.2% (n=285) | 5.1% ±2.2% (n=406) | 4.3% ±2.0% (n=39) | 3.3% ±1.8% (n=2) | 5.0% ±2.2% (n=447) |
| Provide access to federal government documents | 5.0% ±2.2% (n=31) | 4.6% ±2.1% (n=125) | 7.6% ±2.7% (n=426) | 6.3% ±2.4% (n=508) | 7.4% ±2.6% (n=66) | 11.2% ±3.2% (n=7) | 6.5% ±2.5% (n=581) |
| Provide access to and assistance with local, state, or federal government electronic services | 16.5% ±3.7% (n=102) | 16.7% ±3.7% (n=458) | 24.2% ±4.3% (n=1,361) | 21.8% ±4.1% (n=1,745) | 17.6% ±3.8% (n=157) | 28.9% ±4.6% (n=18) | 21.4% ±4.1% (n=1,920) |

Weighted Missing Responses, n=175.
Will not total to 100%, as respondents could select more than one option.
**Key:** * : Insufficient data to report; -- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 22 (above) details the impacts of the public access Internet services offered by public library systems. The largest impacts are providing education resources for K-12 students (63.6%), services for job seekers (46.1%), computer and Internet training skills (38.0%), access to and assistance with local, state, and federal government electronic services (21.4%), and providing community information (20.9%).

Responding library systems were also able to list other impacts not included in the question options. Most of the other noted impacts related to providing access to those who would not otherwise be able to access the Internet and to serving as a general information resource for members of the community.

**Figure 23: Public Library System Information Technology Training Availability for Patrons by Metropolitan Status and Poverty.**

| | Metropolitan Status | | | Poverty Level | | | |
|---|---|---|---|---|---|---|---|
| **Training Availability** | Urban | Suburban | Rural | Low | Medium | High | Overall |
| The library does not offer patron information technology training services | 9.5% ±2.9% (n=58) | 18.9% ±3.9% (n=519) | 23.9% ±4.3% (n=1,344) | 21.4% ±4.1% (n=1,716) | 22.2% ±4.2% (n=198) | 11.2% ±3.2% (n=7) | 21.4% ±4.1% (n=1,921) |
| Facilitates local economic development | 2.8% ±1.7% (n=17) | 1.6% ±1.3% (n=45) | 1.4% ±1.2% (n=79) | 1.4% ±1.2% (n=113) | 2.9% ±1.7% (n=26) | 3.3% ±1.8% (n=2) | 1.6% ±1.3% (n=142) |
| Offers technology training opportunities to those who would otherwise not have any | 62.4% ±4.9% (n=385) | 48.5% ±5.0% (n=1,330) | 35.2% ±4.8% (n=1,981) | 40.7% ±4.9% (n=3,265) | 43.8% ±5.0% (n=391) | 63.2% ±4.9% (n=39) | 41.2% ±4.9% (n=3,695) |
| Helps students with their school assignment and school work | 35.4% ±4.8% (n=218) | 40.0% ±4.9% (n=1,097) | 43.6% ±5.0% (n=2,448) | 42.2% ±4.9% (n=3,386) | 38.8% ±4.9% (n=346) | 49.2% ±5.0% (n=31) | 41.9% ±4.9% (n=3,763) |
| Helps business owners understand and use technology and/or information resources | 5.6% ±2.3% (n=35) | 2.2% ±1.5% (n=62) | 2.3% ±1.5% (n=129) | 2.3% ±1.5% (n=183) | 4.0% ±2.0% (n=36) | 9.9% ±3.0% (n=6) | 2.5% ±1.6% (n=225) |
| Provides general technology skills | 52.3% ±5.0% (n=322) | 41.8% ±4.9% (n=1,146) | 42.1% ±4.9% (n=2,368) | 42.6% ±5.0% (n=3,421) | 43.4% ±5.0% (n=387) | 45.4% ±5.0% (n=28) | 42.7% ±5.0% (n=3,836) |
| Provide information literacy skills | 68.8% ±4.6% (n=424) | 59.2% ±4.9% (n=1,622) | 46.0% ±5.0% (n=2,582) | 50.7% ±5.0% (n=4,065) | 58.9% ±4.9% (n=525) | 63.2% ±4.9% (n=39) | 51.6% ±5.0% (n=4,629) |
| Helps users access and use electronic government services and resources. | 21.5% ±4.1% (n=132) | 21.0% ±4.1% (n=575) | 27.4% ±4.5% (n=1,541) | 25.4% ±4.4% (n=2,039) | 21.7% ±4.1% (n=193) | 25.6% ±4.4% (n=16) | 25.0% ±4.3% (n=2,248) |
| Weighted Missing Responses, n=255.<br>Will not total to 100%, as respondents could select more than one option. | | | | | | | |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

In figure 23 (above), the types of information technology training offered by public library systems for patrons include: 1) providing information literacy skills (51.6%); 2) providing general technology skills (42.7%); 3) helping students with school assignment and work (41.9%); and 4) offering technology-training opportunities to those who would not otherwise have any (41.2%). Responding library systems were also able to list other types of training not included in the question options. These other types of training predominantly related to use of email, health databases, and genealogy databases, as well as special types of training targeted primarily at seniors. Uniquely, one library noted that it offered training classes on "how to sell things on ebay."

# VIII. STATE BRANCH LEVEL DATA

This section details the study findings for state branch-level data by individual state. Selected key findings are below, and a brief discussion of the findings follows each table.

## Discussion of State Data

The state data offer the ability to identify trends, variations, and issues regarding public access computing and Internet access. There are a number of general trends in the state data that bear mention:

- In states that have predominantly rural or diffuse populations, library outlets tend to have lower connection speeds for their Internet access and are more likely to connect to the Internet using an Internet Service Provider. Less populated states also tend to have the lowest average number of workstations in library outlets.
- The leading states in adoption of wireless technology are concentrated in the Eastern half of the nation. The states which currently have the highest levels of wireless access are Connecticut, Indiana, Kentucky, New Jersey, Rhode Island, and Virginia, while North Carolina and Rhode Island have the highest percentage of outlets planning to add wireless in the next year.
- States east of the Mississippi River are more likely to be planning to add more workstations, with the highest percentages of library outlets planning to add more workstations in Delaware, North Carolina, South Carolina, and Washington DC.
- The states where the highest percentages of library systems with increases in total operating budgets were concentrated in the Northeast—Delaware, Maryland, and Rhode Island.
- The states that received various kinds of E-rate funding were primarily located in the Midwest and the Southeast.
- Four Western states—Colorado, South Dakota, Washington, and Wyoming—frequently had the highest percentages of libraries not applying for E-rate funding for a number of different reasons.

These are only some of the general trends from the data by state. With some aggregation, the state data can also provide a regional view of public access computing and Internet access.

**Figure 24: Public Library Outlets Connected to the Internet and Offering Public Internet Access by State.**

| *State* | Connected to the Internet | Public Access Internet Services |
|---|---|---|
| Alabama (n = 282) | 100.0% ± 0.0% | 98.5% ± 1.2% |
| Alaska (n = 98) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Arizona (n = 175) | 97.0% ± 1.7% | 95.8% ± 2.0% |
| Arkansas (n = 209) | 98.7% ± 1.1% | 98.7% ± 1.1% |
| California (n = 1061) | 98.9% ± 1.1% | 97.4% ± 1.6% |
| Colorado (n = 243) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Connecticut (n = 241) | 98.9% ± 1.0% | 97.5% ± 1.6% |
| Delaware (n = 33) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Florida (n = 478) | 100.0% ± 0.0% | 98.3% ± 1.3% |
| Georgia (n = 353) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Idaho (n = 142) | 100.0% ± 0.0% | 99.3% ± 0.8% |
| Illinois (n = 789) | 98.8% ± 1.1% | 98.4% ± 1.3% |
| Indiana (n = 426) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Iowa (n = 562) | 98.2% ± 1.3% | 97.4% ± 1.6% |
| Kentucky (n = 185) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Louisiana (n = 294) | 95.5% ± 2.1% | 95.5% ± 2.1% |
| Maryland (n = 175) | 99.0% ± 1.0% | 99.0% ± 1.0% |
| Massachusetts (n = 488) | 100.0% ± 0.0% | 99.4% ± 0.1% |
| Michigan (n = 659) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Minnesota (n = 358) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Mississippi (n = 242) | 95.9% ± 2.0% | 95.9% ± 2.0% |
| Missouri (n = 359) | 97.7% ± 1.5% | 97.7% ± 1.5% |
| Montana (n = 106) | 100.0% ± 0.0% | 96.8% ± 1.8% |
| Nevada (n = 86) | 98.1% ± 1.4% | 98.1% ± 1.4% |

**Figure 24 (cont'd): Public Library Outlets Connected to the Internet and Offering Public Internet Access by State.**

| *State* | Connected to the Internet | Public Access Internet Services |
|---|---|---|
| New Hampshire (n = 237) | 97.6% ± 1.5% | 95.4% ± 2.1% |
| New Jersey (n = 458) | 99.3% ± 0.1% | 99.3% ± 0.1% |
| New Mexico (n = 102) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| New York (n = 1088) | 98.5% ± 1.2% | 97.4% ± 1.6% |
| North Carolina (n = 381) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Ohio (n = 717) | 99.5% ± 0.1% | 99.5% ± 0.1% |
| Oklahoma (n = 204) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Oregon (n = 208) | 96.5% ± 1.9% | 95.3% ± 2.1% |
| Pennsylvania (n = 628) | 99.3% ± 0.1% | 99.0% ± 1.0% |
| Rhode Island (n = 72) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| South Carolina (n = 184) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Tennessee (n = 284) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Texas (n = 848) | 98.1% ± 1.4% | 97.5% ± 1.6% |
| Utah (n = 106) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Vermont (n = 192) | 97.5% ± 1.6% | 96.3% ± 1.9% |
| Virginia (n = 330) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Washington, DC (n = 27) | 91.3% ± 2.9% | 91.3% ± 2.9% |
| West Virginia (n = 172) | 100.0% ± 0.0% | 97.9% ± 1.4% |
| Wisconsin (n = 455) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| Wyoming (n = 72) | 100.0% ± 0.0% | 100.0% ± 0.0% |
| ***National*** | 98.9% ± 1.0% (n = 16,279) | 98.4% ± 1.2% (n = 16,200) |

**Key:** * : Insufficient data to report;
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 24 (above) demonstrates that almost every library outlet in every state is connected to the Internet and offers public Internet access.

**Figure 25: Public Library Outlet Average Number of Hours Open and Change in Hours Open by State.**

| *State* | Average number of hours open per week | Hours increased since last fiscal year | Hours decreased since last fiscal year | Hours stayed the same as last fiscal year | Number of hours increased | Number of hours decreased |
|---|---|---|---|---|---|---|
| Alabama (n = 282) | 44.1 ± 14.2 | 9.6% ± 3.0% | 1.5% ± 1.2% | 88.9% ± 3.2% | 15.6 ± 15.7 | 1.0 ± 0.0 |
| Alaska (n = 98) | 31.3 ± 16.8 | 7.3% ± 2.6% | -- | 92.7% ± 2.6% | 6.7 ± 4.2 | -- |
| Arizona (n = 170) | 44.1 ± 12.8 | 7.4% ± 2.6% | -- | 89.5% ± 3.1% | 6.8 ± 1.5 | -- |
| Arkansas (n = 209) | 37.1 ± 16.2 | 7.9% ± 2.7% | 2.8% ± 1.6% | 89.3% ± 3.1% | 4.5 ± 0.8 | 4.0 ± 0.0 |
| California (n = 1052) | 42.8 ± 14.4 | 7.5% ± 2.6% | 16.4% ± 3.7% | 75.3% ± 4.3% | 7.8 ± 11.0 | 6.7 ± 2.1 |
| Colorado (n = 243) | 46.5 ± 14.3 | 10.9% ± 3.1% | 10.3% ± 3.1% | 78.8% ± 4.1% | 9.9 ± 6.3 | 5.0 ± 5.4 |
| Connecticut (n = 238) | 49.8 ± 12.6 | 8.1% ± 2.7% | 4.2% ± 2.0% | 86.6% ± 3.4% | 3.1 ± 0.9 | 4.0 ± 1.7 |
| Delaware (n = 33) | 48.7 ± 7.9 | 26.3% ± 4.5% | 8.8% ± 2.9% | 65.0% ± 4.8% | 3.3 ± 1.3 | 2.0 ± 0.0 |
| Florida (n = 478) | 52.3 ± 12.7 | 12.1% ± 3.3% | -- | 87.9% ± 3.3% | 7.4 ± 7.4 | -- |
| Georgia (n = 349) | 46.6 ± 13.6 | 6.0% ± 2.4% | 4.6% ± 2.1% | 89.4% ± 3.1% | 4.0 ± 3.4 | 7.4 ± 4.5 |
| Idaho (n = 142) | 41.7 ± 19.3 | 13.1% ± 3.4% | 3.2% ± 1.8% | 83.7% ± 3.7% | 5.5 ± 2.7 | 4.0 ± 0.0 |
| Illinois (n = 780) | 49.5 ± 16.9 | 5.2% ± 2.2% | 2.5% ± 1.6% | 91.2% ± 2.8% | 4.8 ± 4.1 | 4.5 ± 1.9 |
| Indiana (n = 426) | 51.9 ± 14.2 | 6.1% ± 2.4% | 1.1% ± 1.0% | 92.8% ± 2.6% | 4.2 ± 1.1 | 2.0 ± 0.0 |
| Iowa (n = 554) | 35.4 ± 14.6 | 11.4% ± 3.2% | 4.1% ± 2.0% | 82.7% ± 3.8% | 3.0 ± 2.2 | 3.4 ± 1.5 |
| Kentucky (n = 185) | 50.4 ± 10.1 | 7.5% ± 2.6% | -- | 92.5% ± 2.6% | 5.0 ± 0.0 | -- |
| Louisiana (n = 281) | 44.8 ± 14.0 | 1.2% ± 1.1% | 1.5% ± 1.2% | 94.3% ± 2.3% | 66.0 ± 0.0 | 26.0 ± 0.0 |
| Maryland (n = 173) | 50.0 ± 12.3 | 2.7% ± 1.6% | -- | 96.2% ± 1.9% | 3.8 ± 0.48 | -- |
| Massachusetts (n = 488) | 41.2 ± 16.7 | 2.5% ± 1.6% | 8.4% ± 2.8% | 89.2% ± 3.1% | 4.4 ± 2.5 | 5.5 ± 3.2 |
| Michigan (n = 659) | 45.8 ± 15.9 | 6.8% ± 2.5% | 3.5% ± 1.8% | 89.7% ± 3.0% | 4.8 ± 2.6 | 4.6 ± 1.9 |
| Minnesota (n = 354) | 41.0 ± 14.0 | 10.9% ± 3.1% | 1.2% ± 1.1% | 87.9% ± 3.3% | 8.5 ± 2.9 | 6.0 ± 0.0 |
| Mississippi (n = 235) | 36.5 ± 15.8 | 2.3% ± 1.5% | 6.5% ± 2.5% | 89.4% ± 3.1% | 5.9 ± 4.1 | 13.6 ± 16.3 |
| Missouri (n = 359) | 46.8 ± 16.7 | 7.3% ± 2.6% | 1.0% ± 1.0% | 91.7% ± 2.8% | 4.2 ± 3.1 | 4.0 ± 0.0 |
| Montana (n = 106) | 35.9 ± 12.7 | 10.6% ± 3.1% | 2.1% ± 1.4% | 87.3% ± 3.4% | 3.6 ± 3.4 | 5.0 ± 0.0 |
| Nevada (n = 86) | 41.4 ± 19.6 | 7.9% ± 2.7% | 5.8% ± 2.4% | 86.3% ± 3.5% | 5.9 ± 1.1 | 2.0 ± 0.0 |
| New Hampshire (n = 234) | 35.0 ± 13.7 | 11.6% ± 3.2% | 1.2% ± 1.1% | 86.0% ± 3.5% | 3.7 ± 2.6 | 4.0 ± 0.0 |

**Figure 25 (cont'd): Public Library Outlet Average Number of Hours Open and Change in Hours Open by State.**

| *State* | Average number of hours open per week | Hours increased since last fiscal year | Hours decreased since last fiscal year | Hours stayed the same as last fiscal year | Number of hours increased | Number of hours decreased |
|---|---|---|---|---|---|---|
| New Jersey (n = 458) | 55.6 ± 11.0 | 10.2% ± 3.0% | 1.3% ± 1.1% | 88.4% ± 3.2% | 4.5 ± 1.5 | -- |
| New Mexico (n = 102) | 44.8 ± 12.6 | 8.8% ± 2.9% | 2.1% ± 1.4% | 89.1% ± 3.1% | 6.9 ± 3.6 | 2.0 ± 0.0 |
| New York (n = 1068) | 44.1 ± 15.7 | 12.3% ± 3.3% | 8.1% ± 2.7% | 79.2% ± 4.1% | 4.7 ± 4.4 | 10.9 ± 12.9 |
| North Carolina (n = 381) | 47.4 ± 15.1 | 21.4% ± 4.1% | 3.4% ± 1.8% | 75.3% ± 4.3% | 7.6 ± 6.9 | 3.7 ± 0.49 |
| Ohio (n = 713) | 55.7 ± 12.2 | 5.9% ± 2.4% | 6.1% ± 2.4% | 87.5% ± 3.3% | 8.3 ± 6.0 | 4.0 ± 0.0 |
| Oklahoma (n = 204) | 42.6 ± 13.1 | 5.0% ± 2.2% | 4.0% ± 2.0% | 90.9% ± 2.9% | 2.5 ± 0.60 | -- |
| Oregon (n = 201) | 38.0 ± 16.4 | 6.5% ± 2.5% | 7.1% ± 2.6% | 82.9% ± 3.8% | 4.1 ± 1.3 | 11.6 ± 9.8 |
| Pennsylvania (n = 624) | 50.6 ± 12.3 | 23.5% ± 4.3% | 4.1% ± 2.0% | 72.3% ± 4.5% | 5.9 ± 4.5 | 8.6 ± 10.7 |
| Rhode Island (n = 72) | 47.5 ± 11.5 | 6.2% ± 2.4% | 15.3% ± 3.6% | 78.5% ± 4.1% | 9.0 ± 7.9 | 15.0 ± 0.0 |
| South Carolina (n = 184) | 48.3 ± 14.9 | 8.8% ± 2.8% | 1.3% ± 1.1% | 89.9% ± 3.0% | 1.2 ± 0.55 | 10.0 ± 0.0 |
| Tennessee (n = 284) | 44.2 ± 15.2 | 11.0% ± 3.1% | -- | 89.0% ± 3.1% | 2.4 ± 0.93 | -- |
| Texas (n = 834) | 45.1 ± 13.1 | 11.3% ± 3.2% | 2.8% ± 1.7% | 84.3% ± 3.6% | 8.9 ± 12.3 | 4.0 ± 4.6 |
| Utah (n = 106) | 48.5 ± 12.6 | 7.3% ± 2.6% | 6.5% ± 2.5% | 86.3% ± 3.5% | 4.3 ± 3.0 | 3.3 ± 1.6 |
| Vermont (n = 192) | 30.8 ± 13.3 | 9.8% ± 3.0% | 3.7% ± 1.9% | 86.5% ± 3.4% | 2.2 ± 1.5 | 1.0 ± 0.0 |
| Virginia (n = 330) | 52.3 ± 11.7 | 3.4% ± 1.8% | -- | 96.6% ± 1.8% | 2.3 ± 0.50 | -- |
| Washington, DC (n = 25) | 50.6 ± 10.6 | 67.9% ± 4.8% | 16.1% ± 3.7% | 16.1% ± 3.7% | 7.0 ± 0.0 | 34.0 ± 16.0 |
| West Virginia (n = 164) | 43.3 ± 10.4 | 10.4% ± 3.1% | 6.0% ± 2.4% | 79.2% ± 4.1% | 19.0 ± 17.8 | 8.3 ± 5.4 |
| Wisconsin (n = 455) | 45.5 ± 14.4 | 11.9% ± 3.2% | 7.3% ± 2.6% | 80.8% ± 3.9% | 4.9 ± 5.0 | 4.9 ± 4.7 |
| Wyoming (n = 72) | 34.6 ± 19.1 | 14.4% ± 3.5% | 3.6% ± 1.9% | 82.0% ± 3.9% | 6.0 ± 5.6 | 5.0 ± 0.0 |
| ***National*** | 44.8 (n = 16,338) | 9.6% ± 3.0% (n = 1,584) | 4.8% ± 2.1% (n = 793) | 85.0% ± 3.6% (n = 13,992) | 6.0 (n = 1,504) | 6.8 (n = 726) |

**Key:** * : Insufficient data to report -- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 25 (above) shows that the public libraries in the vast majority of states primarily had few changes in the number of hours open. The highest percentages of public libraries with decreases in hours were in California (16.3%), Rhode Island (15.3%), and Washington DC (16.1%). The highest percentages of public libraries with increases in hours were in Delaware (26.3%), North Carolina (21.4%), Pennsylvania (23.5%), and Washington DC (67.9%).

| Figure 26: Public Library Outlet Public Access Wireless Internet Connectivity by State. | | | |
|---|---|---|---|
| ***State*** | **Wireless currently available** | **Wireless not currently available, but there are plans to make it available within the next year.** | **Wireless not currently available and no plans to make it available within the next year** |
| Alabama (n = 269) | 29.5% ± 4.6% | 14.7% ± 3.6% | 55.8% ± 5.0% |
| Alaska (n = 98) | 35.8% ± 4.8% | 24.2% ± 4.3% | 39.9% ± 4.9% |
| Arizona (n = 168) | 41.2% ± 4.9% | 30.0% ± 4.6% | 28.8% ± 4.5% |
| Arkansas (n = 203) | 18.5% ± 3.9% | 32.5% ± 4.7% | 49.0% ± 5.0% |
| California (n = 989) | 47.8% ± 5.0% | 20.5% ± 4.0% | 31.7% ± 4.7% |
| Colorado (n = 223) | 35.9% ± 4.8% | 24.1% ± 4.3% | 40.0% ± 4.9% |
| Connecticut (n = 235) | 55.6% ± 5.0% | 24.5% ± 4.3% | 20.0% ± 4.0% |
| Delaware (n = 33) | 29.3% ± 4.6% | 13.3% ± 3.5% | 57.4% ± 5.0% |
| Florida (n = 470) | 44.1% ± 5.0% | 33.7% ± 4.7% | 22.1% ± 4.2% |
| Georgia (n = 345) | 11.1% ± 3.2% | 16.8% ± 3.7% | 72.1% ± 4.5% |
| Idaho (n = 135) | 31.4% ± 4.7% | 28.7% ± 4.5% | 39.9% ± 4.9% |
| Illinois (n = 753) | 48.3% ± 5.0% | 14.8% ± 3.6% | 36.8% ± 4.8% |
| Indiana (n = 426) | 56.6% ± 5.0% | 15.4% ± 3.6% | 28.0% ± 4.5% |
| Iowa (n = 522) | 38.3% ± 4.9% | 18.0% ± 3.8% | 43.7% ± 5.0% |
| Kentucky (n = 185) | 52.0% ± 5.0% | 27.0% ± 4.5% | 20.9% ± 4.1% |
| Louisiana (n = 272) | 14.4% ± 3.5% | 27.7% ± 4.5% | 57.9% ± 5.0% |
| Maryland (n = 173) | 49.8% ± 5.0% | 31.2% ± 4.7% | 19.0% ± 3.9% |
| Massachusetts (n = 464) | 47.8% ± 5.0% | 29.3% ± 4.6% | 22.9% ± 4.2% |
| Michigan (n = 655) | 42.8% ± 5.0% | 24.6% ± 4.3% | 32.6% ± 4.7% |
| Minnesota (n = 358) | 16.7% ± 3.7% | 24.8% ± 4.3% | 58.5% ± 4.9% |
| Mississippi (n = 231) | 5.5% ± 2.3% | 27.7% ± 4.5% | 66.8% ± 4.7% |
| Missouri (n = 345) | 24.6% ± 4.3% | 28.0% ± 4.5% | 47.4% ± 5.0% |
| Montana (n = 103) | 32.5% ± 4.7% | 27.3% ± 4.5% | 40.2% ± 4.9% |
| Nevada (n = 84) | 23.2% ± 4.3% | 19.8% ± 4.0% | 57.0% ± 5.0% |

**Figure 26 (cont'd): Public Library Outlet Public Access Wireless Internet Connectivity by State.**

| *State* | Wireless currently available | Wireless not currently available, but there are plans to make it available within the next year. | Wireless not currently available and no plans to make it available within the next year |
|---|---|---|---|
| New Hampshire (n = 223) | 38.8% ± 4.9% | 13.1% ± 3.4% | 48.1% ± 5.0% |
| New Jersey (n = 455) | 50.9% ± 5.0% | 30.0% ± 4.6% | 19.1% ± 3.9% |
| New Mexico (n = 99) | 34.0% ± 4.8% | 36.1% ± 4.8% | 29.9% ± 4.6% |
| New York (n = 1040) | 42.0% ± 4.9% | 26.6% ± 4.4% | 31.4% ± 4.6% |
| North Carolina (n = 381) | 13.7% ± 3.5% | 41.5% ± 4.9% | 44.8% ± 5.0% |
| Ohio (n = 703) | 29.3% ± 4.6% | 28.9% ± 4.5% | 41.8% ± 4.9% |
| Oklahoma (n = 204) | 7.0% ± 2.6% | 20.1% ± 4.0% | 72.8% ± 4.5% |
| Oregon (n = 191) | 24.8% ± 4.3% | 21.3% ± 4.1% | 53.9% ± 5.0% |
| Pennsylvania (n = 611) | 44.7% ± 5.0% | 17.2% ± 3.8% | 38.1% ± 4.9% |
| Rhode Island (n = 72) | 53.9% ± 5.0% | 46.1% ± 5.0% | -- |
| South Carolina (n = 182) | 20.2% ± 4.0% | 29.2% ± 4.6% | 50.6% ± 5.0% |
| Tennessee (n = 278) | 31.6% ± 4.7% | 27.1% ± 4.5% | 41.2% ± 4.9% |
| Texas (n = 815) | 40.8% ± 4.9% | 23.3% ± 4.2% | 35.8% ± 4.8% |
| Utah (n = 103) | 42.4% ± 5.0% | 31.9% ± 4.7% | 25.7% ± 4.4% |
| Vermont (n = 185) | 34.4% ± 4.8% | 16.6% ± 3.7% | 49.0% ± 5.0% |
| Virginia (n = 330) | 63.8% ± 4.8% | 20.5% ± 4.0% | 15.7% ± 3.7% |
| Washington, DC (n = 21) | 0.0% | 100% ± 0.0% | 0.0% |
| West Virginia (n = 161) | 8.2% ± 2.8% | 31.8% ± 4.7% | 60.0% ± 4.9% |
| Wisconsin (n = 449) | 31.0% ± 4.6% | 21.8% ± 4.1% | 47.2% ± 5.0% |
| Wyoming (n = 72) | 28.0% ± 4.5% | 21.6% ± 4.1% | 50.4% ± 5.0% |
| ***National*** | 37.4% ± 4.8% (n = 5,943) | 23.6% ± 4.2% (n = 3,743) | 39.0% ± 4.9% (n = 6,201) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 26 (above) shows wide disparities in wireless access by state. The leaders in current wireless availability in public library outlets are Connecticut (55.6%), Indiana (56.6%), Kentucky (52.0%), New Jersey (50.9%), Rhode Island (53.9%), and Virginia (63.8%). Mississippi (5.5%), Oklahoma (7.0%), and West Virginia (8.2%) have the lowest level of current wireless availability. North Carolina (41.5%) and Rhode Island (46.1%) have the highest percentage of outlets planning to add wireless in the next year. Mississippi (66.8%), Oklahoma (72.8%), and West Virginia (60.0%) have the highest percentage of library outlets with no plans to add wireless access. While public library branches in Washington DC do not have wireless at this time, there are plans to add wireless access within the next year.

**Figure 27: Public Library Outlet Public Access Workstations and Average Workstation Age by State.**

| *State* | Average Number of Workstations | Less than 1 years old | 1-2 years old | 2-3 years old | Greater than 3 years old |
|---|---|---|---|---|---|
| Alabama (n = 273) | 9.0 ± 9.4 | 2.7 ± 2.9 | 5.3 ± 4.3 | 4.0 ± 3.0 | 6.9 ± 7.5 |
| Alaska (n = 98) | 5.1 ± 3.8 | 2.3 ± 1.4 | 2.4 ± 1.8 | 2.3 ± 1.5 | 2.1 ± 1.4 |
| Arizona (n = 164) | 14.1 ± 21.1 | 10.9 ± 13.1 | 13.6 ± 26.8 | 4.8 ± 4.5 | 4.1 ± 3.6 |
| Arkansas (n = 206) | 6.5 ± 6.0 | 3.2 ± 2.3 | 3.6 ± 4.2 | 4.1 ± 4.0 | 4.7 ± 4.2 |
| California (n = 958) | 14.0 ± 21.1 | 9.7 ± 12.6 | 8.2 ± 11.8 | 16.3 ± 42.7 | 8.5 ± 16.0 |
| Colorado (n = 221) | 9.8 ± 12.6 | 3.4 ± 3.2 | 4.2 ± 3.5 | 9.9 ± 17.6 | 5.2 ± 6.3 |
| Connecticut (n = 232) | 12.5 ± 12.0 | 6.4 ± 7.9 | 5.1 ± 5.7 | 5.5 ± 7.9 | 7.0 ± 6.6 |
| Delaware (n = 33) | 8.7 ± 6.1 | 6.6 ± 6.5 | 4.2 ± 2.7 | 7.4 ± 4.0 | 1.7 ± 1.0 |
| Florida (n = 466) | 21.7 ± 35.3 | 22.2 ± 51.4 | 8.7 ± 9.0 | 10.6 ± 23.1 | 5.5 ± 5.6 |
| Georgia (n = 335) | 14.4 ± 12.6 | 3.0 ± 1.6 | 9.2 ± 7.1 | 7.2 ± 7.9 | 7.0 ± 6.8 |
| Idaho (n = 132) | 6.1 ± 7.9 | 2.1 ± 1.1 | 1.7 ± 1.3 | 4.3 ± 6.9 | 3.1 ± 1.9 |
| Illinois (n = 771) | 11.6 ± 20.7 | 3.9 ± 4.1 | 7.9 ± 27.1 | 6.6 ± 11.9 | 5.7 ± 7.8 |
| Indiana (n = 426) | 17.5 ± 26.8 | 8.9 ± 12.1 | 5.7 ± 8.0 | 12.3 ± 15.0 | 5.8 ± 5.2 |
| Iowa (n = 525) | 5.2 ± 4.2 | 2.6 ± 2.1 | 2.7 ± 3.3 | 2.6 ± 2.0 | 2.9 ± 2.1 |
| Kentucky (n = 185) | 9.4 ± 10.1 | 2.1 ± 2.2 | 3.7 ± 8.3 | 7.0 ± 5.3 | 5.9 ± 5.0 |
| Louisiana (n = 276) | 8.3 ± 8.7 | 3.3 ± 3.9 | 4.5 ± 4.5 | 3.9 ± 4.0 | 6.0 ± 7.6 |
| Maryland (n = 171) | 14.6 ± 15.4 | 6.2 ± 7.0 | 6.2 ± 9.6 | 10.2 ± 12.8 | 8.6 ± 12.8 |
| Massachusetts (n = 455) | 11.7 ± 31.9 | 3.7 ± 4.2 | 5.8 ± 8.0 | 7.1 ± 14.5 | 7.4 ± 18.6 |
| Michigan (n = 650) | 14.8 ± 25.7 | 8.0 ± 10.5 | 10.7 ± 14.8 | 7.4 ± 9.8 | 5.5 ± 8.8 |
| Minnesota (n = 344) | 8.0 ± 11.7 | 2.8 ± 2.9 | 3.5 ± 4.0 | 3.7 ± 4.2 | 4.3 ± 4.8 |
| Mississippi (n = 229) | 6.1 ± 8.1 | 3.0 ± 2.5 | 8.4 ± 15.4 | 5.9 ± 6.4 | 3.8 ± 3.3 |
| Missouri (n = 343) | 11.7 ± 10.1 | 5.7 ± 5.8 | 6.6 ± 8.7 | 7.2 ± 7.9 | 4.9 ± 6.1 |
| Montana (n = 103) | 6.3 ± 5.4 | 3.1 ± 2.5 | 4.3 ± 4.3 | 3.4 ± 3.0 | 2.9 ± 4.2 |
| Nevada (n = 83) | 15.7 ± 20.6 | 4.0 ± 2.0 | 3.2 ± 1.9 | 9.4 ± 8.5 | 2.8 ± 2.6 |

| Figure 27 (cont'd): Public Library Outlet Public Access Workstations and Average Workstation Age by State. | | | | | |
|---|---|---|---|---|---|
| ***State*** | **Average Number of Workstations** | **Less than 1 years old** | **1-2 years old** | **2-3 years old** | **Greater than 3 years old** |
| New Hampshire (n = 223) | 4.8 ± 4.7 | 2.3 ± 1.9 | 4.5 ± 6.2 | 3.1 ± 2.4 | 3.6 ± 3.8 |
| New Jersey (n = 452) | 13.8 ± 13.8 | 5.6 ± 6.0 | 8.8 ± 14.2 | 5.4 ± 5.0 | 8.0 ± 9.0 |
| New Mexico (n = 97) | 7.8 ± 7.8 | 8.5 ± 9.3 | 3.3 ± 2.5 | 3.9 ± 2.9 | 3.6 ± 3.1 |
| New York (n = 1021) | 8.6 ± 9.5 | 3.9 ± 4.7 | 4.6 ± 5.1 | 4.8 ± 6.3 | 5.3 ± 5.4 |
| North Carolina (n = 364) | 12.5 ± 12.6 | 9.2 ± 9.7 | 6.7 ± 7.4 | 4.7 ± 3.7 | 5.7 ± 5.1 |
| Ohio (n = 676) | 11.1 ± 11.8 | 5.3 ± 8.0 | 8.6 ± 9.8 | 9.1 ± 10.9 | 7.9 ± 9.8 |
| Oklahoma (n = 204) | 9.4 ± 14.0 | 1.9 ± .90 | 2.3 ± 1.9 | 3.0 ± 3.9 | 3.5 ± 2.1 |
| Oregon (n = 196) | 10.2 ± 12.9 | 2.1 ± 2.3 | 8.0 ± 14.1 | 4.0 ± 2.7 | 8.3 ± 12.9 |
| Pennsylvania (n = 613) | 10.0 ± 9.2 | 7.5 ± 10.0 | 4.4 ± 6.8 | 5.3 ± 6.7 | 6.5 ± 6.3 |
| Rhode Island (n = 72) | 10.1 ± 12.4 | 6.1 ± 4.3 | 5.0 ± 6.9 | 4.1 ± 6.1 | 9.0 ± 5.7 |
| South Carolina (n = 184) | 9.3 ± 10.3 | 7.8 ± 12.3 | 5.7 ± 5.2 | 5.4 ± 9.8 | 4.4 ± 3.7 |
| Tennessee (n = 270) | 9.4 ± 10.3 | 4.4 ± 4.3 | 4.2 ± 5.2 | 8.8 ± 16.0 | 3.9 ± 3.4 |
| Texas (n = 806) | 12.3 ± 16.1 | 6.6 ± 7.8 | 6.1 ± 6.6 | 6.4 ± 6.0 | 7.4 ± 7.2 |
| Utah (n = 103) | 7.9 ± 5.7 | 1.7 ± 1.0 | 8.8 ± 7.5 | 4.2 ± 5.6 | 5.1 ± 4.2 |
| Vermont (n = 180) | 4.5 ± 4.4 | 2.0 ± .91 | 2.4 ± 1.1 | 3.6 ± 3.9 | 3.2 ± 2.7 |
| Virginia (n = 326) | 13.0 ± 11.0 | 5.7 ± 7.3 | 6.4 ± 8.4 | 7.7 ± 8.6 | 7.8 ± 8.9 |
| Washington, DC (n = 21) | 6.7 ± 2.6 | -- | 6.0 ± 1.2 | 5.0 ± 0.0 | 2.8 ± 1.2 |
| West Virginia (n = 158) | 5.4 ± 3.5 | 3.7 ± 3.9 | 2.2 ± 1.7 | 3.1 ± 2.5 | 3.7 ± 3.5 |
| Wisconsin (n = 446) | 8.5 ± 9.7 | 2.9 ± 3.3 | 4.1 ± 5.2 | 4.0 ± 4.8 | 4.8 ± 6.6 |
| Wyoming (n = 72) | 4.3 ± 5.5 | 2.7 ± 1.3 | 2.4 ± 4.9 | 3.1 ± 3.5 | 2.5 ± 2.4 |
| ***National*** | 10.7 (n = 15,740) | 5.3 (n = 5,123) | 6.1 (n = 5,633) | 6.4 (n = 6,261) | 5.6 (n = 8,817) |
| **Key:** * : Insufficient data to report -- : No data to report | | | | | |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

In Figure 27 (above), the states in which the public library outlets have the highest average number of workstations are Florida (21.7), Indiana (17.5), and Nevada (15.7). The states with the lowest average number of workstations are New Hampshire (4.8), Vermont (4.5), and Wyoming (4.3). The highest average number of workstations less than one year old can be found in Florida, while the highest average number of workstations greater than three years old can be found in Rhode Island.

**Figure 28: Public Library Outlet Public Access Workstations Upgrade Schedule within the Next Two Years By State.**

| *State* | There are plans to add workstations | Plans to add workstations are under consideration | There are no plans to add workstations | There are plans to reduce workstations | The average number of workstations to be added | The average number of workstations to be reduced |
|---|---|---|---|---|---|---|
| Alabama (n = 273) | 26.7% ± 4.4% | 28.2% ± 4.5% | 37.9% ± 4.9% | -- | 7.4 ± 10.3 | -- |
| Alaska (n = 98) | 25.4% ± 4.4% | 26.9% ± 4.5% | 45.3% ± 5.0% | -- | 1.5 ± 1.0 | -- |
| Arizona (n = 164) | 17.8% ± 3.8% | 30.0% ± 4.6% | 47.4% ± 5.0% | -- | 3.5 ± 3.2 | -- |
| Arkansas (n = 206) | 30.5% ± 4.6% | 21.3% ± 4.1% | 41.4% ± 4.9% | -- | 3.0 ± 2.7 | -- |
| California (n = 963) | 16.1% ± 3.7% | 27.8% ± 4.5% | 53.8% ± 5.0% | * | 13.2 ± 20.6 | 7.0 ± 0.0 |
| Colorado (n = 240) | 17.6% ± 3.8% | 21.6% ± 4.1% | 47.9% ± 5.0% | -- | 10.7 ± 11.5 | -- |
| Connecticut (n = 228) | 26.1% ± 4.4% | 27.2% ± 4.5% | 46.6% ± 5.0% | -- | 4.9 ± 6.5 | -- |
| Delaware (n = 33) | 43.8% ± 5.0% | 23.6% ± 4.3% | 32.7% ± 4.8% | -- | 2.8 ± .78 | -- |
| Florida (n = 470) | 17.6% ± 3.8% | 56.9% ± 5.0% | 25.5% ± 4.4% | -- | 14.8 ± 24.0 | -- |
| Georgia (n = 345) | 14.2% ± 3.5% | 54.6% ± 5.0% | 31.2% ± 4.6% | -- | 8.7 ± 6.2 | -- |
| Idaho (n = 132) | 11.5% ± 3.2% | 22.9% ± 4.2% | 21.3% ± 4.1% | -- | 6.2 ± 9.8 | -- |
| Illinois (n = 771) | 19.2% ± 3.9% | 35.5% ± 4.8% | 43.9% ± 5.0% | -- | 6.8 ± 9.5 | -- |
| Indiana (n = 426) | 16.6% ± 3.7% | 31.4% ± 4.7% | 51.9% ± 5.0% | -- | 4.1 ± 2.4 | -- |
| Iowa (n = 535) | 11.1% ± 3.1% | 22.0% ± 4.2% | 61.7% ± 4.9% | * | 3.3 ± 4.0 | 3.0 ± 0.0 |
| Kentucky (n = 185) | 11.5% ± 3.2% | 49.9% ± 5.0% | 38.7% ± 4.9% | -- | 3.0 ± 1.0 | -- |
| Louisiana (n = 281) | 10.1% ± 3.0% | 28.8% ± 4.5% | 56.3% ± 5.0% | -- | 8.4 ± 7.4 | -- |
| Maryland (n = 173) | 23.1% ± 4.2% | 26.2% ± 4.4% | 48.9% ± 5.0% | -- | 6.9 ± 5.9 | -- |
| Massachusetts (n = 461) | 17.9% ± 3.8% | 36.2% ± 4.8% | 44.6% ± 5.0% | -- | 3.4 ± 4.3 | -- |
| Michigan (n = 650) | 20.2% ± 4.0% | 36.7% ± 4.8% | 42.6% ± 5.0% | -- | 5.6 ± 10.5 | -- |
| Minnesota (n = 354) | 13.7% ± 3.5% | 21.7% ± 4.1% | 61.9% ± 4.9% | -- | 14.2 ± 48.2 | -- |
| Mississippi (n = 232) | 6.4% ± 2.5% | 28.3% ± 4.5% | 62.0% ± 4.9% | -- | 4.7 ± 5.7 | -- |
| Missouri (n = 347) | 8.0% ± 2.7% | 36.6% ± 4.8% | 55.4% ± 5.0% | -- | 5.9 ± 4.1 | -- |
| Montana (n = 103) | 18.5% ± 3.9% | 29.3% ± 4.6% | 50.0% ± 5.0% | -- | 4.1 ± 3.6 | -- |
| Nevada (n = 83) | 5.9% ± 2.4% | 21.0% ± 4.1% | 73.1% ± 4.5% | -- | 3.0 ± 1.6 | -- |

**Figure 28 (cont'd): Public Library Outlet Public Access Workstations Upgrade Schedule within the Next Two Years By State.**

| *State* | There are plans to add workstations | Plans to add workstations are under consideration | There are no plans to add workstations | There are plans to reduce workstations | The average number of workstations to be added | The average number of workstations to be reduced |
|---|---|---|---|---|---|---|
| New Hampshire (n = 226) | 4.9% ± 2.2% | 8.9% ± 2.9% | 65.4% ± 4.8% | -- | 1.8 ± .87 | -- |
| New Jersey (n = 452) | 13.3% ± 3.4% | 32.0% ± 4.7% | 24.0% ± 4.3% | -- | 4.6 ± 3.9 | -- |
| New Mexico (n = 99) | 27.7% ± 4.5% | 43.2% ± 5.0% | 25.1% ± 4.4% | -- | 3.4 ± 2.1 | -- |
| New York (n = 1033) | 25.4% ± 4.4% | 29.1% ± 4.5% | 43.2% ± 5.0% | * | 7.3 ± 5.9 | 2.0 ± 0.0 |
| North Carolina (n = 364) | 37.1% ± 4.8% | 18.8% ± 3.9% | 40.6% ± 4.9% | -- | 3.0 ± 2.0 | -- |
| Ohio (n = 703) | 8.0% ± 2.7% | 24.2% ± 4.3% | 27.4% ± 4.5% | -- | 4.0 ± 4.4 | -- |
| Oklahoma (n = 204) | 1.0% ± 1.0% | 6.0% ± 2.4% | 6.5% ± 2.5% | -- | 1.0 ± 0.0 | -- |
| Oregon (n = 196) | 20.8% ± 4.1% | 19.6% ± 4.0% | 56.4% ± 5.0% | 1.9% ± 1.4% | 4.5 ± 5.7 | 6.0 ± 0.0 |
| Pennsylvania (n = 616) | 18.9% ± 3.9% | 31.7% ± 4.7% | 46.4% ± 5.0% | * | 5.9 ± 6.9 | 5.0 ± 0.0 |
| Rhode Island (n = 72) | 17.7% ± 3.8% | 18.4% ± 3.9% | 63.9% ± 4.8% | -- | 7.1 ± 10.1 | -- |
| South Carolina (n = 184) | 34.9% ± 4.8% | 20.1% ± 4.0% | 39.7% ± 4.9% | -- | 7.4 ± 8.7 | -- |
| Tennessee (n = 278) | 27.2% ± 4.5% | 25.4% ± 4.4% | 42.5% ± 5.0% | -- | 5.7 ± 5.3 | -- |
| Texas (n = 815) | 18.0% ± 3.8% | 36.8% ±4.8% | 41.2% ± 4.9% | -- | 6.7 ± 6.2 | -- |
| Utah (n = 106) | 23.4% ± 4.3% | 17.7% ± 3.8% | 54.3% ± 5.0% | -- | 3.2 ± 2.9 | -- |
| Vermont (n = 185) | 8.9% ± 2.9% | 20.4% ± 4.0% | 35.7% ± 4.8% | -- | 1.9 ± 1.0 | -- |
| Virginia (n = 330) | 15.8% ± 3.7% | 20.5% ± 4.0% | 60.1% ± 4.9% | 1.7% ± 1.3% | 11.4 ± 16.9 | 2.0 ± 0.0 |
| Washington, DC (n = 21) | 70.7% ± 4.7% | -- | 29.3% ±4.5% | -- | 2.7 ± 1.3 | -- |
| West Virginia (n = 161) | 17.2% ± 3.8% | 28.0% ± 4.5% | 50.6% ± 5.0% | -- | 2.3 ± 1.1 | -- |
| Wisconsin (n = 452) | 13.8% ± 3.5% | 33.9% ± 4.7% | 48.4% ± 5.0% | 1.0% ± 1.0% | 3.7 ± 3.5 | 4.0 ± 0.0 |
| Wyoming (n = 72) | 31.6% ± 4.7% | 18.0% ± 3.9% | 50.4% ± 5.0% | -- | 1.5 ± .88 | -- |
| ***National*** | 16.6% ± 3.7% (n=2,644) | 28.6% ± 4.5% (n=4,559) | 45.4% ± 5.0% (n=7,231) | 0.2% ± 0.4% (n=27) | 6.6 (n=2,644) | 4.0 (n=27) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

As demonstrated by Figure 28 (above), the highest percentages of library outlets planning to add more workstations are in Delaware (43.8%), North Carolina (37.1%), South Carolina (34.9%), and Washington DC (70.7%). Library outlets in few states are planning to reduce the number of workstations, with the highest percentages in Oregon (1.9%) and Virginia (1.7%). The states with the highest percentages of library outlets with no plans to change the number of workstations are in Nevada (73.1%), New Hampshire (65.4%), and Rhode Island (63.9%).

**Figure 29: Public Library Outlet Public Access Workstations Replacement Schedule within the Next Two Years By State.**

| *State* | There are plans to replace workstations | Plans to replace workstations are under consideration | There are no plans to replace workstations | The average number of workstations to be replaced |
|---|---|---|---|---|
| Alabama (n = 262) | 38.7% ± 4.9% | 23.1% ± 4.2% | 38.2% ± 4.9% | 8.4 ± 9.4 |
| Alaska (n = 96) | 33.5% ± 4.7% | 41.7% ± 5.0% | 24.8% ± 4.3% | 2.5 ± 2.6 |
| Arizona (n = 158) | 19.4% ± 4.0% | 32.5% ± 4.7% | 48.1% ± 5.0% | 16.8 ± 28.8 |
| Arkansas (n = 200) | 63.5% ± 4.8% | 14.3% ± 3.5% | 22.2% ± 4.2% | 6.0 ± 17.0 |
| California (n = 950) | 41.1% ± 4.9% | 39.4% ± 4.9% | 19.5% ± 4.0% | 8.8 ± 14.1 |
| Colorado (n = 201) | 46.7% ± 5.0% | 32.9% ± 4.7% | 20.4% ± 4.0% | 5.9 ± 7.6 |
| Connecticut (n = 228) | 33.5% ± 4.7% | 41.5% ± 4.9% | 25.0% ± 4.3% | 6.6 ± 6.5 |
| Delaware (n = 33) | 53.2% ± 5.1% | 26.3% ± 4.5% | 20.5% ± 4.1% | 7.6 ± 4.0 |
| Florida (n = 466) | 40.5% ± 4.9% | 48.5% ± 5.0% | 11.0% ± 3.1% | 11.7 ± 22.9 |
| Georgia (n = 340) | 35.3% ± 4.8% | 59.3% ± 4.9% | 5.4% ± 2.3% | 5.5 ± 3.2 |
| Idaho (n = 73) | 44.5% ± 5.0% | 30.8% ± 4.7% | 24.7% ± 4.3% | 3.1 ± 3.6 |
| Illinois (n = 760) | 29.8% ± 4.6% | 39.6% ± 4.9% | 30.6% ± 4.6% | 7.3 ± 10.9 |
| Indiana (n = 421) | 52.0% ± 5.0% | 32.4% ± 4.7% | 15.6% ± 3.6% | 19.7 ± 29.3 |
| Iowa (n = 504) | 29.9% ± 4.6% | 27.2% ± 4.5% | 42.8% ± 5.0% | 3.1 ± 3.5 |
| Kentucky (n = 185) | 34.9% ± 4.8% | 47.6% ± 5.0% | 17.5% ± 3.8% | 6.6 ± 11.0 |
| Louisiana (n = 276) | 37.5% ± 4.9% | 37.7% ± 4.9% | 24.8% ± 4.3% | 3.7 ± 4.0 |
| Maryland (n = 152) | 27.3% ± 4.5% | 33.7% ± 4.7% | 39.0% ± 4.9% | 14.1 ± 18.2 |
| Massachusetts (n = 451) | 39.4% ± 4.9% | 38.7% ± 4.9% | 21.9% ± 4.1% | 4.9 ± 5.4 |
| Michigan (n = 643) | 32.4% ± 4.7% | 39.8% ± 4.9% | 27.8% ± 4.5% | 7.4 ± 9.7 |
| Minnesota (n = 313) | 37.2% ± 4.8% | 29.9% ± 4.6% | 32.9% ± 4.7% | 5.1 ± 6.9 |
| Mississippi (n = 226) | 34.2% ± 4.8% | 46.3% ± 5.0% | 19.5% ± 4.0% | 4.5 ± 3.9 |
| Missouri (n = 347) | 19.3% ± 4.0% | 40.5% ± 4.9% | 40.2% ± 4.9% | 9.6 ± 9.5 |
| Montana (n = 101) | 41.1% ± 4.9% | 25.6% ± 4.4% | 33.4% ± 4.7% | 4.9 ± 5.6 |
| Nevada (n = 83) | 18.2% ± 3.9% | 28.0% ± 4.5% | 53.7% ± 5.0% | 15.9 ± 8.5 |

**Figure 29 (cont'd): Public Library Outlet Public Access Workstations Replacement Schedule within the Next Two Years By State.**

| *State* | There are plans to replace workstations | Plans to replace workstations are under consideration | There are no plans to replace workstations | The average number of workstations to be replaced |
|---|---|---|---|---|
| New Hampshire (n = 187) | 35.2% ± 4.8% | 30.6% ± 4.6% | 34.3% ± 4.8% | 2.7 ± 2.5 |
| New Jersey (n = 301) | 30.1% ± 4.6% | 48.8% ± 5.0% | 21.1% ± 4.1% | 5.2 ± 4.3 |
| New Mexico (n = 95) | 30.7% ± 4.6% | 59.0% ± 4.9% | 10.3% ± 3.1% | 6.1 ± 3.2 |
| New York (n = 1,017) | 34.4% ± 4.8% | 33.4% ± 4.7% | 32.2% ± 4.7% | 6.9 ± 7.9 |
| North Carolina (n = 343) | 45.7% ± 5.0% | 34.1% ± 4.8% | 20.1% ± 4.0% | 3.9 ± 2.6 |
| Ohio (n = 424) | 19.1% ± 3.9% | 57.8% ± 4.9% | 23.1% ± 4.2% | 12.8 ± 12.2 |
| Oklahoma (n = 28) | 14.9% ± 3.6% | 37.2% ± 4.9% | 47.9% ± 5.1% | 2.0 ± 1.2 |
| Oregon (n = 190) | 26.6% ± 4.4% | 29.2% ± 4.6% | 44.2% ± 5.0% | 11.6 ± 19.4 |
| Pennsylvania (n = 602) | 36.5% ± 4.8% | 33.2% ± 4.7% | 30.2% ± 4.6% | 7.1 ± 9.0 |
| Rhode Island (n = 72) | 68.6% ± 4.7% | 12.5% ± 3.3% | 18.9% ± 3.9% | 7.1 ± 5.7 |
| South Carolina (n = 170) | 52.3% ± 5.0% | 20.9% ± 4.1% | 26.8% ± 4.4% | 9.6 ± 12.4 |
| Tennessee (n = 264) | 35.9% ± 4.8% | 42.2% ± 5.0% | 21.9% ± 4.1% | 3.2 ± 1.3 |
| Texas (n = 776) | 34.1% ± 4.7% | 47.3% ± 5.0% | 18.6% ± 3.9% | 7.8 ± 8.9 |
| Utah (n = 100) | 39.4% ± 4.9% | 36.2% ± 4.8% | 24.4% ± 4.3% | 4.9 ± 6.9 |
| Vermont (n = 118) | 32.0% ± 4.7% | 28.0% ± 4.5% | 40.0% ± 4.9% | 2.8 ± 1.8 |
| Virginia (n = 327) | 49.0% ± 5.0% | 32.4% ± 4.7% | 18.6% ± 3.9% | 8.1 ± 8.9 |
| Washington, DC (n = 21) | 100.0% ± 0.0% | -- | -- | 7.3 ± 1.5 |
| West Virginia (n = 158) | 26.7% ± 4.4% | 50.9% ± 5.0% | 22.4% ± 4.2% | 3.8 ± 1.9 |
| Wisconsin (n = 432) | 39.5% ± 4.9% | 33.3% ± 4.7% | 27.2% ± 4.5% | 4.3 ± 3.0 |
| Wyoming (n = 64) | 51.6% ± 5.0% | 44.4% ± 5.0% | 4.0% ± 1.1% | 1.7 ± 1.6 |
| ***National*** | 35.3% ± 4.8% (n = 5,065) | 37.5% ± 4.8% (n = 5,391) | 27.2% ± 4.5% (n = 3,903) | 7.2 (n = 5,065) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 29 (above) reveals that the states with the highest percentages of public library outlets planning to replace workstations are Arkansas (63.5%), Rhode Island (68.6%), and Washington DC (100.0%). The states with the highest percentages of public library outlets considering a plan to replace workstations are Georgia (59.3%) and Ohio (57.8%). The states with the highest percentages of public library outlets with no plan to replace workstations are Arizona (48.1%), Oklahoma (53.7%), and Nevada (47.9%).

**Figure 30: Public Library's Ability to Follow Its Upgrade/Replacement Schedule for Public Access Workstations by State.**

| *State* | Yes | No | There is no workstation replacement or addition schedule | Not applicable |
|---|---|---|---|---|
| Alabama (n = 258) | 48.5% ± 5.0% | 14.1% ± 3.5% | 32.9% ± 4.7% | 4.5% ± 2.1% |
| Alaska (n = 84) | 34.0% ± 4.8% | 17.3% ± 3.8% | 27.5% ± 4.5% | 21.2% ± 4.1% |
| Arizona (n = 161) | 77.2% ± 4.2% | -- | 12.3% ± 3.3% | 10.5% ± 3.1% |
| Arkansas (n = 189) | 43.3% ± 5.0% | 8.3% ± 2.8% | 48.4% ± 5.0% | -- |
| California (n = 943) | 68.3% ± 4.7% | 9.8% ± 3.0% | 15.9% ± 3.7% | 6.0% ± 2.4% |
| Colorado (n = 221) | 77.6% ± 4.2% | 2.3% ± 1.5% | 15.5% ± 3.6% | 4.6% ± 2.1% |
| Connecticut (n = 212) | 52.2% ± 5.0% | 18.4% ± 3.9% | 26.2% ± 4.4% | 3.2% ± 1.8% |
| Delaware (n = 33) | 100.0% ± 0.0% | -- | -- | -- |
| Florida (n = 466) | 68.2% ± 4.7% | 9.3% ± 2.9% | 21.7% ± 4.1% | * |
| Georgia (n = 345) | 44.6% ± 5.0% | 4.0% ± 2.0% | 51.3% ± 5.0% | -- |
| Idaho (n = 72) | 32.8% ± 4.7% | 12.6% ± 3.3% | 50.4% ± 5.0% | 4.2% ± 2.0% |
| Illinois (n = 739) | 53.6% ± 5.0% | 7.4% ± 2.6% | 35.0% ± 4.8% | 4.0% ± 2.0% |
| Indiana (n = 426) | 70.4% ± 4.6% | 9.4% ± 2.9% | 20.3% ± 4.0% | -- |
| Iowa (n = 497) | 41.6% ± 4.9% | 9.9% ± 3.0% | 42.9% ± 5.0% | 5.6% ± 2.3% |
| Kentucky (n = 185) | 37.4% ± 4.9% | 12.3% ± 3.3% | 48.1% ± 5.0% | 2.3% ± 1.5% |
| Louisiana (n = 276) | 58.9% ± 4.9% | -- | 30.6% ± 4.6% | 10.5% ± 3.1% |
| Maryland (n = 171) | 74.4% ± 4.4% | 19.7% ± 4.0% | 5.3% ± 2.2% | -- |
| Massachusetts (n = 445) | 45.0% ± 5.0% | 16.8% ± 3.7% | 36.6% ± 4.8% | 1.6% ± 1.3% |
| Michigan (n = 631) | 63.4% ± 4.8% | 7.0% ± 2.6% | 27.3% ± 4.5% | 2.3% ± 1.5% |
| Minnesota (n = 319) | 42.8% ± 5.0% | 18.7% ± 3.9% | 30.8% ± 4.6% | 7.7% ± 2.7% |
| Mississippi (n = 229) | 40.2% ± 4.9% | 20.2% ± 4.0% | 35.9% ± 4.8% | 3.7% ± 1.9% |
| Missouri (n = 339) | 47.3% ± 5.0% | 7.9% ± 2.7% | 29.7% ± 4.6% | 15.2% ± 3.6% |
| Montana (n = 101) | 35.6% ± 4.8% | 10.0% ± 3.0% | 47.7% ± 5.0% | 6.7% ± 2.5% |
| Nevada (n = 79) | 55.9% ± 5.0% | 17.6% ± 3.8% | 18.2% ± 3.9% | 8.3% ± 2.8% |

**Figure 30 (cont'd): Public Library's Ability to Follow Its Upgrade/Replacement Schedule for Public Access Workstations by State.**

| *State* | Yes | No | There is no workstation replacement or addition schedule | Not applicable |
|---|---|---|---|---|
| New Hampshire (n = 179) | 52.3% ± 5.0% | 8.8% ± 2.8% | 34.2% ± 4.8% | 4.7% ± 2.1% |
| New Jersey (n = 301) | 54.4% ± 5.0% | 6.8% ± 2.5% | 28.1% ± 4.5% | 10.8% ± 3.1% |
| New Mexico (n = 96) | 62.1% ± 4.9% | -- | 30.6% ± 4.6% | 7.3% ± 2.6% |
| New York (n = 972) | 46.1% ± 5.0% | 5.2% ± 2.2% | 35.7% ± 4.8% | 13.0% ± 3.4% |
| North Carolina (n = 356) | 56.3% ± 5.0% | 19.9% ± 4.0% | 12.9% ± 3.4% | 10.9% ± 3.1% |
| Ohio (n = 424) | 66.8% ± 4.7% | 8.4% ± 2.8% | 21.6% ± 4.1% | 3.2% ± 1.8% |
| Oklahoma (n = 28) | 37.1% ± 4.9% | 8.0% ± 2.8% | 24.1% ± 4.4% | 30.8% ± 4.7% |
| Oregon (n = 182) | 48.8% ± 5.0% | 7.4% ± 2.6% | 34.9% ± 4.8% | 8.9% ± 2.9% |
| Pennsylvania (n = 572) | 48.2% ± 5.0% | 13.3% ± 3.4% | 26.1% ±4.4% | 12.4% ± 0% |
| Rhode Island (n = 72) | 92.1% ± 2.7% | -- | 7.9% ± 2.7% | -- |
| South Carolina (n = 179) | 51.5% ± 5.0% | 10.9% ± 3.1% | 33.7% ± 4.7% | 4.0% ± 2.0% |
| Tennessee (n = 253) | 48.1% ± 5.0% | 9.1% ± 2.9% | 20.1% ± 4.0% | 22.7% ± 4.2% |
| Texas (n = 774) | 46.5% ± 5.0% | 13.6% ± 3.4% | 33.9% ± 4.7% | 6.0% ± 2.4% |
| Utah (n = 100) | 68.7% ± 4.7% | 16.6% ± 3.7% | 11.4% ± 3.2% | 3.3% ± 1.8% |
| Vermont (n = 113) | 37.5% ± 4.9% | 18.8% ± 3.9% | 39.6% ± 4.9% | 4.2% ± 2.0% |
| Virginia (n = 308) | 80.9% ± 3.9% | 9.4% ± 2.9% | 9.7% ± 3.0% | -- |
| Washington, DC (n = 21) | -- | -- | 100.0% ± 0.0% | -- |
| West Virginia (n = 151) | 42.3% ± 5.0% | 19.6% ± 4.0% | 31.6% ± 4.7% | 6.5% ± 2.5% |
| Wisconsin (n = 436) | 54.5% ± 5.0% | 9.4% ± 2.9% | 26.0% ± 4.4% | 10.1% ± 3.0% |
| Wyoming (n = 72) | 85.6% ± 3.5% | -- | 14.4% ± 3.5% | -- |
| ***National*** | 54.1% ± 5.0% (n = 7,697) | 10.9% ± 3.1% (n = 1,548) | 29.5% ± 4.6% (n = 4,196) | 5.6% ± 2.3% (n = 795) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

According to Figure 30 (above), the states with the highest percentages of public library outlets that are able to follow their workstations replacement schedules are Delaware (100.0%),

Rhode Island (92.1%), and Wyoming (85.6%). The states with the highest percentages of public library outlets that are not able to follow their workstations replacement schedules are Maryland (19.7%), Mississippi (20.2%), North Carolina (19.9%), and West Virginia (19.6%). The states with the highest percentages of outlets with no replacement schedule are Arkansas (48.4%), Kentucky (48.1%), Montana (47.7%), and Washington DC (100.0%).

As Figure 31 (below) shows, the two most significant factors influencing decisions to add further workstations in public library outlets in almost every state are space limitations and cost. Wyoming (0.0%) was the only state where less than fifty percent of outlets noted space limitations as a factor; while cost was a factor for the lowest percentage of library outlets in Arizona (32.6%). Maintenance and upkeep were a factor for the highest percentages of library outlets in Utah (77.1%) and Washington DC (100.0%). Utah was the state where both staff time (82.2%) and inadequate bandwidth (88.1%) were a factor for the highest percentage of library outlets. Rhode Island was the state where the highest percentage of library outlets (13.1%) ranked the purchase of laptops as a factor, while Florida was the state where the highest percentage of library outlets (38.8%) ranked the current availability of laptops as a factor. Library outlets in New Hampshire (39.2%) were most likely to feel that the current number of workstations meet patron needs.

**Figure 31: Factors Influencing Upgrade Decisions for Public Access Workstations by State.**

| *State* | Space limitations | Cost factors | Maintenance, upgrade, and general upkeep | Staff time | Inadequate bandwidth | Laptops purchase | Wireless access with laptops | The current workstations meets patron needs | Other |
|---|---|---|---|---|---|---|---|---|---|
| Alabama (n = 262) | 79.0% ± 4.1% | 81.7% ± 3.9% | 48.8% ± 5.0% | 20.0% ± 4.0% | 6.0% ± 2.4% | 2.4% ± 1.5% | 5.6% ± 2.3% | 20.7% ± 4.1% | 2.4% ± 1.5% |
| Alaska (n = 98) | 78.2% ± 4.2% | 68.5% ± 4.7% | 62.0% ± 4.9% | 7.3% ± 2.6% | 19.4% ± 4.0% | 2.4% ± 1.6% | 14.5% ± 3.5% | 9.7% ± 3.0% | 13.8% ± 3.5% |
| Arizona (n = 164) | 53.6% ± 5.0% | 32.6% ± 4.7% | 28.4% ± 4.5% | 39.7% ± 4.9% | 8.8% ± 2.9% | -- | 7.5% ± 2.6% | 13.1% ± 3.4% | 30.6% ± 4.6% |
| Arkansas (n = 206) | 81.2% ± 3.9% | 82.3% ± 3.8% | 47.0% ± 5.0% | 33.4% ± 4.7% | 8.6% ± 2.8% | 4.1% ± 2.0% | 8.6% ± 2.8% | 16.1% ± 3.7% | 4.9% ± 2.2% |
| California (n = 958) | 84.9% ± 3.6% | 71.1% ± 4.5% | 46.6% ± 5.0% | 28.3% ± 4.5% | 24.6% ± 4.3% | 2.7% ± 1.6% | 12.7% ± 3.3% | 8.9% ± 2.9% | 2.2% ± 1.5% |
| Colorado (n = 221) | 72.5% ± 4.5% | 55.7% ± 5.0% | 34.7% ± 4.8% | 24.3% ± 4.3% | 18.1% ± 3.9% | 5.9% ± 2.4% | 6.3% ± 2.4% | 23.2% ± 4.2% | 11.5% ± 3.2% |
| Connecticut (n = 228) | 72.2% ± 4.5% | 68.1% ± 4.7% | 40.1% ± 4.9% | 30.4% ± 4.6% | 1.5% ± 1.2% | 7.9% ± 2.7% | 22.6% ± 4.2% | 12.5% ± 3.3% | 10.3% ± 3.0% |
| Delaware (n = 33) | 91.2% ± 2.9% | 76.4% ± 4.3% | 29.3% ± 4.6% | 39.6% ± 5.0% | -- | -- | 11.8% ± 3.3% | 13.3% ± 3.5% | 8.8% ± 2.9% |
| Florida (n = 466) | 95.3% ± 2.1% | 42.9% ± 5.0% | 48.9% ± 5.0% | 22.6% ± 4.2% | 19.5% ± 4.0% | 1.7% ± 1.3% | 38.8% ± 4.9% | 13.0% ± 3.4% | 6.7% ± 2.5% |
| Georgia (n = 345) | 87.1% ± 3.4% | 82.7% ± 3.8% | 52.9% ± 5.0% | 23.6% ± 4.3% | 16.0% ± 3.7% | 1.0% ± 1.0% | -- | 3.3% ± 1.8% | 1.4% ± 1.2% |
| Idaho (n = 76) | 92.1% ± 2.7% | 84.9% ± 3.6% | 61.2% ± 4.9% | 11.9% ± 3.3% | 1.3% ± 1.1% | -- | 9.2% ± 2.9% | 19.7% ± 4.0% | 4.0% ± 2.0% |
| Illinois (n = 769) | 76.8% ± 4.2% | 73.6% ± 4.4% | 41.8% ± 4.9% | 17.6% ± 3.8% | 3.7% ± 1.9% | 1.6% ± 1.3% | 12.2% ± 3.3% | 25.0% ± 4.3% | 2.9% ± 1.7% |
| Indiana (n = 426) | 84.5% ± 3.6% | 59.0% ± 4.9% | 34.3% ± 4.8% | 19.3% ± 4.0% | 2.2% ± 1.5% | 5.6% ± 2.3% | 22.7% ± 4.2% | 37.7% ± 4.9% | 3.4% ± 1.8% |
| Iowa (n = 520) | 67.8% ± 4.7% | 78.0% ± 4.2% | 45.1% ± 5.0% | 18.2% ± 3.9% | 1.0% ± 1.0% | -- | 14.6% ± 3.5% | 33.2% ± 4.7% | 2.8% ± 1.7% |
| Kentucky (n = 185) | 83.1% ± 3.8% | 62.0% ± 4.9% | 39.2% ± 4.9% | 27.2% ± 4.5% | 2.3% ± 1.5% | 5.2% ± 2.2% | 22.0% ± 4.2% | 14.8% ± 3.6% | 2.3% ± 1.5% |
| Louisiana (n = 281) | 87.2% ± 3.4% | 38.4% ± 4.9% | 41.0% ± 4.9% | 19.7% ± 4.0% | 18.2% ± 3.9% | 3.0% ± 1.7% | 13.2% ± 3.4% | 25.8% ± 4.4% | 9.1% ± 2.9% |
| Maryland (n = 173) | 89.6% ± 3.1% | 84.2% ± 3.7% | 23.3% ± 4.2% | 23.9% ± 4.3% | 24.4% ± 4.3% | 2.1% ± 1.4% | 13.3% ± 3.4% | 5.8% ± 2.4% | 6.6% ± 2.5% |
| Massachusetts (n = 458) | 71.4% ± 4.5% | 80.5% ± 4.0% | 35.1% ± 4.8% | 18.6% ± 3.9% | 13.1% ± 3.4% | 2.8% ± 1.7% | 22.3% ± 4.2% | 11.7% ± 3.2% | 4.4% ± 2.0% |

**Figure 31 (cont'd): Factors Influencing Upgrade Decisions for Public Access Workstations by State.**

| *State* | Space limitations | Cost factors | Maintenance, upgrade, and general upkeep | Staff time | Inadequate bandwidth | Laptops purchase | Wireless access with laptops | The current workstations meets patron needs | Other |
|---|---|---|---|---|---|---|---|---|---|
| Michigan (n = 650) | 81.3% ± 3.9% | 62.2% ± 4.9% | 32.8% ± 4.7% | 20.5% ± 4.0% | 18.9% ± 3.9% | 1.2% ± 1.1% | 23.9% ± 4.3% | 14.7% ± 3.6% | 5.4% ± 2.3% |
| Minnesota (n = 349) | 65.7% ± 4.8% | 73.6% ± 4.4% | 41.3% ± 4.9% | 29.7% ± 4.6% | 6.0% ± 2.4% | -- | 17.5% ± 3.8% | 21.9% ± 4.1% | 8.0% ± 2.7% |
| Mississippi (n = 232) | 81.7% ± 3.9% | 85.9% ± 3.5% | 32.5% ± 4.7% | 20.9% ± 4.1% | 13.8% ± 3.5% | * | 5.2% ± 2.2% | 17.3% ± 3.8% | 1.2% ± 1.1% |
| Missouri (n = 347) | 70.1% ± 4.6% | 70.2% ± 4.6% | 46.8% ± 5.0% | 14.8% ± 3.6% | -- | 2.1% ± 1.4% | 6.1% ± 2.4% | 20.7% ± 4.1% | 11.5% ± 3.2% |
| Montana (n = 103) | 87.0% ± 3.4% | 84.8% ± 3.6% | 36.0% ± 4.8% | 23.9% ± 4.3% | 8.7% ± 2.8% | -- | 8.7% ± 2.8% | 25.0% ± 4.4% | 4.3% ± 2.1% |
| Nevada (n = 83) | 79.7% ± 4.0% | 58.9% ± 5.0% | 24.3% ± 4.3% | 9.1% ± 2.9% | 14.3% ± 3.5% | 2.0% ± 1.4% | 23.3% ± 4.3% | 16.9% ± 3.8% | 3.6% ± 1.9% |
| New Hampshire (n = 190) | 78.1% ± 4.2% | 74.0% ± 4.4% | 32.6% ± 4.7% | 13.9% ± 3.5% | 2.9% ± 1.7% | -- | 21.8% ± 4.1% | 39.2% ± 4.9% | 1.8% ± 1.3% |
| New Jersey (n = 310) | 83.5% ± 3.7% | 72.0% ± 4.5% | 35.8% ± 4.8% | 25.0% ± 4.3% | 3.3% ± 1.8% | 1.0% ± 1.0% | 22.4% ± 4.2% | 14.6% ± 3.5% | 1.0% ± 1.0% |
| New Mexico (n = 99) | 82.0% ± 3.9% | 50.6% ± 5.0% | 46.8% ± 5.0% | 35.9% ± 4.8% | 11.0% ± 3.2% | 3.3% ± 1.8% | 11.1% ± 3.2% | 12.7% ± 3.4% | 2.2% ± 1.5% |
| New York (n = 1,017) | 81.7% ± 3.9% | 80.5% ± 4.0% | 36.1% ± 4.8% | 15.9% ± 3.7% | 4.3% ± 2.0% | 10.2% ± 3.0% | 14.8% ± 3.6% | 18.0% ± 3.8% | 1.9% ± 1.4% |
| North Carolina (n = 364) | 79.0% ± 4.1% | 68.4% ± 4.7% | 29.9% ± 4.6% | 23.1% ± 4.2% | 16.0% ± 3.7% | -- | 10.5% ± 3.1% | 23.4% ± 4.2% | 1.1% ± 1.1% |
| Ohio (n = 424) | 86.1% ± 3.5% | 66.9% ± 4.7% | 46.8% ± 5.0% | 15.0% ± 3.6% | 3.0% ± 1.7% | 3.0% ± 1.7% | 28.1% ± 4.5% | 16.7% ± 3.7% | -- |
| Oklahoma (n = 28) | 71.5% ± 4.6% | 77.7% ± 4.2% | 73.1% ± 4.5% | 13.6% ± 3.5% | -- | -- | 14.9% ± 3.6% | 19.4% ± 4.0% | 7.4% ± 2.7% |
| Oregon (n = 192) | 78.2% ± 4.1% | 70.1% ± 4.6% | 35.0% ± 4.8% | 31.2% ± 4.6% | 7.1% ± 2.6% | -- | 14.6% ± 3.5% | 16.8% ± 3.8% | 4.5% ± 2.1% |
| Pennsylvania (n = 616) | 83.5% ± 3.7% | 78.7% ± 4.1% | 31.8% ± 4.7% | 12.5% ± 3.3% | 10.3% ± 3.0% | 4.0% ± 2.0% | 15.6% ± 3.6% | 29.6% ± 4.6% | 3.7% ± 1.9% |
| Rhode Island (n = 72) | 97.9% ± 1.4% | 43.5% ± 5.0% | 33.7% ± 4.8% | 3.1% ± 1.8% | -- | 13.1% ± 3.4% | 19.3% ± 4.0% | 14.1% ± 3.5% | -- |
| South Carolina (n = 184) | 82.6% ± 3.8% | 56.5% ± 5.0% | 32.2% ± 4.7% | 25.1% ± 4.4% | 3.4% ± 1.8% | 1.3% ± 1.1% | 23.7% ± 4.3% | 24.3% ± 4.3% | 7.7% ± 2.7% |
| Tennessee (n = 278) | 88.2% ± 3.2% | 80.9% ± 3.9% | 29.2% ± 4.6% | 6.6% ± 2.5% | 1.7% ± 1.3% | 3.3% ± 1.8% | 8.0% ± 2.7% | 13.8% ± 3.5% | 6.5% ± 2.5% |

**Figure 31 (cont'd): Factors Influencing Upgrade Decisions for Public Access Workstations by State.**

| *State* | Space limitations | Cost factors | Maintenance, upgrade, and general upkeep | Staff time | Inadequate bandwidth | Laptops purchase | Wireless access with laptops | The current workstations meets patron needs | Other |
|---|---|---|---|---|---|---|---|---|---|
| Texas (n = 812) | 76.1% ± 4.3% | 81.8% ± 3.9% | 43.4% ± 5.0% | 16.9% ± 3.8% | 6.7% ± 2.5% | 4.3% ± 2.0% | 13.1% ± 3.4% | 16.9% ± 3.8% | 5.4% ± 2.3% |
| Utah (n = 103) | 80.3% ± 4.0% | 72.7% ± 4.5% | 77.1% ± 4.2% | 82.2% ± 3.8% | 88.1% ± 3.3% | -- | 14.2% ± 3.5% | 30.0% ± 4.6% | 12.3% ± 3.3% |
| Vermont (n = 125) | 77.4% ± 4.2% | 81.1% ± 3.3% | 54.7% ± 5.0% | 13.2% ± 3.4% | -- | -- | 7.5% ± 2.7% | 24.5% ± 4.3% | 3.8% ± 1.9% |
| Virginia (n = 330) | 85.5% ± 3.5% | 56.8% ± 5.0% | 23.1% ± 4.2% | 9.9% ± 3.0% | 12.9% ± 3.4% | 9.3% ± 2.9% | 23.1% ± 4.2% | 29.9% ± 4.6% | 4.3% ± 2.0% |
| Washington, DC (n = 21) | 100.0% ± 0.0% | 100.0% ± 0.0% | 100.0% ± 0.0% | -- | -- | -- | -- | -- | -- |
| West Virginia (n = 158) | 93.2% ± 2.5% | 85.8% ± 3.5% | 35.4% ± 4.8% | 2.3% ± 1.5% | -- | -- | 21.0% ± 4.1% | 21.3% ± 4.1% | 4.2% ± 2.0% |
| Wisconsin (n = 452) | 75.2% ± 4.3% | 76.6% ± 4.2% | 39.1% ± 4.9% | 22.0% ± 4.2% | 3.2% ± 1.8% | 2.1% ± 1.4% | 14.2% ± 3.5% | 26.4% ± 4.4% | 1.4% ± 1.2% |
| Wyoming (n = 72) | -- | 56.8% ± 5.0% | 19.4% ± 4.0% | 21.6% ± 4.1% | 33.8% ± 3.4% | -- | 7.2% ± 2.6% | 28.8% ± 4.6% | 7.2% ± 2.6% |
| ***National*** | 79.9% ± 4.0% (n = 11,772) | 72.6% ± 4.5% (n = 10,703) | 38.8% ± 4.9% (n = 5,714) | 19.5% ± 4.0% (n = 2,882) | 8.8% ± 2.8% (n = 1,294) | 2.5% ± 1.6% (n = 365) | 15.5% ± 3.6% (n = 2,285) | 20.7% ± 4.1% (n = 3,048) | 4.5% ± 2.1% (n = 657) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

| Figure 32: Public Library Outlet Public Access Workstation Availability by State. | | | |
|---|---|---|---|
| ***State*** | **There are fewer public access Internet workstations than patrons who wish to use them at any given time** | **Only at certain times during a typical day are there fewer public access Internet workstations than patrons who wish to use them** | **There are always sufficient public access Internet workstations available for patrons who wish to use them** |
| Alabama (n = 262) | 12.1% ± 3.3% | 75.3% ± 4.3% | 12.6% ± 3.3% |
| Alaska (n = 98) | 27.8% ± 4.5% | 62.5% ± 4.9% | 9.7% ± 3.0% |
| Arizona (n = 164) | 9.5% ± 2.9% | 74.6% ± 4.4% | 15.9% ± 3.7% |
| Arkansas (n = 206) | 6.0% ± 2.4% | 67.8% ± 4.7% | 26.2% ± 4.4% |
| California (n = 954) | 22.2% ± 4.2% | 70.2% ± 4.6% | 7.6% ± 2.7% |
| Colorado (n = 221) | 12.7% ± 3.3% | 73.0% ± 4.5% | 14.3% ± 3.5% |
| Connecticut (n = 225) | 9.3% ± 2.9% | 83.1% ± 3.8% | 7.6% ± 2.7% |
| Delaware (n = 33) | 10.6% ± 3.1% | 89.4% ± 3.1% | -- |
| Florida (n = 454) | 9.4% ± 2.9% | 81.3% ± 3.9% | 9.3% ± 2.9% |
| Georgia (n = 345) | 14.9% ± 3.6% | 75.4% ± 4.3% | 9.7% ± 3.0% |
| Idaho (n = 132) | 26.0% ± 4.4% | 64.9% ± 4.8% | 9.2% ± 2.9% |
| Illinois (n = 769) | 7.9% ± 2.7% | 77.4% ± 4.2% | 14.7% ± 3.5% |
| Indiana (n = 426) | 2.8% ± 1.7% | 76.1% ± 4.3% | 21.1% ± 4.1% |
| Iowa (n = 515) | 7.6% ± 2.7% | 77.7% ± 4.2% | 14.7% ± 3.5% |
| Kentucky (n = 185) | 7.0% ± 2.6% | 80.5% ± 4.0% | 12.6% ± 3.3% |
| Louisiana (n = 276) | 7.6% ± 2.7% | 61.4% ± 4.9% | 31.0% ± 4.6% |
| Maryland (n = 171) | 10.1% ± 3.0% | 85.8% ± 3.5% | 4.2% ± 2.0% |
| Massachusetts (n = 454) | 11.3% ± 3.2% | 76.8% ± 4.2% | 11.9% ± 3.2% |
| Michigan (n = 646) | 12.1% ± 3.3% | 77.9% ± 4.2% | 10.0% ± 3.0% |
| Minnesota (n = 345) | 16.1% ± 3.7% | 70.8% ± 4.6% | 13.0% ± 3.4% |
| Mississippi (n = 231) | 8.0% ± 2.7% | 67.6% ± 4.7% | 24.4% ± 4.3% |
| Missouri (n = 347) | 8.0% ± 2.7% | 68.4% ± 4.7% | 23.6% ± 4.3% |
| Montana (n = 101) | 6.7% ± 2.5% | 76.7% ± 4.3% | 16.7% ± 3.8% |
| Nevada (n = 83) | 51.5% ± 5.0% | 27.6% ± 4.5% | 20.9% ± 4.1% |

**Figure 32 (cont'd): Public Library Outlet Public Access Workstation Availability by State.**

| *State* | There are fewer public access Internet workstations than patrons who wish to use them at any given time | Only at certain times during a typical day are there fewer public access Internet workstations than patrons who wish to use them | There are always sufficient public access Internet workstations available for patrons who wish to use them |
|---|---|---|---|
| New Hampshire (n = 220) | 8.9% ± 2.9% | 60.8% ± 4.9% | 30.4% ± 4.6% |
| New Jersey (n = 449) | 16.4% ± 3.7% | 72.1% ± 4.5% | 11.4% ± 3.2% |
| New Mexico (n = 99) | 31.9% ± 4.7% | 51.4% ± 5.0% | 16.7% ± 3.8% |
| New York (n = 1,017) | 21.4% ± 4.1% | 68.0% ± 4.7% | 10.6% ± 3.1% |
| North Carolina (n = 360) | 16.4% ± 3.7% | 55.2% ± 5.0% | 28.4% ± 4.5% |
| Ohio (n = 703) | 10.1% ± 3.0% | 77.3% ± 4.2% | 12.6% ± 3.3% |
| Oklahoma (n = 202) | 16.3% ± 3.7% | 75.3% ± 4.3% | 8.4% ± 2.8% |
| Oregon (n = 192) | 34.8% ± 4.8% | 59.3% ± 4.9% | 5.9% ± 2.4% |
| Pennsylvania (n = 616) | 11.9% ± 3.2% | 70.2% ± 4.6% | 17.9% ± 3.8% |
| Rhode Island (n = 70) | 19.0% ± 4.0% | 69.7% ± 4.6% | 11.4% ± 3.2% |
| South Carolina (n = 184) | 16.2% ± 3.7% | 67.1% ± 4.7% | 16.7% ± 3.7% |
| Tennessee (n = 278) | 30.4% ± 4.6% | 59.8% ± 4.9% | 9.8% ± 3.0% |
| Texas (n = 802) | 18.1% ± 3.9% | 69.3% ± 4.6% | 12.6% ± 3.3% |
| Utah (n = 103) | 8.7% ± 2.8% | 85.4% ± 3.6% | 5.9% ± 2.4% |
| Vermont (n = 180) | 9.7% ± 3.0% | 68.0% ± 4.7% | 22.2% ± 4.2% |
| Virginia (n = 330) | 12.4% ± 3.3% | 70.0% ± 4.6% | 17.6% ± 3.8% |
| Washington, DC (n = 21) | 69.9% ± 4.7% | 30.1% ± 4.7% | -- |
| West Virginia (n = 158) | -- | 82.1% ± 3.9% | 17.9% ± 3.9% |
| Wisconsin (n = 452 | 8.8% ± 2.8% | 76.8% ± 4.2% | 14.4% ± 3.5% |
| Wyoming (n = 72) | -- | 74.8% ± 4.4% | 25.2% ± 4.4% |
| ***National*** | 13.7% ± 3.4% (n = 2,155) | 71.7% ± 4.5% (n = 11,268) | 14.6% ± 3.5% (n = 2,303) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 32 (above) demonstrates that there are insufficient public access workstations to meet patron demand at all times of the day in the highest percentages of library outlets in Nevada (51.5%), Oregon (34.8%), and Washington DC (69.9%). There are insufficient public access workstations to meet patron demand at some times of the day in the highest percentages of library outlets in Delaware (89.4%), Maryland (85.8%), and Utah (85.4%). There are sufficient public access workstations to meet patron demand in the highest percentages of library outlets in Louisiana (31.0%) and New Hampshire (30.4%).

**Figure 33: Public Library Outlet Internet Connection Provider by State.**

| *State* | Connects directly to an Internet Service Provider | Connects via a network managed by a regional library consortium or library cooperative | Connects via a network managed by a non-library entity | Other | Don't know |
|---|---|---|---|---|---|
| Alabama (n = 262) | 74.6% ± 4.4% | 17.7% ± 3.8% | 7.8% ± 2.7% | -- | -- |
| Alaska (n = 93) | 63.1% ± 4.9% | -- | 15.3% ± 3.6% | 19.1% ± 4.0% | 2.6% ± 1.6% |
| Arizona (n = 164) | 61.6% ± 4.9% | -- | 38.4% ± 4.9% | -- | -- |
| Arkansas (n = 206) | 61.4% ± 4.9% | 15.0% ± 3.6% | 19.5% ± 4.0% | 4.1% ± 2.0% | -- |
| California (n = 945) | 29.5% ± 4.6% | 19.2% ± 3.9% | 30.6% ± 4.6% | 20.7% ± 4.1% | -- |
| Colorado (n = 221) | 40.1% ± 4.9% | 19.7% ± 4.0% | 31.5% ± 4.7% | 8.7% ± 2.8% | -- |
| Connecticut (n = 228) | 29.6% ± 4.6% | 38.5% ± 4.9% | 23.7% ± 4.3% | 8.2% ± 2.8% | -- |
| Delaware (n = 33) | -- | 79.5% ± 4.1% | 20.5% ± 4.1% | -- | -- |
| Florida (n = 466) | 22.7% ± 4.2% | 36.0% ± 4.8% | 40.4% ± 4.9% | -- | * |
| Georgia (n = 341) | 30.6% ± 4.6% | 45.1% ± 5.0% | 18.8% ± 3.9% | 5.5% ± 2.3% | -- |
| Idaho (n = 76) | 80.2% ± 4.0% | 4.0% ± 2.0% | 4.0% ± 2.0% | 11.9% ± 3.3% | -- |
| Illinois (n = 764) | 48.3% ± 5.0% | 10.9% ± 3.1% | 29.0% ± 4.5% | 11.4% ± 3.2% | * |
| Indiana (n = 426) | 56.3% ± 5.0% | 27.0% ± 4.4% | 15.7% ± 3.6% | 1.1% ± 1.0% | -- |
| Iowa (n = 520) | 90.9% ± 2.9% | * | 6.0% ± 2.4% | 2.3% ± 1.5% | -- |
| Kentucky (n = 185) | 93.5% ± 2.5% | -- | 2.3% ± 1.5% | 4.2% ± 2.0% | -- |
| Louisiana (n = 267) | 25.0% ± 4.3% | 38.1% ± 4.9% | 13.8% ± 3.5% | 23.1% ± 4.2% | -- |
| Maryland (n = 171) | 28.0% ± 4.5% | 32.1% ± 4.7% | 6.2% ± 2.4% | 33.7% ± 4.7% | -- |
| Massachusetts (n = 458) | 27.9% ± 4.5% | 54.7% ± 5.0% | 6.8% ± 2.5% | 10.5% ± 3.1% | -- |
| Michigan (n = 650) | 65.9% ± 4.8% | 26.1% ± 4.4% | 5.2% ± 2.2% | 2.9% ± 1.7% | -- |
| Minnesota (n = 334) | 32.3% ± 4.7% | 52.5% ± 5.0% | 8.4% ± 2.8% | 2.6% ± 1.6% | 4.2% ± 2.0% |
| Mississippi (n = 231) | 19.8% ± 4.0% | 41.2% ± 4.9% | 16.8% ± 3.8% | 22.2% ± 4.2% | -- |
| Missouri (n = 347) | 33.8% ± 4.7% | 18.5% ± 3.9% | 32.5% ± 4.7% | 15.2% ± 3.6% | -- |
| Montana (n = 101) | 78.9% ± 4.1% | 2.2% ± 1.5% | 18.9% ± 3.9% | -- | -- |
| Nevada (n = 83) | 68.0% ± 4.7% | 10.5% ± 3.1% | 19.4% ± 4.0% | -- | 2.0% ± 1.4% |

**Figure 33 (cont'd): Public Library Outlet Internet Connection Provider by State.**

| *State* | Connects directly to an Internet Service Provider | Connects via a network managed by a regional library consortium or library cooperative | Connects via a network managed by a non-library entity | Other | Don't know |
|---|---|---|---|---|---|
| New Hampshire (n = 190) | 83.8% ± 3.7% | 1.5% ± 1.2% | 10.6% ± 3.1% | 4.2% ± 3.0% | -- |
| New Jersey (n = 307) | 24.4% ± 4.3% | 53.2% ± 5.0% | 4.9% ± 2.2% | 17.5% ± 3.8% | -- |
| New Mexico (n = 99) | 47.2% ± 5.0% | 29.7% ± 4.6% | 15.5% ± 3.6% | 7.6% ± 2.7% | -- |
| New York (n = 1,017) | 58.1% ± 4.9% | 36.1% ± 4.8% | 1.9% ± 1.4% | 3.8% ± 1.9% | -- |
| North Carolina (n = 364) | 56.7% ± 5.0% | 8.2% ± 2.8% | 34.0% ± 4.7% | 1.1% ± 1.1% | -- |
| Ohio (n = 424) | 14.8% ± 3.6% | 48.9% ± 5.0% | 17.5% ± 3.8% | 18.8% ± 3.9% | -- |
| Oklahoma (n = 28) | 80.6% ± 4.0% | -- | 12.0% ± 3.3% | 7.4% ± 2.7% | -- |
| Oregon (n = 192) | 34.0% ± 4.8% | 35.8% ± 4.8% | 27.6% ± 4.5% | 2.6% ± 1.6% | -- |
| Pennsylvania (n = 608) | 49.9% ± 5.0% | 35.5% ± 4.8% | 11.4% ± 3.2% | 3.1% ± 1.7% | -- |
| Rhode Island (n = 72) | -- | 84.7% ± 3.6% | 15.3% ± 3.6% | -- | -- |
| South Carolina (n = 184) | 4.9% ± 2.2% | 35.3% ± 4.8% | 50.5% ± 5.0% | 9.2% ± 2.9% | -- |
| Tennessee (n = 270) | 78.4% ± 4.1% | 10.3% ± 3.0% | 9.4% ± 2.9% | 1.9% ± 1.4% | -- |
| Texas (n = 805) | 60.6% ± 4.9% | 7.0% ± 2.6% | 23.8% ± 4.3% | 8.6% ± 2.8% | -- |
| Utah (n = 100) | 43.9% ± 5.0% | 9.4% ± 2.9% | 37.3% ± 4.9% | 9.4% ± 2.9% | -- |
| Vermont (n = 125) | 81.1% ± 3.9% | 3.8% ± 1.9% | 7.5% ± 2.7% | 7.5% ± 2.7% | -- |
| Virginia (n = 327) | 43.8% ± 5.0% | 5.9% ± 2.4% | 35.0% ± 4.8% | 15.3% ± 3.6% | -- |
| Washington, DC (n = 21) | -- | -- | 100.0% ± 0.0% | -- | -- |
| West Virginia (n = 158) | 2.3% ± 1.5% | 77.9% ± 4.2% | 17.8% ± 3.8% | 2.0% ± 1.4% | -- |
| Wisconsin (n = 449) | 14.0% ± 3.5% | 71.2% ± 4.5% | 10.4% ± 3.1% | 4.4% ± 2.1% | -- |
| Wyoming (n = 72) | 80.6% ± 4.0% | 15.8% ± 3.7% | 3.6% ± 1.9% | -- | -- |
| ***National*** | 46.4% ± 5.0% (n = 6,791) | 26.2% ± 4.4% (n = 3,837) | 18.4% ± 3.9% (n = 2,689) | 8.9% ± 2.8% (n = 1,299) | 0.2% ± 0.5% (n = 29) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

In Figure 33 (above), the states where the highest percentages of library outlets connect to the Internet using an Internet Service Provider are Iowa (90.9%) and Kentucky (93.5%). The states where the highest percentages of library outlets connect to the Internet through network managed by a regional library consortium or library cooperative are Rhode Island (84.7%), West Virginia (77.9%), and Wisconsin (71.2%). The states where the highest percentages of library outlets connect to the Internet through a network managed by a non-library entity are Florida (40.4%), South Carolina (50.5%), and Washington DC (100.0%).

Figure 34 (below) reveals that Idaho is the state with the highest percentage of library outlets (17.4%) with a connection speed below 56kbps. West Virginia is the state with the highest percentage of library outlets (22.2%) with a connection speed between 56kbps and 128kbps. Wyoming is the state with the highest percentage of library outlets (33.6%) with a connection speed between 129kbps and 256kbps. Washington DC is the state with the highest percentage of library outlets (100.0%) with a connection speed between 257kbps and 768kbps. Oklahoma is the state with the highest percentage of library outlets (62.9%) with a connection speed between 769kbps and 1.5mbps. Maryland is the state with the highest percentage of library outlets (49.6%) with a connection speed above 1.5mbps.

**Figure 34: Public Library Outlet Maximum Speed of Public Access Internet Services by State.**

| *State* | Less than 56kbps | 56kbps - 128kbps | 129kbps - 256kbps | 257kbps - 768kbps | 769kbps - 1.5mbps | Greater than 1.5mbps | Don't Know |
|---|---|---|---|---|---|---|---|
| Alabama (n = 254) | 1.7% ± 1.3% | 19.8% ± 4.0% | 10.1% ± 3.0% | 12.3% ± 3.3% | 40.5% ± 4.9% | 10.5% ± 3.1% | 5.1% ± 2.2% |
| Alaska (n = 76) | 12.6% ± 3.3% | 14.7% ± 3.6% | 15.7% ± 3.7% | 31.8% ± 4.7% | 12.6% ± 3.3% | 9.4% ± 2.9% | 3.1% ± 1.8% |
| Arizona (n = 164) | 3.2% ± 1.8% | 8.8% ± 2.9% | 7.1% ± 2.6% | 3.2% ± 1.8% | 33.4% ± 4.7% | 29.6% ± 4.6% | 14.6% ± 3.5% |
| Arkansas (n = 203) | 8.3% ± 2.8% | 8.8% ± 2.9% | 9.4% ± 2.9% | 10.8% ± 3.1% | 43.9% ± 5.0% | 12.9% ± 3.4% | 5.8% ± 2.4% |
| California (n = 911) | 2.6% ± 1.6% | 1.0% ± 1.0% | 4.9% ± 2.2% | 16.4% ± 3.7% | 25.1% ± 4.3% | 48.6% ± 5.0% | 1.4% ± 1.2% |
| Colorado (n = 213) | 3.2% ± 1.8% | 18.2% ± 3.9% | 6.5% ± 2.5% | 14.1% ± 3.5% | 14.2% ± 3.5% | 43.8% ± 5.0% | -- |
| Connecticut (n = 0.0) | -- | 4.2% ± 2.0% | 8.9% ± 2.9% | 19.8% ± 4.0% | 29.8% ± 4.6% | 29.8% ± 4.6% | 7.5% ± 2.6% |
| Delaware (n = 24) | -- | -- | -- | 20.5% ± 4.1% | 27.9% ± 4.6% | 27.9% ± 4.6% | 23.7% ± 4.4% |
| Florida (n = 458) | 2.1% ± 1.4% | 2.6% ± 1.6% | * | 4.4% ± 2.1% | 43.7% ± 5.0% | 39.9% ± 4.9% | 6.4% ± 2.4% |
| Georgia (n = 341) | -- | 6.5% ± 2.5% | 2.0% ± 1.4% | 1.0% ± 1.0% | 61.8% ± 4.9% | 28.8% ± 4.5% | -- |
| Idaho (n = 121) | 17.4% ± 3.8% | 7.5% ± 2.6% | 10.0% ± 3.0% | 19.9% ± 4.0% | 24.9% ± 4.3% | 12.9% ± 3.4% | 7.5% ± 2.6% |
| Illinois (n = 722) | 2.2% ± 1.5% | 8.8% ± 2.8% | 5.8% ± 2.3% | 7.1% ± 2.6% | 35.6% ± 4.8% | 35.3% ± 4.8% | 5.1% ± 2.2% |
| Indiana (n = 409) | -- | 14.3% ± 3.5% | 4.6% ± 2.1% | 7.5% ± 2.6% | 55.3% ± 5.0% | 18.4% ± 3.9% | -- |
| Iowa (n = 490) | * | 15.1% ± 3.6% | 20.8% ± 4.1% | 22.8% ± 4.2% | 16.4% ± 3.7% | 17.8% ± 3.8% | 6.6% ± 2.5% |
| Kentucky (n = 185) | -- | 9.1% ± 2.9% | 9.1% ± 2.9% | 8.4% ± 2.8% | 49.9% ± 5.0% | 23.5% ± 4.3% | -- |
| Louisiana (n = 234) | -- | 7.9% ± 2.7% | 15.4% ± 3.6% | 1.5% ± 1.2% | 44.4% ± 5.0% | 28.6% ± 4.5% | 2.2% ± 1.5% |
| Maryland (n = 171) | -- | 5.3% ± 2.2% | 4.2% ± 2.0% | 2.1% ± 1.4% | 38.8% ± 4.9% | 49.6% ± 5.0% | -- |

| Figure 34 (cont'd): Public Library Outlet Maximum Speed of Public Access Internet Services by State. | | | | | | | |
|---|---|---|---|---|---|---|---|
| ***State*** | **Less than 56kbps** | **56kbps - 128kbps** | **129kbps - 256kbps** | **257kbps - 768kbps** | **769kbps - 1.5mbps** | **Greater than 1.5mbps** | **Don't Know** |
| Massachusetts (n = 431) | 2.4% ± 1.5% | 9.7% ± 3.0% | 4.8% ± 2.2% | 20.1% ± 4.0% | 26.3% ± 4.4% | 29.7% ± 4.6% | 6.9% ± 2.5% |
| Michigan (n = 635) | 1.2% ± 1.1% | 9.5% ± 2.9% | 10.2% ± 3.0% | 11.1% ± 3.2% | 39.5% ± 4.9% | 26.6% ± 4.4% | 1.8% ± 1.3% |
| Minnesota (n = 279) | 1.6% ± 1.3% | 9.8% ± 3.0% | 4.7% ± 2.1% | 5.0% ± 2.2% | 25.8% ± 4.4% | 36.5% ± 4.8% | 16.7% ± 3.7% |
| Mississippi (n = 229) | 5.9% ± 2.4% | 33.8% ± 4.7% | 11.2% ± 3.2% | 10.6% ± 3.1% | 23.3% ± 4.2% | 14.7% ± 3.6% | * |
| Missouri (n = 331) | 0.5% ± 0.7% | -- | 9.2% ± 2.9% | 16.4% ± 3.7% | 47.2% ± 5.0% | 24.6% ± 4.3% | 2.2% ± 1.5% |
| Montana (n = 94) | -- | 17.9% ± 3.9% | 21.5% ± 4.1% | 19.0% ± 3.9% | 11.9% ± 3.3% | 22.6% ± 4.2% | 7.1% ± 2.6% |
| Nevada (n = 81) | 10.1% ± 3.0% | 12.6% ± 3.3% | -- | 4.0% ± 2.0% | 23.1% ± 4.2% | 44.1% ± 5.0% | 6.1% ± 2.4% |
| New Hampshire (n = 193) | 4.3% ± 2.0% | 14.3% ± 3.5% | 2.9% ± 1.7% | 19.9% ± 4.0% | 22.4% ± 4.2% | 31.9% ± 4.7% | 4.3% ± 2.0% |
| New Jersey (n = 433) | * | 2.8% ± 1.7% | 4.9% ± 2.2% | 14.2% ± 3.5% | 46.3% ± 5.0% | 26.3% ± 4.4% | 4.9% ± 2.2% |
| New Mexico (n = 94) | 2.3% ± 1.5% | 10.3% ± 3.1% | 11.1% ± 3.2% | 20.3% ± 4.0% | 17.7% ± 3.8% | 31.5% ± 4.7% | 6..9% ± 2.5% |
| New York (n = 947) | * | 5.9% ± 2.4% | 7.1% ± 2.6% | 12.7% ± 3.3% | 31.1% ± 4.6% | 28.9% ± 4.5% | 13.7% ± 3.4% |
| North Carolina (n = 360) | 1.1% ± 1.1% | 8.9% ± 2.8% | 11.7% ± 3.2% | 6.9% ± 2.5% | 23.9% ± 4.3% | 27.2% ± 4.5% | 20.4% ± 4.0% |
| Ohio (n = 698) | -- | 3.2% ± 1.8% | 3.3% ± 1.8% | 4.2% ± 2.0% | 58.9% ± 4.9% | 27.9% ± 4.5% | 2.6% ± 1.6% |
| Oklahoma (n = 200) | 1.0% ± 1.0% | 12.0% ± 3.3% | 6.2% ± 2.4% | 5.0% ± 2.2% | 62.9% ± 4.8% | 10.9% ± 3.1% | 2.1% ± 1.4% |
| Oregon (n = 184) | * | 6.8% ± 2.5% | 13.1% ± 3.4% | 14.9% ± 3.6% | 27.7% ± 4.5% | 36.8% ± 4.8% | -- |
| Pennsylvania (n = 561) | * | 8.1% ± 2.7% | 5.8% ± 2.3% | 15.1% ± 3.6% | 35.3% ± 4.8% | 28.5% ± 4.5% | 6.4% ± 2.4% |
| Rhode Island (n = 66) | -- | -- | -- | 17.1% ± 3.8% | 33.5% ± 4.8% | 49.4% ± 5.0% | -- |

**Figure 34 (cont'd): Public Library Outlet Maximum Speed of Public Access Internet Services by State.**

| *State* | Less than 56kbps | 56kbps - 128kbps | 129kbps - 256kbps | 257kbps - 768kbps | 769kbps - 1.5mbps | Greater than 1.5mbps | Don't Know |
|---|---|---|---|---|---|---|---|
| South Carolina (n = 165) | -- | 7.6% ± 2.7% | 12.2% ± 3.3% | -- | 55.6% ± 5.0% | 23.1% ± 4.2% | 1.4% ± 1.2% |
| Tennessee (n = 249) | 5.2% ± 2.2% | 7.2% ± 2.6% | 11.0% ± 3.1% | 11.5% ± 3.2% | 16.4% ± 3.7% | 41.0% ± 4.9% | 7.6% ± 2.7% |
| Texas (n = 787) | 3.1% ± 1.7% | 15.7% ± 3.6% | 8.9%± 2.9% | 11.1% ± 3.2% | 31.4% ± 4.6% | 27.2% ± 4.5% | 2.6% ± 1.6% |
| Utah (n = 95) | -- | 2.1% ± 1.5% | 9.5% ± 3.0% | 16.4% ± 3.7% | 29.7% ± 4.6% | 35.8% ± 4.8% | 6.5% ± 2.5% |
| Vermont (n = 176) | 9.4% ± 2.9% | 17.5% ± 3.8% | 6.7% ± 2.5% | 16.7% ± 3.7% | 20.2% ± 4.0% | 21.5% ± 4.1% | 8.1% ± 2.7% |
| Virginia (n = 306) | -- | 3.6% ± 1.9% | 5.4% ± 2.3% | 18.4% ± 3.9% | 30.4% ± 4.6% | 40.9% ± 4.9% | 1.2% ± 1.1% |
| Washington, DC (n = 21) | -- | -- | -- | 100.0% ± 0.0% | -- | -- | -- |
| West Virginia (n = 134) | 2.3% ± 1.5% | 22.2% ± 4.2% | -- | -- | 52.4% ± 5.0% | 15.4% ± 3.6% | 7.7% ± 2.7% |
| Wisconsin (n = 394) | -- | 2.4% ± 1.5% | 7.5% ± 2.6% | 8.2% ± 2.7% | 39.0% ± 4.9% | 29.4% ± 4.6% | 13.6% ± 3.4% |
| Wyoming (n = 69) | -- | 14.9% ± 3.6% | 33.6% ± 4.8% | 22.4% ± 4.2% | 12.6% ± 3.4% | 12.6% ± 3.4% | 3.7% ± 1.9% |
| ***National*** | 2.1% ± 1.4% (n = 311) | 9.8% ± 3.0% (n = 1,463) | 8.2% ± 2.8% (n = 1,233) | 11.7% ± 3.2% (n = 1,747) | 34.4% ± 4.8% (n = 5,144) | 28.9% ± 4.5% (n = 4,324) | 4.9% ± 2.2% (n = 739) |

**Key:** : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

**Figure 35: Public Library Outlet Public Access Internet Service Connection Speed in Meeting Patron Needs by State.**

| *State* | The connection speed is insufficient to meet patron needs | The connection speed is sufficient to meet patron needs at some times | The connection speed is sufficient to meet patron needs at all times | Don't know |
|---|---|---|---|---|
| Alabama (n = 262) | 19.7% ± 4.0% | 22.6% ± 4.2% | 57.7% ± 5.0% | -- |
| Alaska (n = 96) | 27.3% ± 4.5% | 45.3% ± 5.0% | 27.3% ± 4.5% | -- |
| Arizona (n = 164) | 19.8% ± 4.0% | 27.0% ± 4.5% | 53.2% ± 5.0% | -- |
| Arkansas (n = 206) | 21.2% ± 4.1% | 26.6% ± 4.4% | 52.2% ± 5.0% | -- |
| California (n = 954) | 16.4% ± 3.7% | 28.5% ± 4.5% | 54.6% ± 5.0% | * |
| Colorado (n = 221) | 12.1% ± 3.3% | 46.0% ± 5.0% | 40.6% ± 4.9% | 1.3% ± 1.2% |
| Connecticut (n = 225) | 21.5% ± 4.1% | 20.0% ± 4.0% | 58.5% ± 4.9% | -- |
| Delaware (n = 33) | 26.9% ± 4.5% | 38.0% ± 4.9% | 35.0% ± 4.8% | -- |
| Florida (n = 462) | 14.9% ± 3.6% | 45.1% ± 5.0% | 39.9% ± 4.9% | -- |
| Georgia (n = 345) | -- | 19.5% ± 4.0% | 80.5% ± 4.0% | -- |
| Idaho (n = 76) | 17.7% ± 3.9% | 36.9% ± 4.9% | 41.4% ± 5.0% | 4.0% ± 2.0% |
| Illinois (n = 765) | 12.2% ± 3.3% | 23.8% ± 4.3% | 64.0% ± 4.8% | -- |
| Indiana (n = 426) | 17.1% ± 3.8% | 19.3% ± 4.0% | 63.6% ± 4.8% | -- |
| Iowa (n = 517) | 12.9% ± 3.4% | 22.5% ± 4.2% | 64.2% ± 4.8% | * |
| Kentucky (n = 185) | 10.9% ± 3.1% | 36.1% ± 4.8% | 53.0% ± 5.0% | -- |
| Louisiana (n = 281) | 14.2% ± 3.5% | 24.0% ± 4.3% | 61.7% ± 4.9% | -- |
| Maryland (n = 171) | 13.4% ± 3.4% | 31.8% ± 4.7% | 41.2% ± 5.0% | 13.7% ± 3.5% |
| Massachusetts (n = 458) | 18.3% ± 3.9% | 43.0% ± 5.0% | 38.7% ± 4.9% | -- |
| Michigan (n = 642) | 14.4% ± 3.5% | 42.5% ± 5.0% | 43.1% ± 5.0% | -- |
| Minnesota (n = 345) | 19.1% ± 3.9% | 33.0% ± 4.7% | 47.9% ± 5.0% | -- |
| Mississippi (n = 229) | 26.6% ± 4.4% | 32.1% ± 4.7% | 41.4% ± 4.9% | -- |
| Missouri (n = 345) | 24.3% ± 4.3% | 16.7% ± 3.7% | 58.9% ± 4.9% | -- |
| Montana (n = 98) | 13.7% ± 3.5% | 31.9% ± 4.7% | 54.4% ± 5.0% | -- |
| Nevada (n = 83) | 11.9% ± 3.3% | 26.6% ± 4.5% | 55.6% ± 5.0% | 5.9% ± 2.4% |

**Figure 35 (cont'd): Public Library Outlet Public Access Internet Service Connection Speed in Meeting Patron Needs by State.**

| *State* | The connection speed is insufficient to meet patron needs | The connection speed is sufficient to meet patron needs at some times | The connection speed is sufficient to meet patron needs at all times | Don't know |
|---|---|---|---|---|
| New Hampshire (n = 187) | 11.9% ± 3.3% | 17.5% ± 3.8% | 70.6% ± 4.6% | -- |
| New Jersey (n = 307) | 15.3% ± 3.6% | 33.7% ± 4.7% | 50.9% ± 5.0% | -- |
| New Mexico (n = 99) | 19.3% ± 4.0% | 33.0% ± 4.7% | 47.7% ± 5.0% | -- |
| New York (n = 1,014) | 11.0% ± 3.1% | 28.7% ± 4.5% | 59.9% ± 4.9% | * |
| North Carolina (n = 364) | 28.1% ± 4.5% | 32.6% ± 4.7% | 39.3% ± 4.9% | -- |
| Ohio (n = 420) | 16.3% ± 3.7% | 19.8% ± 4.0% | 63.9% ± 4.8% | -- |
| Oklahoma (n = 28) | -- | 37.2% ± 4.9% | 62.8% ± 4.9% | -- |
| Oregon (n = 188) | 22.4% ± 4.2% | 22.0% ± 4.2% | 55.6% ± 5.0% | -- |
| Pennsylvania (n = 606) | 18.5% ± 3.9% | 23.6% ± 4.3% | 57.5% ± 5.0% | * |
| Rhode Island (n = 72) | 23.1% ± 4.3% | 21.9% ± 4.2% | 55.0% ± 5.0% | -- |
| South Carolina (n = 182) | 13.4% ± 3.4% | 27.4% ± 4.5% | 59.2% ± 4.9% | -- |
| Tennessee (n = 278) | 19.3% ± 4.0% | 22.8% ± 4.2% | 56.6% ± 5.0% | 1.3% ± 1.2% |
| Texas (n = 807) | 14.0% ± 3.5% | 30.9% ± 4.6% | 53.6% ± 5.0% | 1.4% ± 1.2% |
| Utah (n = 103) | 13.8% ± 3.5% | 41.6% ± 5.0% | 44.6% ± 5.0% | -- |
| Vermont (n = 123) | 19.2% ± 4.0% | 13.5% ± 3.4% | 63.5% ± 4.8% | 3.8% ± 1.9% |
| Virginia (n = 330) | 35.0% ± 4.8% | 24.5% ± 4.3% | 40.5% ± 4.9% | -- |
| Washington, DC (n = 21) | 19.5% ± 4.1% | 60.2% ± 5.0% | 20.3% ± 4.1% | -- |
| West Virginia (n = 158) | 14.0% ± 3.5% | 34.4% ± 4.8% | 51.7% ± 5.0% | -- |
| Wisconsin (n = 442) | 11.1% ± 3.1% | 26.7% ± 4.4% | 61.5% ± 4.9% | * |
| Wyoming (n = 72) | 14.4% ± 3.5% | 33.8% ± 4.8% | 37.4% ± 4.9% | 14.4% ± 3.5% |
| ***National*** | 16.1% ± 3.7% (n=2,357) | 29.4% ± 4.6% (n=4,301) | 53.5% ± 5.0% (n=7,831) | 1.0% ± 1.0% (n=140) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

As demonstrated in Figure 35 (above), the connection speed is insufficient to meet patron needs in the highest percentages of public library outlets in Alaska (27.3%), North Carolina (28.1%), and Virginia (35.0%). The connection speed is sufficient to meet patron needs at some times in the highest percentages of public library outlets in Alaska, (45.3%), Colorado (46.0%), and Washington DC (60.2%). The connection speed is sufficient to meet patron needs at all times in the highest percentages of public library outlets in Georgia (80.5%), Iowa (64.2%), and New Hampshire (70.6%).

# IX. STATE SYSTEM LEVEL DATA

This section details the study findings for state system-level data by individual state. A brief discussion of the findings follows each table.

**Figure 36: Public Library System Total Operating Budget Status by State.**

| *State* | Increased since last fiscal year | Decreased since last fiscal year | Stayed the same as last fiscal year | Percentage increased | Percentage decreased |
|---|---|---|---|---|---|
| Alabama (n = 206) | 34.7% ± 4.8% | 4.5% ± 2.1% | 47.9% ± 5.0% | 6.9% | 6.1% |
| Alaska (n = 81) | 32.0% ± 4.7% | 4.0% ± 2.0% | 56.0% ± 5.0% | 4.8% | 15.0% |
| Arizona (n = 28) | 0% ± 4.5% | 0% ± 3.8% | 0% ± 5.0% | 18.7% | 1.1% |
| Arkansas (n = 43) | 54.5% ± 5.0% | -- | 45.5% ± 5.0% | 15.2% | -- |
| California (n = 166) | 50.0% ± 5.0% | 9.5% ± 2.9% | 34.2% ± 4.8% | 5.8% | 6.6% |
| Colorado (n = 104) | 45.3% ± 5.0% | 22.7% ± 4.2% | 29.4% ± 4.6% | 15.8% | 4.1% |
| Connecticut (n = 194) | 68.6% ± 4.7% | 2.8% ± 1.7% | 21.1% ± 4.1% | 5.8% | 2.0% |
| Delaware (n = 17) | 80.0% ± 4.1% | -- | -- | 8.5% | -- |
| Florida (n = 56) | 57.0% ± 5.0% | 6.8% ± 2.6% | 26.7% ± 4.5% | 7.2% | 33.4% |
| Georgia (n = 58) | 12.9% ± 3.4% | 9.3% ± 2.9% | 64.5% ± 4.8% | 8.2 | 3.6 |
| Idaho (n = 104) | 74.5% ± 4.4% | -- | 17.5% ± 3.8% | 3.7% | -- |
| Illinois (n = 626) | 38.6% ± 4.9% | 9.0% ± 2.9% | 38.2% ± 4.9% | 7.3% | 8.2% |
| Indiana (n = 239) | 48.3% ± 5.0% | 12.3% ± 3.3% | 30.8% ± 4.6% | 156.9% | 9.4% |
| Iowa (n = 537) | 36.7% ± 4.8% | 7.2% ± 2.6% | 42.8% ± 5.0% | 5.0% | 14.5% |
| Kentucky (n = 116) | 73.6% ± 4.4% | 4.6% ± 2.1% | 19.5% ± 4.0% | 9.5% | * |
| Louisiana (n = 65) | 23.1% ± 4.3% | 10.8% ± 3.1% | 53.3% ± 5.0% | 36.9% | 68.1% |
| Maryland (n = 21) | 85.7% ± 3.6% | -- | 14.3% ± 3.6% | 6.6% | -- |
| Massachusetts (n = 370) | 58.4% ± 4.9% | 7.6% ± 2.7% | 19.8% ± 4.0% | 4.9% | 5.7% |
| Michigan (n = 378) | 43.4% ± 5.0% | 11.2% ± 3.2% | 37.0% ± 4.8% | 12.4% | 11.2% |
| Minnesota (n = 132) | 54.5% ± 5.0% | 6.3% ± 2.4% | 24.1% ± 4.3% | 5.2% | 5.8% |
| Mississippi (n = 44) | 48.1% ± 5.1% | 7.4% ± 2.7% | 40.7% ± 5.0% | 4.5% | 26.0% |
| Missouri (n = 145) | 34.8% ± 4.8% | 13.9% ± 3.5% | 37.8% ± 4.9% | 7.6% | 12.4% |
| Montana (n = 79) | 24.3% ± 4.3% | 9.9% ± 3.0% | 46.1% ± 5.0% | 4.7% | 10.8% |
| Nevada (n = 20) | 33.9% ± 4.9% | 10.7% ± 3.2% | 42.8% ± 5.1% | 6.9% | 25.0% |

**Figure 36 (cont'd): Public Library System Total Operating Budget Status by State.**

| *State* | Increased since last fiscal year | Decreased since last fiscal year | Stayed the same as last fiscal year | Percentage increased | Percentage decreased |
|---|---|---|---|---|---|
| New Hampshire (n = 230) | 62.5% ± 4.9% | 2.9% ± 1.7% | 27.2% ± 4.5% | 8.8% | * |
| New Mexico (n = 82) | 25.3% ± 4.4% | 5.2% ± 2.2% | 44.0% ± 5.0% | 25.8% | 20.0% |
| New York (n = 750) | 53.5% ± 5.0% | 8.6% ± 2.8% | 27.7% ± 4.5% | 6.8% | 10.4% |
| North Carolina (n = 65) | 61.6% ± 4.9% | -- | 7.8% ± 2.7% | 5.5% | -- |
| Ohio (n = 244) | 19.2% ± 4.0% | 17.4% ± 3.8% | 53.5% ± 5.0% | 7.2% | 5.6% |
| Oregon (n = 121) | 45.3% ± 5.0% | 4.6% ± 2.1% | 43.1% ± 5.0% | 5.1% | 17.5% |
| Pennsylvania (n = 451) | 46.1% ± 5.0% | 2.3% ± 1.5% | 31.8% ± 4.7% | 43.7% | 10.0% |
| Rhode Island (n = 48) | 76.4% ± 4.3% | 9.7% ± 3.0% | 13.9% ± 3.5% | 4.6% | 5.0% |
| South Carolina (n = 40) | 50.3% ± 5.1% | 15.5% ± 3.7% | 29.0% ± 4.6% | 7.7% | 9.8% |
| South Dakota (n = 123) | 39.4% ± 4.9% | 6.1% ± 2.4% | 51.5% ± 5.0% | 6.1% | 4.6% |
| Tennessee (n = 184) | 40.6% ± 4.9% | -- | 49.6% ± 5.0% | 6.5% | -- |
| Texas (n = 557) | 39.5% ± 4.9% | 4.6% ± 2.1% | 44.9% ± 5.0% | 58.7% | 10.7% |
| Utah (n = 53) | 34.7% ± 4.8% | 16.7% ± 3.8% | 37.6%± 4.9% | 7.1% | 2.1% |
| Virginia (n = 79) | 62.8% ± 4.9% | -- | 26.9% ± 4.5% | 7.7% | -- |
| Washington (n = 55) | 35.4% ± 4.8% | 10.1% ± 3.0% | 28.3% ± 4.6% | 7.3% | 5.0% |
| West Virginia (n = 97) | 33.1% ± 4.7% | 2.2% ± 1.5% | 54.0% ± 5.0% | 4.0% | 1.0% |
| Wisconsin (n = 377) | 52.1% ± 5.0% | 7.9% ± 2.7% | 21.4% ± 4.1% | 3.6% | 4.8% |
| Wyoming (n = 23) | 60.9% ± 5.0% | -- | 23.9% ± 4.4% | 12.3% | -- |
| ***National*** | 45.1% ± 5.0% (n = 4,050) | 6.8% ± 2.5% (n = 609) | 36.6% ± 4.8% (n = 3,283) | 17.0% (n = 4,050) | 9.8% (n = 609) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 36 (above) reveals that total operating budgets have increased since last year in the highest percentages of library systems in Delaware (80.0%), Maryland (85.7%), and Rhode Island (76.4%). The total operating budgets have decreased since last year in the highest percentages of library systems in Colorado (22.7%), Ohio (17.4%), and South Carolina (15.5%). The total operating budgets have stayed the same since last year in the highest percentages of library systems in Alaska (56.0%), Georgia (64.5%), and Ohio (53.5%).

**Figure 37: Public Library System Overall Internet Information Technology Budget Status by State.**

| *State* | Budget increased since last fiscal year | Budget decreased since last fiscal year | Budget stayed the same as last fiscal year | Percentage increased | Percentage decreased |
|---|---|---|---|---|---|
| Alabama (n = 206) | 18.6% ± 3.9% | -- | 71.7% ± 4.5% | 14.9% | -- |
| Alaska (n = 81) | 16.0% ± 3.7% | 8.0% ± 2.7% | 60.0% ± 4.9% | 10.5% | 14.0% |
| Arizona (n = 28) | 7.7% ± 2.7% | 8.6% ± 2.9% | 73.0% ± 4.5% | 56.0% | 2.0% |
| Arkansas (n = 43) | 27.5% ± 4.5% | 5.9% ± 2.4% | 57.3% ± 5.0% | 77.7% | 8.0% |
| California (n = 166) | 27.3% ± 4.5% | 9.3% ± 2.9% | 56.8% ± 5.0% | 13.4% | 18.1% |
| Colorado (n = 104) | 20.0% ± 4.0% | 9.7% ± 3.0% | 61.6% ± 4.9% | 26.2% | 54.2% |
| Connecticut (n = 194) | 24.3% ± 4.3% | 8.5% ± 2.8% | 48.4% ± 3.9% | 15.0% | 7.0% |
| Delaware (n = 17) | 60.0% ± 5.1% | -- | -- | 29.0% | -- |
| Florida (n = 56) | 38.0% ± 4.9% | 6.1% ± 2.4% | 35.3% ± 4.8% | 17.5% | 15.0% |
| Georgia (n = 58) | 3.0% ± 1.7% | 9.3% ± 2.9% | 74.4% ± 4.4% | 4.0% | 4.9% |
| Idaho (n = 104) | 24.8% ± 4.3% | -- | 63.0% ± 4.9% | 21.0% | -- |
| Illinois (n = 626) | 19.7% ± 4.0% | 4.7% ± 2.1% | 62.2% ± 4.9% | 54.8% | 12.3% |
| Indiana (n = 239) | 17.5% ± 3.8% | 1.8% ± 1.3% | 67.1% ± 4.7% | 6.3% | 4.0% |
| Iowa (n = 537) | 11.1% ± 3.1% | 1.0% ± 1.0% | 77.1% ± 4.2% | 15.8% | 1.5% |
| Kentucky (n = 116) | 48.3% ± 5.0% | 4.6% ± 2.1% | 37.9% ± 4.9% | 22.5% | 25.0% |
| Louisiana (n = 65) | 40.0% ± 4.9% | 2.0% ± 1.4% | 45.1% ± 5.1% | 34.7% | 60.0% |
| Maryland (n = 21) | 47.6% ± 5.1% | 9.5% ± 3.0% | 42.9% ± 5.1% | 15.7% | 8.1% |
| Massachusetts (n = 370) | 22.0% ± 4.2% | 4.7% ± 2.1% | 59.7% ± 4.9% | 46.6% | 26.1% |
| Michigan (n = 378) | 27.1% ± 4.5% | 8.2% ± 2.7% | 54.2% ± 3.2% | 24.7% | 12.0% |
| Minnesota (n = 132) | 13.8% ± 3.5% | 4.4% ± 2.1% | 71.7% ± 4.5% | 7.2% | 11.5% |
| Mississippi (n = 44) | 18.5% ± 3.9% | 3.7% ± 1.9% | 66.7% ± 4.8% | 9.6% | 35.0% |
| Missouri (n = 145) | 17.4% ± 3.4% | 64.1% ± 3.8% | 10.5% ± 4.8% | 18.0% | 15.5% |
| Montana (n = 79) | 14.4% ± 3.5% | 3.3% ± 1.8% | 69.1% ± 4.7% | 3.2% | 5.0% |
| Nevada (n = 20) | 10.7% ± 3.2% | -- | 61.1% ± 5.0% | 25.0% | -- |

**Figure 37 (cont'd): Public Library System Overall Internet Information Technology Budget Status by State.**

| *State* | Budget increased since last fiscal year | Budget decreased since last fiscal year | Budget stayed the same as last fiscal year | Percentage increased | Percentage decreased |
|---|---|---|---|---|---|
| New Hampshire (n = 230) | 19.8% ± 4.0% | 4.4% ± 2.1% | 64.8% ± 4.8% | 70.4% | 26.4% |
| New Mexico (n = 82) | 12.3% ± 3.3% | 5.2% ± 2.2% | 65.0% ± 4.8% | 18.2% | 26.5% |
| New York (n = 750) | 18.6% ± 3.9% | 5.9% ± 2.4% | 65.8% ± 4.8% | 31.2% | 23.9% |
| North Carolina (n = 65) | 9.7% ± 3.0% | -- | 59.8% ± 4.9% | 11.0% | -- |
| Ohio (n = 244) | 19.1% ± 3.9% | 6.0% ± 2.4% | 61.2% ± 4.9% | 27.2% | 7.1% |
| Oregon (n = 121) | 11.5% ± 3.2% | 2.3% ± 1.5% | 79.3% ± 4.1% | 11.0% | 50.0% |
| Pennsylvania (n = 451) | 15.1% ± 3.6% | 7.7% ± 2.7% | 54.8% ± 5.0% | 14.5% | 27.2% |
| Rhode Island (n = 48) | 33.3% ± 4.8% | 37.5% ± 4.9% | 29.2% ± 4.6% | 10.3% | 2.0% |
| South Carolina (n = 40) | 31.0% ± 4.7% | 27.6% ± 4.5% | 36.2% ± 4.9% | 11.9% | 64.5% |
| South Dakota (n = 123) | 15.2% ± 3.6% | 9.1% ± 2.9% | 66.7% ± 4.7% | 12.7% | 26.3% |
| Tennessee (n = 184) | 17.5% ± 3.8% | 2.1% ± 1.5% | 68.4% ± 4.7% | 41.3% | 3.0% |
| Texas (n = 557) | 14.8% ± 3.6% | 2.6% ± 1.6% | 69.5% ± 4.6% | 188.1% | 27.4% |
| Utah (n = 53) | 11.0% ± 3.2% | 5.7% ± 2.3% | 62.2% ± 4.9% | 53.5% | 2.0% |
| Virginia (n = 79) | 16.4% ± 3.7% | 5.9% ± 2.4% | 60.4% ± 4.9% | 8.5% | 22.9% |
| Washington (n = 55) | -- | 10.1% ± 3.0% | 68.7% ± 4.7% | -- | 1.0% |
| West Virginia (n = 97) | 8.7% ± 2.8% | 3.5% ± 1.9% | 87.8% ± 3.3% | * | 1.0% |
| Wisconsin (n = 377) | 16.0% ± 3.7% | 6.5% ± 2.5% | 59.6% ± 4.9% | 29.8% | 7.6% |
| Wyoming (n = 23) | 45.7% ± 5.1% | -- | 39.1% ± 5.0% | 12.7% | -- |
| ***National*** | 18.6% ± 3.9% (n = 1,671) | 5.0% ± 2.2% (n = 453) | 64.2% ± 4.8% (n = 5,767) | 41.8% (n = 1,671) | 20.7% (n = 453) |

**Key:** * : Insufficient data to report -- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 37 (above) that Internet information technology budgets have increased since last year in the highest percentages of library systems in Delaware (60.0%), Kentucky (48.3%), and Maryland (47.6%). The total Internet information technology budgets have decreased since last year in the highest percentages of library systems in Missouri (64.1%), Rhode Island (37.5%), and South Carolina (27.6%). The total Internet information technology budgets have stayed the same since last year in the highest percentages of library systems in Iowa (77.1%), Oregon (79.3%), and West Virginia (87.8%).

**Figure 38: Public Library System Percentage of Libraries Receiving E-rate Discount by Category and by State.**

| *State* | Internet connectivity | Telecommunications services | Internal connections cost |
|---|---|---|---|
| Alabama (n = 206) | 37.4% ± 4.9% | 40.6% ± 4.9% | 7.7% ± 2.7% |
| Alaska (n = 81) | 32.0% ± 4.7% | 68.0% ± 4.7% | 8.0% ± 2.7% |
| Arizona (n = 28) | 24.1% ± 4.4% | 51.9% ± 5.1% | 19.3% ± 4.0% |
| Arkansas (n = 43) | 42.8% ± 5.0% | 60.4% ± 5.0% | 11.7% ± 3.3% |
| California (n = 166) | 12.8% ± 3.4% | 37.3% ± 4.9% | 3.2% ± 1.8% |
| Colorado (n = 104) | 21.8% ± 4.2% | 19.3% ± 4.0% | 8.7% ± 2.8% |
| Connecticut (n = 194) | 3.4% ± 1.8% | 32.5% ± 4.7% | 3.4% ± 1.8% |
| Delaware (n = 17) | -- | 40.0% ± 5.1% | -- |
| Florida (n = 56) | 35.3% ± 4.8% | 67.2% ± 4.7% | 4.3% ± 2.0% |
| Georgia (n = 58) | 23.1% ± 4.3% | 63.1% ± 4.9% | -- |
| Idaho (n = 104) | 37.2% ± 4.9% | 29.0% ± 4.6% | -- |
| Illinois (n = 626) | 11.6% ± 3.2% | 28.8% ± 4.5% | 1.4% ± 1.2% |
| Indiana (n = 239) | 70.8% ± 4.6% | 50.5% ± 5.0% | 5.2% ± 2.2% |
| Iowa (n = 537) | 8.7% ± 2.8% | 49.4% ± 5.0% | 1.0% ± 1.0% |
| Kentucky (n = 116) | 41.4% ± 5.0% | 55.2% ± 5.0% | 3.5% ± 1.8% |
| Louisiana (n = 65) | 89.2% ± 3.1% | 79.5% ± 4.1% | 12.3% ± 3.3% |
| Maryland (n = 21) | 28.6% ± 4.6% | 76.2% ± 4.4% | 4.8% ± 2.2% |
| Massachusetts (n = 370) | 8.5% ± 2.8% | 17.0% ± 3.8% | 2.8% ± 1.7% |
| Michigan (n = 378) | 39.8% ± 4.9% | 45.2% ± 5.0% | 2.1% ± 1.4% |
| Minnesota (n = 132) | 50.5% ± 5.0% | 42.7% ± 5.0% | 22.6% ± 4.2% |
| Mississippi (n = 44) | 63.0% ± 4.9% | 92.6% ± 2.7% | 29.6% ± 4.6% |
| Missouri (n = 145) | 37.9% ± 4.9% | 51.4% ± 5.0% | 8.9% ± 2.9% |
| Montana (n = 79) | 26.3% ± 4.4% | 70.4% ± 4.6% | 3.3% ± 1.8% |
| Nevada (n = 20) | -- | 42.8% ± 5.1% | -- |

**Figure 38 (cont'd): Public Library System Percentage of Libraries Receiving E-rate Discount by Category and by State.**

| *State* | Internet connectivity | Telecommunications services | Internal connections cost |
|---|---|---|---|
| New Hampshire (n = 230) | 2.9% ± 1.7% | 6.5% ± 2.5% | -- |
| New Mexico (n = 82) | 20.1% ± 4.0% | 28.8% ± 4.6% | 7.1% ± 2.6% |
| New York (n = 750) | 12.6% ± 3.3% | 58.7% ± 4.9% | 2.8% ± 1.6% |
| North Carolina (n = 65) | 27.8% ± 4.5% | 61.2% ± 4.9% | 3.9% ± 2.0% |
| Ohio (n = 244) | 19.0% ± 3.9% | 39.4% ± 4.9% | 1.7% ± 1.3% |
| Oregon (n = 121) | 6.9% ± 2.6% | 27.7% ± 4.5% | 4.6% ± 2.1% |
| Pennsylvania (n = 451) | 41.0% ± 4.9% | 56.9% ± 5.0% | 3.7% ± 1.9% |
| Rhode Island (n = 48) | 23.6% ± 4.3% | 29.2% ± 4.6% | -- |
| South Carolina (n = 40) | 27.6% ± 4.5% | 89.4% ± 3.1% | 5.2% ± 2.2% |
| South Dakota (n = 123) | 9.1% ± 2.9% | 9.1% ± 2.9% | 3.0% ± 1.7% |
| Tennessee (n = 184) | 44.7% ± 5.0% | 51.7% ± 5.0% | 10.5% ± 3.1% |
| Texas (n = 557) | 12.0% ± 3.3% | 23.9% ± 4.3% | 6.6% ± 2.5% |
| Utah (n = 53) | 21.1% ± 4.1% | 21.2% ± 4.1% | -- |
| Virginia (n = 79) | 23.7% ± 4.1% | 45.9% ± 5.0% | 3.7% ± 1.9% |
| Washington (n = 55) | 33.3% ± 4.8% | 33.3% ± 4.8% | -- |
| West Virginia (n = 97) | 38.6% ± 4.9% | 79.1% ± 4.1% | 14.2% ± 3.5% |
| Wisconsin (n = 377) | 12.2% ± 3.3% | 16.5% ± 3.7% | 3.8% ± 1.9% |
| Wyoming (n = 23) | -- | 23.9% ± 4.4% | -- |
| ***National*** | 22.4% ± 4.2% (N = 2,014) | 39.6% ± 4.9% (N = 3,552) | 4.4% ± 2.1% (N = 394) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

According to Figure 38 (above), the states with the highest percentages of library systems receiving E-rate discounts for Internet connectivity are Indiana (70.8%), Louisiana (89.2%), and Mississippi (63.0%). The states with the highest percentages of library systems receiving E-rate discounts for telecommunications services are Louisiana (79.5%), South Carolina (89.4%), and West Virginia (79.1%). The states with the highest percentages of library systems receiving E-rate discounts for internal connections are Minnesota (22.6%) and Mississippi (29.6%).

Figure 39 (below) documents reasons that library systems did not apply for E-rate funding. Library systems in Washington (35.4%) and Wyoming (60.9%) were most likely to not apply due to the complexity of the application process. Library systems in Wyoming (30.4%) were also most likely to feel that the library system would not qualify for E-rate funding. Library systems in South Dakota (45.5%) and Wyoming (45.7%) were most likely to believe that it was not worth applying because the funding level would be too low to justify the effort. Library systems in Massachusetts (47.0%) and Rhode Island (47.2%) were most likely to mot apply due to receiving E-rate as part of a consortium. Library systems in Delaware (20.0%) were most likely not to apply due to being rejected in the past. Library systems in South Dakota (24.2%), Washington (30.4%), and Wyoming (60.9%) were most likely to have not applied as a result of the filtering requirements of CIPA. Library systems in Colorado (11.2%), South Dakota (15.2%), and Wyoming (30.4%) were most likely to have applied for E-rate funding in the past, but now no longer find it necessary.

**Figure 39: Public Library System Reasons for Non-Receipt of E-rate Discounts by State.**

| *State* | The E-rate application process is too complicated | The library staff did not feel the library would qualify | Our total E-rate discount is fairly low and not worth the time to participate | The library receives it as part of a consortium, so does not apply individually | The library was denied funding in the past | The library has applied for E-rate in the past, but because of the need to comply with CIPA, our library decided not to apply in 2006 | The library has applied for E-rate in the past, but no longer finds it necessary |
|---|---|---|---|---|---|---|---|
| Alabama (n = 206) | 16.2% ± 3.7% | 3.2% ± 1.8% | 11.0% ± 3.1% | 6.4% ± 2.5% | -- | 3.2% ± 1.8% | 6.5% ± 2.5% |
| Alaska (n = 81) | 8.0% ± 2.7% | -- | 16.0% ± 3.7% | -- | -- | 8.0% ± 2.7% | -- |
| Arizona (n = 28) | 24.1% ± 4.4% | -- | -- | -- | -- | 7.7% ± 2.7% | -- |
| Arkansas (n = 43) | 9.2% ± 2.9% | 3.3% ± 1.8% | 9.2% ± 2.9% | -- | -- | -- | 5.9% ± 2.4% |
| California (n = 166) | 32.5% ± 4.7% | 9.9% ± 3.0% | 23.3% ± 4.2% | 3.0% ± 1.7% | 3.0% ± 1.7% | 17.3% ± 3.8% | 5.1% ± 2.2% |
| Colorado (n = 104) | 25.3% ± 4.4% | 1.0% ± 1.0% | 35.4% ± 4.8% | 1.0% ± 1.0% | -- | 6.9% ± 2.5% | 11.2% ± 3.2% |
| Connecticut (n = 194) | 9.0% ± 2.9% | 5.7% ± 2.3% | 23.8% ± 4.3% | 18.2% ± 3.9% | 2.8% ± 1.7% | 8.5% ± 2.8% | 5.7% ± 2.3% |
| Delaware (n = 17) | -- | -- | 20.0% ± 4.1% | -- | 20.0% ± 4.1% | -- | -- |
| Florida (n = 56) | 10.4% ± 3.1% | 6.1% ± 2.4% | 8.7% ± 2.8% | -- | -- | -- | 6.1% ± 2.4% |
| Georgia (n = 58) | 20.7% ± 4.1% | 6.9% ± 2.6% | 13.8% ± 3.5% | 9.3% ± 2.9% | -- | -- | -- |
| Idaho (n = 104) | 34.1% ± 4.8% | -- | 21.7% ± 4.1% | 4.1% ± 2.0% | 8.3% ± 2.8% | 4.1% ± 2.0% | -- |
| Illinois (n = 626) | 34.4% ± 4.8% | 6.9% ± 2.5% | 25.0% ± 4.3% | 1.3% ± 1.2% | 2.2% ± 1.5% | 8.8% ± 2.8% | 4.1% ± 2.0% |
| Indiana (n = 239) | 1.7% ± 1.3% | -- | -- | 1.7% ± 1.3% | -- | 3.4% ± 1.8% | -- |
| Iowa (n = 537) | 18.4% ± 3.9% | 6.1% ± 2.4% | 17.6% ± 3.8% | * | 1.0% ± 1.0% | 5.8% ± 2.3% | 3.1% ± 1.7% |
| Kentucky (n = 116) | 31.0% ± 4.7% | -- | 20.7% ± 4.1% | -- | 9.2% ± 2.9% | 23.0% ± 4.2% | -- |
| Louisiana (n = 65) | -- | -- | -- | -- | -- | -- | -- |

**Figure 39 (cont'd): Public Library System Reasons for Non-Receipt of E-rate Discounts by State.**

| *State* | The E-rate application process is too complicated | The library staff did not feel the library would qualify | Our total E-rate discount is fairly low and not worth the time to participate | The library receives it as part of a consortium, so does not apply individually | The library was denied funding in the past | The library has applied for E-rate in the past, but because of the need to comply with CIPA, our library decided not to apply in 2006 | The library has applied for E-rate in the past, but no longer finds it necessary |
|---|---|---|---|---|---|---|---|
| Maryland (n = 21) | 14.3% ± 3.6% | 4.8% ± 2.2% | 4.8% ± 2.2% | 4.8% ± 2.2% | 4.8% ± 2.2% | 4.8% ± 2.2% | 4.8% ± 2.2% |
| Massachusetts (n = 370) | 25.1% ± 4.3% | 6.5% ± 2.5% | 26.8% ± 4.4% | 47.0% ± 5.0% | 2.7% ± 1.6% | 12.3% ± 3.3% | * |
| Michigan (n = 378) | 9.2% ± 2.9% | 3.1% ± 1.7% | 12.4% ± 3.3% | 3.2% ± 1.8% | 1.1% ± 1.0% | 6.2% ± 2.4% | -- |
| Minnesota (n = 132) | 3.2% ± 1.8% | -- | 6.3% ± 2.4% | 21.0% ± 4.1% | -- | 2.6% ± 1.6% | -- |
| Mississippi (n = 44) | 3.7% ± 1.9% | -- | 3.7% ± 1.9% | -- | -- | -- | -- |
| Missouri (n = 145) | 6.0% ± 2.4% | -- | 15.9% ± 3.7% | 14.9% ± 3.6% | 2.0% ± 1.4% | -- | -- |
| Montana (n = 79) | 3.3% ± 1.8% | -- | 6.6% ± 2.5% | -- | -- | 9.9% ± 3.0% | -- |
| Nevada (n = 20) | 30.7% ± 4.7% | 7.5% ± 2.7% | 33.9% ± 4.9% | 28.9% ± 4.7% | 7.5% ± 2.7% | -- | -- |
| New Hampshire (n = 230) | 30.2% ± 2.4% | 5.9% ± 4.4% | 26.4% ± 1.7% | 2.9% ± 1.7% | -- | 19.5% ± 4.0% | 7.4% ± 2.6% |
| New Mexico (n = 82) | 35.0% ± 4.8% | 4.5% ± 2.1% | 17.5% ± 3.8% | -- | 4.5% ± 2.1% | 20.1% ± 4.0% | 2.6% ± 1.6% |
| New York (n = 750) | 14.4% ± 3.5% | 2.5% ± 1.6% | 12.3% ± 3.3% | 7.2% ± 2.6% | 3.4% ± 1.8% | 11.0% ± 3.1% | 2.5% ± 1.6% |
| North Carolina (n = 65) | 14.0% ± 3.5% | 3.9% ± 2.0% | 16.5% ± 3.7% | 4.4% ± 2.1% | -- | -- | -- |
| Ohio (n = 244) | 26.1% ± 4.4% | -- | 20.8% ± 4.1% | 12.0% ± 3.3% | 3.3% ± 1.8% | 7.7% ± 2.7% | 2.7% ± 1.6% |
| Oregon (n = 121) | 16.2% ± 3.7% | 11.5% ± 3.2% | 20.8% ± 4.1% | 18.7% ± 3.9% | -- | 16.7% ± 3.7% | -- |
| Pennsylvania (n = 451) | 9.6% ± 3.0% | -- | 12.8% ± 3.3% | 9.3% ± 2.9% | 2.6% ± 1.6% | * | 2.8% ± 1.7% |
| Rhode Island (n = 48) | 9.7% ± 3.0% | -- | -- | 47.2% ± 5.1% | -- | -- | -- |

**Figure 39 (cont'd): Public Library System Reasons for Non-Receipt of E-rate Discounts by State.**

| *State* | The E-rate application process is too complicated | The library staff did not feel the library would qualify | Our total E-rate discount is fairly low and not worth the time to participate | The library receives it as part of a consortium, so does not apply individually | The library was denied funding in the past | The library has applied for E-rate in the past, but because of the need to comply with CIPA, our library decided not to apply in 2006 | The library has applied for E-rate in the past, but no longer finds it necessary |
|---|---|---|---|---|---|---|---|
| South Carolina (n = 40) | -- | -- | -- | -- | -- | -- | -- |
| South Dakota (n = 123) | 27.3% ± 4.5% | 15.2% ± 3.6% | 45.5% ± 5.0% | -- | 3.0% ± 1.7% | 24.2% ± 4.3% | 15.2% ± 3.6% |
| Tennessee (n = 184) | 9.8% ± 3.0% | 5.6% ± 2.3% | 9.8% ± 3.0% | 2.1% ± 1.5% | 2.8% ± 1.7% | 5.6% ± 2.3% | -- |
| Texas (n = 557) | 25.5% ± 4.4% | 3.1% ± 1.7% | 16.2% ± 3.7% | 1.0% ± 1.0% | 1.0% ± 1.0% | 7.9% ± 2.7% | 8.3% ± 2.8% |
| Utah (n = 53) | 16.5% ± 3.8% | 5.5% ± 2.3% | 15.6% ± 3.7% | 9.1% ± 2.9% | -- | -- | 5.5% ± 2.3% |
| Virginia (n = 79) | 31.1% ± 4.7% | 4.4% ± 2.1% | 20.3% ± 4.1% | -- | 2.2% ± 1.5% | 13.9% ± 3.5% | -- |
| Washington (n = 55) | 35.4% ± 4.8% | 10.1% ± 3.0% | 40.5% ± 5.0% | -- | -- | 30.4% ± 4.6% | -- |
| West Virginia (n = 97) | 5.8% ± 2.4% | -- | 2.2% ± 1.5% | -- | -- | -- | 3.5% ± 1.9% |
| Wisconsin (n = 377) | 6.6% ± 2.5% | 5.6% ± 2.3% | 6.5% ± 2.5% | 29.7% ± 4.6% | -- | 8.7% ± 2.8% | -- |
| Wyoming (n = 23) | 60.9% ± 5.0% | 30.4% ± 4.7% | 45.7% ± 5.1% | 15.2% ± 3.7% | -- | 60.9% ± 5.0% | 30.4% ± 4.7% |
| ***National*** | 35.3% ± 4.8% (n =1,734) | 8.1% ± 2.7% (n =399) | 31.7% ± 4.7% (n =1,556) | 13.4% ± 3.4% (n =657) | 3.3% ± 1.8% (n =160) | 15.3% ± 3.6% (n =753) | 5.8% ± 2.4% (n =287) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

As can be seen in Figure 40 (below), the highest percentages of library systems do not offer information technology training for patrons in Arkansas (39.6%), Louisiana (48.7%), and Mississippi (40.7%). The highest percentages of library systems offer training related to local economic development in Maryland (14.3%) and North Carolina (14.5%). The highest percentages of library systems offer training to those who otherwise have no access to technology in Florida (73.4%) and Maryland (76.2%). The highest percentages of library systems offer training to help students with their schoolwork in Iowa (64.2%) and West Virginia (69.1%). The highest percentages of library systems offer training to help business owners in Maryland (9.5%) and Montana (9.9%). The highest percentages of library systems offer training to provide general technology skills in Kentucky (72.4%) and Montana (70.4%). The highest percentages of library systems offer training to provide information literacy skills in Maryland (90.5%) and Rhode Island (81.9%). The highest percentages of library systems offer training to help users access government information and services in Delaware (60.0%) and Rhode Island (52.8%).

**Figure 40: Public Library System Information Technology Training Availability for Patrons by State.**

| *State* | The library does not offer patron information technology training services | Facilitates local economic development | Offers technology training opportunities to those who would otherwise not have any | Helps students with their school assignment and school work | Helps business owners understand and use technology and/or information resources | Provides general technology skills | Provide information literacy skills | Helps users access and use electronic government services and resources. |
|---|---|---|---|---|---|---|---|---|
| Alabama (n = 206) | 30.4% ± 4.6% | -- | 29.6% ± 4.6% | 50.9% ± 5.0% | 4.5% ± 2.1% | 31.6% ± 4.7% | 48.9% ± 5.0% | 17.4% ± 3.8% |
| Alaska (n = 81) | 36.0% ± 4.8% | -- | 32.0% ± 4.7% | 20.0% ± 4.0% | -- | 40.0% ± 4.9% | 40.0% ± 4.9% | 40.0% ± 4.9% |
| Arizona (n = 28) | 34.8% ± 4.9% | 7.7% ± 2.7% | 65.2% ± 4.9% | 23.2% ± 4.3% | -- | 49.8% ± 5.1% | 32.6% ± 4.8% | 24.1% ± 4.4% |
| Arkansas (n = 43) | 39.6% ± 5.0% | -- | 30.1% ± 4.6% | 36.3% ± 4.9% | 9.1% ± 2.9% | 24.2% ± 4.3% | 30.2% ± 4.7% | 17.8% ± 3.9% |
| California (n = 166) | 24.3% ± 4.3% | 3.0% ± 1.7% | 49.5% ± 5.0% | 37.1% ± 4.9% | 5.7% ± 2.3% | 30.5% ± 4.6% | 59.5% ± 4.9% | 13.3% ± 3.4% |
| Colorado (n = 104) | 11.2% ± 3.2% | 1.0% ± 1.0% | 42.5% ±5. 0% | 20.9% ± 4.1% | 5.3% ± 2.3% | 60.3% ± 4.9% | 64.4% ± 4.8% | 20.9% ± 4.1% |
| Connecticut (n = 194) | 20.9% ± 4.1% | -- | 40.6% ± 4.9% | 33.6% ± 4.7% | 3.4% ± 1.8% | 40.1% ± 4.9% | 62.1% ± 4.9% | 11.4% ± 3.2% |
| Delaware (n = 17) | -- | -- | 40.0% ± 5.1% | 60.0% ± 5.1% | -- | 60.0% ± 5.1% | 80.0% ± 4.1% | 60.0% ± 5.1% |
| Florida (n = 466) | 6.8% ± 2.6% | -- | 73.4% ± 4.5% | 31.0% ± 4.7% | -- | 66.4% ± 4.8% | 64.6% ± 4.8% | 18.1% ± 3.9% |
| Georgia (n = 58) | 34.5% ± 4.8% | -- | 43.3% ± 5.0% | 42.4% ± 5.0% | -- | 42.4% ± 5.0% | 65.5% ± 4.8% | 3.0% ± 1.7% |
| Idaho (n = 104) | 29.0% ± 4.6% | -- | 29.0% ± 4.6% | 29.9% ± 4.6% | 1.0% ± 1.0% | 37.2% ± 4.9% | 41.4% ± 5.0% | 25.8% ± 4.4% |
| Illinois (n = 626) | 21.4% ± 4.1% | 1.7% ± 1.3% | 39.5% ± 4.9% | 43.1% ± 5.0% | 4.3% ± 2.0% | 40.3% ± 4.9% | 47.4% ± 5.0% | 23.9% ± 4.3% |
| Indiana (n = 239) | 6.9% ± 2.5% | 7.0% ± 2.6% | 58.9% ± 4.9% | 32.3% ± 4.7% | -- | 56.8% ± 5.0% | 52.0% ± 5.0% | 32.5% ± 4.7% |
| Iowa (n = 537) | 21.4% ± 4.1% | -- | 35.6% ± 4.8% | 64.2% ± 4.8% | 1.6% ± 1.2% | 42.2% ± 4.9% | 43.6% ± 5.0% | 25.2% ± 4.4% |
| Kentucky (n = 116) | 12.6% ± 3.3% | 3.5% ± 1.8% | 46.0% ± 5.0% | 60.9% ± 4.9% | 4.6% ± 2.1% | 72.4% ± 4.5% | 56.3% ± 5.0% | 32.2% ± 4.7% |
| Louisiana (n = 65) | 48.7% ± 5.0% | -- | 4.1% ± 2.0% | 32.8% ± 4.7% | -- | 18.4% ± 3.9% | 26.7% ± 4.5% | 14.4% ± 3.5% |

**Figure 40 (cont'd): Public Library System Information Technology Training Availability for Patrons by State.**

| *State* | The library does not offer patron information technology training services | Facilitates local economic development | Offers technology training opportunities to those who would otherwise not have any | Helps students with their school assignment and school work | Helps business owners understand and use technology and/or information resources | Provides general technology skills | Provide information literacy skills | Helps users access and use electronic government services and resources. |
|---|---|---|---|---|---|---|---|---|
| Maryland (n = 21) | -- | 14.3% ± 3.6% | 76.2% ± 4.4% | 57.1% ± 5.1% | 9.5% ± 3.0% | 47.6% ± 5.1% | 90.5% ± 3.0% | -- |
| Massachusetts (n = 370) | 27.1% ± 4.5% | 2.0% ± 1.4% | 42.2% ± 5.0% | 36.5% ± 4.8% | 1.9% ± 1.4% | 33.5% ± 4.7% | 47.3% ± 5.0% | 26.2% ± 4.4% |
| Michigan (n = 378) | 20.6% ± 4.1% | * | 44.2% ± 5.0% | 28.1% ± 4.5% | 2.0% ± 1.4% | 59.5% ± 4.9% | 57.8% ± 5.0% | 23.8% ± 4.3% |
| Minnesota (n = 132) | 10.1% ± 3.0% | -- | 40.1% ± 4.9% | 51.1% ± 5.0% | 4.4% ± 2.1% | 29.1% ± 4.6% | 53.9% ± 5.0% | 30.9% ± 4.6% |
| Mississippi (n = 44) | 40.7% ± 5.0% | -- | 37.0% ± 4.9% | 48.1% ± 5.1% | -- | 40.7% ± 5.0% | 37.0% ± 4.9% | 14.8% ± 3.6% |
| Missouri (n = 145) | 21.8% ± 4.1% | -- | 50.4% ± 5.0% | 30.7% ± 4.6% | 2.0% ± 1.4% | 47.9% ± 5.0% | 52.4% ± 5.0% | 29.8% ± 4.6% |
| Montana (n = 79) | 6.6% ± 2.5% | -- | 42.8% ± 5.0% | 42.8% ± 5.0% | 9.9% ± 3.0% | 70.4% ± 4.6% | 55.9% ± 5.0% | 29.6% ± 4.6% |
| Nevada (n = 20) | 21.4% ± 4.2% | -- | 30.7% ± 4.7% | 52.2% ± 5.2% | -- | 42.1% ± 5.1% | 57.2% ± 4.2% | 21.4% ± 3.2% |
| New Hampshire (n = 230) | 32.8% ± 4.7% | -- | 20.8% ± 4.1% | 37.8% ± 4.9% | -- | 33.4% ± 4.7% | 42.2% ± 5.0% | 18.4% ± 3.9% |
| New Mexico (n = 82) | 18.2% ± 3.9% | -- | 50.8% ± 5.0% | 44.9% ± 5.0% | 5.2% ± 2.2% | 29.1% ± 4.6% | 49.2% ± 5.0% | 31.4% ± 4.7% |
| New York (n = 750) | 16.3% ± 3.7% | * | 48.1% ± 5.0% | 43.9% ± 5.0% | 2.5% ± 1.6% | 43.2% ± 5.0% | 60.9% ± 4.9% | 19.0% ± 3.9% |
| North Carolina (n = 65) | 16.5% ± 3.7% | 14.5% ± 3.6% | 55.2% ± 5.0% | 39.8% ± 4.9% | -- | 52.0% ± 5.0% | 61.2% ± 4.9% | 12.2% ± 3.3% |
| Ohio (n = 244) | 20.1% ± 4.0% | 5.4% ± 2.3% | 53.7% ± 5.0% | 37.8% ± 4.9% | 2.7% ± 1.6% | 43.8% ± 5.0% | 53.7% ± 5.0% | 24.5% ± 4.3% |
| Oregon (n = 121) | 20.8% ± 4.1% | -- | 39.9% ± 4.9% | 42.3% ± 5.0% | 2.3% ± 1.5% | 30.0% ± 4.6% | 44.4% ± 5.0% | 44.0% ± 5.0% |
| Pennsylvania (n = 451) | 22.7% ± 4.2% | -- | 42.1% ± 4.9% | 33.3% ± 4.7% | 2.8% ± 1.7% | 45.1% ± 5.0% | 50.3% ± 5.0% | 24.2% ± 4.3% |
| Rhode Island (n = 48) | 4.2% ± 2.0% | -- | 33.3% ± 4.8% | 52.8% ± 5.1% | -- | 56.9% ± 5.0% | 81.9% ± 3.9% | 52.8% ± 5.1% |

**Figure 40 (cont'd): Public Library System Information Technology Training Availability for Patrons by State.**

| *State* | The library does not offer patron information technology training services | Facilitates local economic development | Offers technology training opportunities to those who would otherwise not have any | Helps students with their school assignment and school work | Helps business owners understand and use technology and/or information resources | Provides general technology skills | Provide information literacy skills | Helps users access and use electronic government services and resources. |
|---|---|---|---|---|---|---|---|---|
| South Carolina (n = 40) | 31.1% ± 4.7% | 3.8% ± 1.9% | 48.2% ± 5.1% | 36.5% ± 4.9% | -- | 30.1% ± 4.6% | 55.5% ± 5.0% | 12.1% ± 3.3% |
| South Dakota (n = 123) | 24.2% ± 4.3% | 3.0% ± 1.7% | 27.3% ± 4.5% | 33.3% ± 4.7% | 3.0% ± 1.7% | 33.3% ± 4.7% | 39.4% ± 4.9% | 30.3% ± 4.6% |
| Tennessee (n = 184) | 30.0% ± 4.6% | -- | 30.8% ± 4.6% | 39.9% ± 4.9% | -- | 39.3% ± 4.9% | 52.5% ± 5.0% | 20.3% ± 4.0% |
| Texas (n = 557) | 19.1% ± 3.9% | 4.2% ± 2.0% | 39.8% ± 4.9% | 43.4% ± 5.0% | 2.6% ± 1.6% | 43.7% ± 5.0% | 57.6% ± 5.0% | 31.2% ± 4.6% |
| Utah (n = 53) | 15.6% ± 3.7% | -- | 42.3% ± 5.0% | 63.2% ± 4.9% | 5.5% ± 2.3% | 32.3% ± 4.7% | 52.3% ± 5.0% | 36.6% ± 4.9% |
| Virginia (n = 79) | 22.8% ± 4.2% | -- | 36.6% ± 4.9% | 40.6% ± 4.9% | -- | 49.6% ± 5.0% | 60.8% ± 4.9% | 21.0% ± 4.1% |
| Washington (n = 55) | 18.2% ± 3.9% | -- | 23.2% ± 4.3% | 45.5% ± 5.0% | -- | 55.6% ± 5.0% | 63.7% ± 4.9% | -- |
| West Virginia (n = 97) | 10.6% ± 3.1% | 7.1% ± 2.6% | 28.3% ± 4.5% | 69.1% ± 4.6% | -- | 40.2% ± 4.9% | 62.4% ± 4.9% | 44.7% ± 5.0% |
| Wisconsin (n = 377) | 28.1% ± 4.5% | -- | 33.5% ± 4.7% | 32.9% ± 4.7% | 3.8% ± 1.9% | 37.5% ± 4.9% | 44.2% ± 5.0% | 27.3% ± 4.5% |
| Wyoming (n = 23) | -- | -- | 54.3% ± 5.1% | 30.4% ± 4.7% | -- | 69.6% ± 4.7% | -- | 30.4% ± 4.7% |
| ***National*** | 21.4% ± 4.1% (n = 1,921) | 1.6% ± 1.3% (n = 142) | 41.2% ± 4.9% (n = 3,695) | 41.9% ± 4.9% (n = 3,763) | 2.5% ± 1.6% (n = 225) | 42.7% ± 5.0% (n = 3,836) | 51.6% ± 5.0% (n = 4,629) | 25.0% ± 4.3% (n = 2,248) |

**Key:** * : Insufficient data to report
-- : No data to report

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Figure 41 (below) shows library system perceptions of the impacts of the availability of Internet access in the public library on the community served by the library:

- The provision of information for local economic development was noted by the highest percentage of library systems in Washington (15.1%).
- The provision of information about local and state business opportunities was noted by the highest percentage of library systems in New York (98.8%).
- The provision of Internet training and skills was noted by the highest percentage of library systems in Florida (76.8%).
- The provision of real estate information was noted by the highest percentage of library systems in Alaska (8.0%).
- The provision of community information was noted by the highest percentage of library systems in Connecticut (38.2%).
- The provision of information for local business marketing was noted by the highest percentage of library systems in Delaware (20.0%).
- The provision of services for job seekers was noted by the highest percentage of library systems in North Carolina (78.2%).
- The provision of investment information or databases was noted by the highest percentage of library systems in Colorado (16.3%).
- The provision of education resources for K-12 students was noted by the highest percentage of library systems in Georgia (86.8%).
- The provision of education resources for students in higher education was noted by the highest percentage of library systems in Alabama (46.5%).
- The provision of education resources for home schooling was noted by the highest percentage of library systems in Louisiana (33.3%).
- The provision of education resources for adult and continuing education students was noted by the highest percentage of library systems in North Carolina (45.6%).
- The provision of information for college applicants was noted by the highest percentage of library systems in Delaware (20.0%).
- The provision of access to local and state government documents was noted by the highest percentage of library systems in Nevada (32.1%).
- The provision of access to federal government documents was noted by the highest percentage of library systems in Washington (20.3%).
- The provision of access to local, state, and federal electronic government services was noted by the highest percentage of library systems in Rhode Island (47.2%).

One can therefore see the variation in the impacts of Internet access across the states.

## Figure 41: Public Library System Community Impact of Public Access Internet Services by State.

| *State* | Provide information for local economic development | Provide information about state and local business opportunities | Provide computer and Internet skills training | Provide real estate-related information | Provide community information | Provide information for local business marketing | Provide services for job seekers | Provide investment information or databases | Provide education resources and databases for K-12 students | Provide education resources & databases for students in higher education | Provide education resources and databases for home schooling | Provide education resources & databases for adult/continuing education students | Provide information for college applicants | Provide access to local public and local government documents | Provide access to federal government documents | Provide access to and assistance with local, state, or federal government electronic services |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama (n = 206) | 3.2% ±1.8% | -- | 39.3% ±4.9% | 6.4% ±2.5% | 21.8% ±4.1% | -- | 39.4% ±4.9% | -- | 79.4% ±4.1% | 46.5% ±5.0% | 9.7% ±3.0% | 7.8% ±2.7% | 6.5% ±2.5% | -- | 9.7% ±3.0% | 14.2% ±3.5% |
| Alaska (n = 81) | -- | 8.0% ±2.7% | 28.0% ±4.5% | 8.0% ±2.7% | 24.0% ±4.3% | -- | 40.0% ±4.9% | 8.0% ±2.7% | 48.0% ±5.0% | 16.0% ±3.7% | 12.0% ±3.3% | 8.0% ±2.7% | 8.0% ±2.7% | 12.0% ±3.3% | 8.0% ±2.7% | 44.0% ±5.0% |
| Arizona (n = 28) | 7.7% ±2.7% | -- | 57.5% ±5.0% | -- | 34.8% ±4.9% | -- | 32.6% ±4.8% | -- | 51.1% ±5.1% | 7.7% ±2.7% | 16.3% ±3.8% | 15.5% ±3.7% | 15.5% ±3.7% | -- | -- | 8.6% ±2.9% |
| Arkansas (n = 43) | 5.8% ±2.4% | 9.2% ±2.9% | 21.7% ±4.2% | -- | 17.6% ±3.9% | -- | 33.5% ±4.8% | -- | 69.7% ±4.7% | 30.3% ±4.7% | 21.8% ±4.2% | 18.5% ±3.9% | 5.9% ±2.4% | -- | 11.8% ±3.3% | 12.6% ±3.4% |
| California (n = 166) | 4.4% ±2.1% | 1.5% ±1.2% | 39.7% ±4.9% | -- | 27.1% ±4.5% | 7.5% ±2.6% | 45.3% ±5.0% | 8.2% ±2.8% | 68.3% ±4.7% | 13.7% ±3.5% | 1.7% ±1.3% | 15.3% ±3.6% | 1.3% ±1.2% | 6.6% ±2.5% | 8.1% ±2.7% | 11.4% ±3.2% |
| Colorado (n = 104) | 4.4% ±2.1% | 4.4% ±2.1% | 48.9% ±5.0% | -- | 26.2% ±4.4% | 2.5% ±1.6% | 42.2% ±5.0% | 16.3% ±3.7% | 40.8% ±4.9% | 13.2% ±3.4% | 4.4% ±2.1% | 7.8% ±2.7% | 4.4% ±2.1% | -- | 19.9% ±4.0% | 22.7% ±4.2% |
| Connecticut (n = 194) | 2.8% ±1.7% | 5.7% ±2.3% | 39.3% ±4.9% | -- | 38.2% ±4.9% | 2.8% ±1.7% | 36.5% ±4.8% | 4.6% ±2.1% | 56.3% ±5.0% | 13.1% ±3.4% | 5.7% ±2.3% | 17.6% ±3.8 | -- | 2.8% ±1.7 | 4.6% ±2.1 | 17.0% ±3.8 |
| Delaware (n = 17) | -- | -- | 40.0% ±5.1% | -- | -- | 20.0% ±4.1% | -- | -- | 80.0% ±4.1% | -- | -- | 40.0% ±5.1% | 20.0% ±4.1% | -- | -- | -- |
| Florida (n = 56) | -- | 6.8% ±2.6% | 76.8% ±4.3% | -- | 23.2% ±4.3% | -- | 12.8% ±3.4% | 11.2% ±3.2% | 56.0% ±5.0% | 10.4% ±3.1% | 2.6% ±1.6% | 6.8% ±2.6% | 12.2% ±3.3% | 14.8% ±3.6% | 8.6% ±2.8% | 16.2% ±3.7% |
| Georgia (n = 58) | -- | 6.3% ±2.5% | 36.9% ±4.9% | -- | 6.9% ±2.6% | -- | 53.2% ±5.0% | -- | 86.8% ±3.4% | 26.7% ±4.7% | 23.1% ±4.3% | 19.3% ±4.0% | 6.9% ±2.6% | -- | -- | 20.7% ±4.1% |
| Idaho (n = 104) | -- | 5.1% ±2.2% | 29.0% ±4.6% | -- | 4.1% ±2.0% | -- | 58.9% ±4.9% | 4.1% ±2.0% | 45.5% ±5.0% | 9.2% ±2.9% | 29.0% ±4.6% | 20.7% ±4.1% | 12.4% ±3.3% | 4.1% ±2.0% | 4.1% ±2.0% | 33.1% ±4.7% |
| Illinois (n = 626) | 2.5% ±1.6% | * | 37.5% ±4.8% | 1.8% ±1.3% | 24.0% ±4.3% | 1.3% ±1.2% | 49.8% ±5.0% | 6.1% ±2.4% | 59.4% ±4.9% | 15.7% ±3.6% | 7.1% ±2.6% | 14.5% ±3.5% | 8.4% ±2.8% | 5.3% ±2.2% | 5.5% ±2.3% | 20.3% ±4.0% |
| Indiana (n = 239) | 5.2% ±2.2% | -- | 50.2% ±5.0% | -- | 20.8% ±4.1% | 1.7% ±1.3% | 49.9% ±5.0% | 1.7% ±1.3% | 57.0% ±5.0% | 8.6% ±2.8% | 6.8% ±2.5% | 12.0% ±3.3% | 3.4% ±1.8% | 8.6% ±2.8% | 8.5% ±2.8% | 32.7% ±4.7% |

**Figure 41 (cont'd): Public Library System Community Impact of Public Access Internet Services by State.**

| *State* | Provide information for local economic development | Provide information about state and local business opportunities | Provide computer and Internet skills training | Provide real estate-related information | Provide community information | Provide information for local business marketing | Provide services for job seekers | Provide investment information or databases | Provide education resources and databases for K-12 students | Provide education resources & databases for students in higher education | Provide education resources and databases for home schooling | Provide education resources & databases for adult/continuing education students | Provide information for college applicants | Provide access to local public and local government documents | Provide access to federal government documents | Provide access to and assistance with local, state, or federal government electronic services |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iowa (n = 537) | 2.0% ±1.4% | 2.0% ±1.4% | 38.4% ±4.9% | 2.0% ±1.4% | 16.7% ±3.7% | -- | 44.9% ±5.0% | 2.5% ±1.6% | 76.7% ±4.2% | 22.6% ±4.2% | 14.8% ±3.6% | 19.1% ±3.9% | 3.6% ±1.9% | 6.7% ±2.5% | 3.5% ±1.8% | 18.0% ±3.8% |
| Kentucky (n = 116) | 3.5% ±1.8% | 14.9% ±3.6% | 50.6% ±5.0% | -- | 35.6% ±4.8% | 4.6% ±2.1% | 50.6% ±5.0% | 4.6% ±2.1% | 40.2% ±4.9% | 32.2% ±4.7% | -- | 23.0% ±4.2% | 9.2% ±2.9% | 4.6% ±2.1% | 9.2% ±2.9% | 12.6% ±3.3% |
| Louisiana (n = 65) | 10.3% ±3.1% | -- | 12.3% ±3.3% | 2.0% ±1.4% | 16.4% ±3.7% | -- | 49.2% ±5.0% | -- | 81.6% ±3.9% | 27.7% ±4.5% | 33.3% ±4.8% | 33.3% ±4.8% | -- | 2.0% ±1.4% | 2.0% ±1.4% | 2.0% ±1.4% |
| Maryland (n = 21) | 14.3% ±3.6% | 4.8% ±2.2% | 52.4% ±5.1% | -- | 28.6% ±4.6% | 4.8% ±2.2% | 38.1% ±5.0% | -- | 81.0% ±4.0% | 9.5% ±3.0% | 23.8% ±4.4% | 33.3% ±4.8% | -- | -- | -- | 4.8% ±2.2% |
| Massachusetts (n = 370) | 5.8% ±2.3% | 1.9% ±1.4% | 36.2% ±4.8% | -- | 28.8% ±4.5% | * | 21.8% ±4.1% | 9.1% ±2.9% | 70.7% ±4.6% | 18.6% ±3.9% | 7.7% ±2.7% | 31.1% ±4.6% | * | 6.4% ±2.5% | 7.7% ±2.7% | 16.0% ±3.7% |
| Michigan (n = 378) | 4.0% ±2.0% | 2.0% ±1.4% | 42.2% ±5.0% | * | 19.7% ±4.0% | * | 63.0% ±4.8% | 4.3% ±2.0% | 58.9% ±4.9% | 6.3% ±2.4% | 12.3% ±3.3% | 18.6% ±3.9% | 4.2% ±2.0% | 3.0% ±1.7% | 6.1% ±2.4% | 27.4% ±4.5% |
| Minnesota (n = 132) | -- | -- | 22.2% ±4.2% | -- | 20.2% ±4.0% | -- | 43.7% ±5.0% | -- | 74.7% ±4.4% | 7.5% ±2.7% | 22.7% ±4.2% | 20.2% ±4.0% | 5.8% ±2.3% | 6.3% ±2.4% | 7.5% ±2.7% | 24.0% ±4.3% |
| Mississippi (n = 44) | 7.4% ±2.7% | -- | 22.2% ±4.2% | -- | 22.2% ±4.2% | -- | 44.4% ±5.0% | -- | 85.2% ±3.6% | 29.6% ±4.6% | 18.5% ±3.9% | 33.3% ±4.8% | 3.7% ±1.9% | -- | -- | 22.2% ±4.2% |
| Missouri (n = 145) | 2.0% ±1.4% | 6.0% ±2.4% | 47.5% ±5.0% | -- | 16.1% ±3.7% | -- | 70.0% ±4.6% | 2.0% ±1.4% | 48.2% ±5.0% | 18.8% ±3.9% | 6.9% ±2.5% | 15.8% ±3.7% | 7.9% ±2.7% | 4.0% ±2.0% | 15.5% ±3.6% | 21.9% ±4.2% |
| Montana (n = 79) | 9.9% ±3.0% | 9.9% ±3.0% | 62.5% ±4.9% | -- | 13.2% ±3.4% | -- | 40.8% ±5.0% | -- | 46.1% ±5.0% | 9.9% ±3.0% | 19.7% ±4.0% | 13.2% ±3.4% | 9.9% ±3.0% | 7.8% ±2.7% | 9.9% ±3.0% | 26.3% ±4.4% |
| Nevada (n = 20) | -- | -- | 39.6% ±5.0% | -- | 20.7% ±4.2% | -- | 44.6% ±5.1% | 5.0% ±2.2% | 67.9% ±4.8% | -- | 10.7% ±3.2% | 39.6% ±5.0% | -- | 32.1% ±4.8% | 10.7% ±3.2% | 28.9% ±4.7% |
| New Hampshire (n = 230) | 1.5% ±1.2% | 4.4% ±2.1% | 14.3% ±3.5% | 1.5% ±1.2% | 33.1% ±4.7% | 1.8% ±1.4% | 38.5% ±4.9% | 2.9% ±1.7% | 72.7% ±4.5% | 13.3% ±3.4% | 19.5% ±4.0% | 23.5% ±4.3% | 1.5% ±1.2% | 10.3% ±3.1% | 7.7% ±2.7% | 13.3% ±3.4% |
| New Mexico (n = 82) | -- | -- | 31.7% ±4.7% | -- | 21.0% ±4.1% | -- | 30.7% ±4.6% | -- | 56.7% ±5.0% | 22.7% ±4.2% | 10.4% ±3.1% | 20.1% ±4.0% | 14.9% ±3.6% | 5.2% ±2.2% | 10.4% ±3.1% | 28.4% ±4.5% |

**Figure 41 (cont'd): Public Library System Community Impact of Public Access Internet Services by State.**

| *State* | Provide information for local economic development | Provide information about state and local business opportunities | Provide computer and Internet skills training | Provide real estate-related information | Provide community information | Provide information for local business marketing | Provide services for job seekers | Provide investment information or databases | Provide education resources and databases for K-12 students | Provide education resources & databases for students in higher education | Provide education resources and databases for home schooling | Provide education resources & databases for adult/continuing education students | Provide information for college applicants | Provide access to local public and local government documents | Provide access to federal government documents | Provide access to and assistance with local, state, or federal government electronic services |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New York (n = 750) | 2.9% ±1.7% | 98.8% ±1.1% | 51.3% ±5.0% | 1.7% ±1.3% | 18.5% ±3.9% | * | 45.8% ±5.0% | 2.9% ±1.7% | 62.7% ±4.8% | 20.3% ±4.0% | 9.6% ±3.0% | 21.9% ±4.1% | * | 2.5% ±1.6% | 5.9% ±2.4% | 13.4% ±3.4% |
| North Carolina (n = 65) | 4.4% ±2.1% | -- | 32.6% ±4.7% | 5.8% ±2.4% | 8.7% ±2.8% | -- | 78.2% ±4.2% | 3.9% ±2.0% | 52.0% ±5.0% | 20.0% ±4.0% | 9.7% ±3.0% | 45.6% ±5.0% | -- | 5.8% ±2.4% | -- | 7.8% ±2.7% |
| Ohio (n = 244) | 5.4% ±2.3% | 2.7% ±1.6% | 56.9% ±5.0% | 2.7% ±1.6% | 19.8% ±4.0% | 2.7% ±1.6% | 35.4% ±4.8% | -- | 64.8% ±4.8% | 8.7% ±2.8% | 14.7% ±3.6% | 8.7% ±2.8% | 5.4% ±2.3% | 7.7% ±2.7% | 9.2% ±2.9% | 21.4% ±4.1% |
| Oregon (n = 121) | 7.4% ±2.6% | -- | 33.8% ±4.8% | -- | 13.9% ±3.5% | 2.3% ±1.5% | 51.1% ±5.0% | -- | 60.6% ±4.9% | 11.5% ±3.2% | 16.2% ±3.7% | 25.4% ±4.4% | 9.2% ±2.9% | 2.3% ±1.5% | 4.6% ±2.1% | 37.0% ±4.9% |
| Pennsylvania (n = 451) | 3.1% ±1.8% | 2.3% ±1.5% | 39.3% ±4.9% | -- | 18.7% ±3.9% | * | 58.2% ±4.9% | 3.7% ±1.9% | 67.1% ±4.7% | 16.2% ±3.7% | 15.0% ±3.6% | 15.9% ±3.7% | * | 4.3% ±2.0% | 5.6% ±2.3% | 21.9% ±4.1% |
| Rhode Island (n = 48) | -- | -- | 23.6% ±4.3% | -- | 29.2% ±4.6% | -- | 52.8% ±5.1% | -- | 62.5% ±4.9% | -- | 9.7% ±3.0% | 19.5% ±4.0% | -- | 9.7% ±3.0% | -- | 47.2% ±5.1% |
| South Carolina (n = 40) | 3.8% ±1.9% | 5.2% ±2.2% | 47.9% ±5.1% | -- | 12.7% ±3.4% | -- | 73.8% ±4.5% | 5.2% ±2.2% | 75.5% ±4.4% | 23.8% ±4.3% | 14.1% ±3.5% | 29.0% ±4.6% | -- | -- | 5.2% ±2.2% | 3.8% ±1.9% |
| South Dakota (n = 123) | -- | 3.0% ±1.7% | 27.3% ±4.5% | 3.0% ±1.7% | 24.2% ±4.3% | 3.0% ±1.7% | 27.3% ±4.5% | -- | 54.5% ±5.0% | 18.2% ±3.9% | 9.1% ±2.9% | 18.2% ±3.9% | 3.0% ±1.7% | 3.0% ±1.7% | 6.1% ±2.4% | 36.4% ±4.8% |
| Tennessee (n = 184) | -- | 2.8% ±1.7% | 23.7% ±4.3% | -- | 11.9% ±3.3% | -- | 62.2% ±4.9% | 2.8% ±1.7% | 73.5% ±4.4% | 26.5% ±4.4% | 18.2% ±3.9% | 25.2% ±4.4% | 13.9% ±3.5% | 2.8% ±1.7% | 8.3% ±2.8% | 14.7% ±3.6% |
| Texas (n = 557) | 4.2% ±2.0% | 5.7% ±2.3% | 33.6% ±4.7% | 1.1% ±1.0% | 14.0% ±3.5% | * | 50.6% ±5.0% | 3.1% ±1.7% | 59.8% ±4.9% | 27.0% ±4.4% | 13.6% ±3.4% | 17.2% ±3.8% | 14.6% ±3.5% | 2.6% ±1.6% | 4.2% ±2.0% | 25.1% ±4.3% |
| Utah (n = 53) | 5.5% ±2.3% | -- | 36.8% ±4.9% | -- | 21.2% ±4.1% | -- | 40.2% ±5.0% | 5.7% ±2.3% | 67.7% ±4.7% | 42.1% ±5.0% | 5.5% ±2.3% | 37.6% ±4.9% | 5.5% ±2.3% | 5.5% ±2.3% | -- | 22.1% ±4.2% |
| Virginia (n = 79) | -- | 3.7% ±1.9% | 33.0% ±4.7% | -- | 17.6% ±3.8% | 5.9% ±2.4% | 35.2% ±4.8% | 5.9% ±2.4% | 75.1% ±4.4% | 16.1% ±3.7% | 25.2% ±4.4% | 23.0% ±4.2% | 3.4% ±1.8% | 7.1% ±2.6% | 3.4% ±1.8% | 24.7% ±4.3% |
| Washington (n = 55) | 15.1% ±3.6% | -- | 43.4% ±5.0% | -- | 33.3% ±4.8% | -- | 30.4% ±4.6% | -- | 63.7% ±4.9% | 13.2% ±3.4% | 18.2% ±3.9% | 10.1% ±3.0% | -- | 5.0% ±2.2% | 20.3% ±4.1% | 15.1% ±3.6% |

**Figure 41 (cont'd): Public Library System Community Impact of Public Access Internet Services by State.**

| *State* | Provide information for local economic development | Provide information about state and local business opportunities | Provide computer and Internet skills training | Provide real estate-related information | Provide community information | Provide information for local business marketing | Provide services for job seekers | Provide investment information or databases | Provide education resources and databases for K-12 students | Provide education resources & databases for students in higher education | Provide education resources and databases for home schooling | Provide education resources & databases for adult/continuing education students | Provide information for college applicants | Provide access to local public and local government documents | Provide access to federal government documents | Provide access to and assistance with local, state, or federal government electronic services |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| West Virginia (n = 97) | -- | 7.1% ±2.6% | 33.7% ±4.8% | -- | 21.6% ±4.1% | -- | 38.6% ±4.9% | -- | 75.2% ±4.3% | 19.9% ±4.0% | 16.4% ±3.7% | 34.4% ±4.8% | 3.5% ±1.9% | -- | 10.6% ±3.1% | 24.8% ±4.3% |
| Wisconsin (n = 377) | -- | 1.4% ±1.2% | 28.5% ±4.5% | 3.0% ±1.7% | 26.9% ±4.4% | -- | 52.8% ±5.0% | 5.9% ±2.4% | 48.8% ±5.0% | 6.5% ±2.5% | 12.3% ±3.3% | 19.4% ±4.0% | 4.3% ±2.0% | 8.4% ±2.8% | 10.7% ±3.1% | 31.7% ±4.7% |
| Wyoming (n = 23) | -- | -- | 23.9% ±4.4% | -- | 8.7% ±2.9% | -- | 60.9% ±5.0% | -- | 60.9% ±5.0% | 15.2% ±3.7% | 23.9% ±4.4% | 30.4% ±4.7% | -- | -- | -- | 30.4% ±4.7% |
| ***National*** | 3.2% ±1.8% (n=287) | 2.8% ±1.6% (n=250) | 38.0% ±4.9% (n=3,412) | 1.2% ±1.1% (n=111) | 20.9% ±4.1% (n=1,877) | 1.0% ±1.0% (n=87) | 46.1% ±5.0% (n=4,140) | 3.7% ±1.9% (n=335) | 63.6% ±4.8% (n=5,709) | 17.5% ±3.8% (n=1,575) | 12.7% ±3.3% (n=1,138) | 19.6% ±4.0% (n=1,763) | 5.5% ±2.3% (n=491) | 5.0% ±2.2% (n=447) | 6.5% ±2.5% (n=581) | 21.4% ±4.1% (n=1,920) |
| **Key:** | * : Insufficient data to report<br>-- : No data to report | | | | | | | | | | | | | | | |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

# X. QUALITATIVE SURVEY DATA FINDINGS

## Overview

Question 9 of the branch portion of the 2006 Public Libraries and the Internet survey was open-ended. It was intended to produce qualitative data from libraries that would both: 1) provide further insight into the perspectives of librarians regarding the impacts of the Internet, and 2) serve as a conceptual bridge between the quantitative data from the survey and the data gathered in the site visits.

This open-ended question in the survey was: "In the space below, **please identify the single most important impact on the community** as a result of the library branch's public access to the Internet." All responding branches had the opportunity to answer the question, and respondents were able to write as long a response as they desired to the question. A total of 3,887 libraries answered the qualitative question. Answers ranged from a length of fewer than five words to more than 100 words. The methodology for analyzing the qualitative data for question 9 of the branch portion of the 2006 Public Libraries and the Internet survey is included within this report on page 94.

## Data Analysis

From the 3,887 responses, researchers coded a representative sample of 785 responses (20% of the total). Using a pre-tested, preliminary codebook, which was modified through the course of the data analysis, four researchers each coded one quarter of the sample. These results were then compared between researchers through crosschecking by the researchers as a group and through statistical analysis using SPSS software.

Upon completion of the data analysis, it is possible to summarize the categories for the qualitative data as follows:

1. Access (AC) – The response indicates that a key impact of Internet connectivity at the library is primary access for people who would not otherwise have access. These populations included people with no service, people with insufficient service, seasonal residents, evacuees, tourists, and others.
2. Education (ED) – The response states that a key impact of the provision of Internet access has been facilitating educational purposes. These educational purposes extended through all age groups. This included the homework of K-12 students, college students, and people in continuing education courses, as well as people conducting informal research, such as genealogical research.
3. Library as place in the community (PL) – The response discusses the ways in which the provision of Internet access has benefited the entire community. These responses included assertions that the Internet has increased use of the library overall, has turned the library into a gathering place for the community, has extended the value of the library within the community, and has made people feel more welcome in the library. This category also included statements about how the Internet in the library has been a benefit to the entire community.

4. Commerce (CO) – The response reveals that a primary impact of Internet access in the library has been related to commerce. These responses focused on the benefits to individuals conducting job searches, filling out employment applications, checking market prices of crops, and conducting commercial transactions, as well as benefits to local businesses that rely on the Internet in the library for all of their online business activities.
5. Communication (IM) – The response indicates that personal communication activities have been a primary impact of Internet access in the library. Such activities include email, instant messaging, chat functions, and other types of communication with friends and family.
6. Government information (GI) – The response states that provision of access to government information has been a key impact of the provision of Internet access in the library. Responses addressed the access to government information at local, state, and federal levels. Specific types of government information that were frequently mentioned include tax information, Medicare information, and Federal Emergency Management Authority (FEMA) information.
7. High speed access (HS) – The response discusses the impact of the provision of high speed Internet access. A number of respondents specifically focused on the fact that the library provided much faster Internet access than patrons had in their homes and businesses, allowing them to perform activities on the Internet that they might not practically be able to do otherwise.
8. Library instruction (LI) – The response states that a primary impact of the provision of Internet access in the library related to instruction given within the library. These activities include teaching computer skills, computer literacy, information literacy, and other teaching activities performed by the library staff.
9. Recreational purposes (RE) – The response explains that a key impact of the provision of Internet access in the library has been recreational. Such recreational purposes mainly consist of playing games on the Internet in the library.
10. Other (OT) – A small number of responses defied easy categorization with other responses.

Answers to the question were coded to include as many of the above categories as was appropriate. As a result, many responses were coded to include two or more of the categories.

## Findings

*Overall Responses*

Figure 42 (below) shows the overall percentages of responses by category. The categories are presented in descending order from most frequent to least frequent.

| Figure 42: Overall Percentages of Responses by Category. | | |
|---|---|---|
| **Category Code** | **Number of responses** | **Percentage** |
| **AC** | 563/785 | 71.7% |
| **ED** | 184/785 | 23.4% |
| **PL** | 152/785 | 19.4% |
| **CO** | 122/785 | 15.5% |
| **IM** | 122/785 | 15.5% |
| **GI** | 49/785 | 6.2% |
| **HS** | 47/785 | 6.0% |
| **LI** | 44/785 | 5.6% |
| **RE** | 37/785 | 4.7% |
| **OT** | 21/785 | 2.7% |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Note: percentages total more than 100% as a response could include more than one category.

Access (AC) was overwhelmingly the most frequently cited category in responses. A total of 71.7% of responses discussed issues of access to patrons who would not otherwise have access. Thousands of the responses in the data echo the sentiment expressed by one library in Georgia: "The public library is the only place that offers public access to the Internet to the community. Many community members would not be able to access the Internet without the library."

Access was often cited in the answers as a point of pride by the libraries, discussing it in terms of filling a civic duty to provide equal access or bridging the "digital divide" or proving that the library can be as important in the digital age as it was one hundred years ago. These responses indicate not only that libraries have embraced their role as provider of public Internet access, but view it has a tremendous social benefit to the community.

At 23.4%, education (ED) was the second most frequent category in the responses. Within educational purposes, Internet access was most often tied to support for local K-12 students. In some communities, the library provides Internet access that the schools lack entirely or have insufficient amounts of. Many other libraries see the educational roles in terms of providing a place for students to do research for homework, particularly papers, outside of the school building (after school or on weekends). In other places, the library computers support adults seeking G.E.D.s, college students in distance-learning programs, or other types of continuing education.

Responses (19.4%) related to the role of the Internet in supporting the place of the library in the community (PL) were often very detailed. As with the responses related to access, the responses about the benefit of the Internet to the entire community were frequently impassioned. These responses described the library as having been transformed into "a resource center for the community" or "an important community asset" or "the gathering place for the entire community" or "the most significant tool for our community to have access to the world of information." These responses also often linked this role to a positive economic effect of the library on the community and increased respect accorded to the library by patrons, elected

officials, and business leaders. Evidence of the last can be found in one library's statement that "the WiFi connectivity in all three branches was donated by a local defense contractor [and the] equipment and personnel to install!"

Commerce (CO) plays a number of different important roles for library patrons, leading 15.5% of libraries to rate it as a primary impact of Internet access. Many of these libraries noted a particular benefit to people seeking jobs and filling out employment applications. With many job listings only available online and many applications now requiring online submission, public Internet access in libraries has greatly assisted many job seekers. Further, some libraries noted that patrons came to the library specifically to use the Internet for online purchases or price comparisons, while other libraries noted that small businesses relied on the public library's computers to do all their online business transactions. A number of libraries also noted that farmers relied on the public Internet access to check on the market price or future value for their crops.

Communication (IM) was considered an important impact by 15.5% of public libraries. Communication functions were viewed as important for people who otherwise might not have access to them. Many libraries, however, specifically pointed to communication functions as a vital means for many patrons to keep in touch with distant friends and family. A number of libraries used the example of communication between immigrants to the United States and people in their home countries or people who had moved to the community from other parts of the United States.

Though only 6.2% of libraries listed Government information (GI) as a primary impact of Internet access, those that did list it cited several specific compelling reasons. First, many of these libraries noted the importance of Internet access for patrons filling out tax forms online or doing tax-related research. Second, the Medicare prescription drug program brought many seniors into libraries to research the programs and fill out the enrollment forms online. A number of libraries noted that the staff had to become experts on the Medicare programs and the requirements to adequately assist patrons with the forms. Third, for communities near the Gulf Coast, the Internet access in public libraries became a vital link to FEMA forms for hurricane victims. These aid forms are available exclusively online, and many libraries in Gulf Coast states were the only means by which people were able to get to and fill out the forms.

The remaining categories were noted by 6.0% or fewer of libraries as a primary impact. High speed access (HS) was listed by 6.0% of libraries, with these libraries primarily indicating that the higher speeds of access in the library allowed patrons to use online materials that they would not be able to do with slower home connections.

Library instruction (LI) was listed by 5.6% of libraries. This category cited primary areas of library or librarian instruction for computer skills, computer literacy, and information literacy. One library stated that, when it comes to technology skills, "For many people in our community, the learning curve started at the library." Some libraries also noted progress in their use of the Internet for teaching purposes, "our community is starting to overcome its intimidation of technology, and this can only better our economic future."

Finally, 4.7% of libraries noted Recreation (RE) as a primary impact. These comments mostly focused on the use of the Internet by children to play games in the library. The remaining 2.7% of responses were categorized in the Other (OT) category.

The responses from many libraries indicated that the Internet access performed several different impacts simultaneously. One library spoke for many others in asserting, "People use the library as a 'technology commons' to conduct their Internet business. Examples include personal Email, an 'emergency' provider when their own personal computers break down, school research, job search, online testing, and library-provided technology training."

Based on many of the statements in the data, the provision of Internet access is becoming interwoven with all other aspects of public library service, in the minds of library patrons and library staff. One library noted with pride, "In a public survey last year, respondents indicated a high level of satisfaction with Internet public access at the Portage District Library. Providing library constituents with what they need is our priority, and we are not only meeting but actually exceeding their expectations."

*Responses by Metropolitan Status Area*

The libraries participating in the survey were categorized by Metropolitan Status Area (MSA). Depending on the density of the library's service area, a library could be classified as Urban, Suburban, or Rural. Figure 43 (below) shows the results of the qualitative data analysis by MSA designation.

**Figure 43: Qualitative Data Analysis by MSA.**

| | Urban | Suburban | Rural |
|---|---|---|---|
| **AC** | 74/109 (67.9%) | 169/234 (72.2%) | 320/442 (72.4%) |
| **ED** | 24/109 (22.0%) | 52/234 (22.2%) | 108/442 (24.4%) |
| **PL** | 15/109 (13.8%) | 45/234 (19.2%) | 92/442 (20.8%) |
| **CO** | 15/109 (13.8%) | 36/234 (15.4%) | 71/442 (16.1%) |
| **IM** | 10/109 (9.2%) | 35/234 (15.0%) | 77/442 (17.4%) |
| **GI** | 5/109 (4.6%) | 14/234 (6.0%) | 30/442 (6.8%) |
| **HS** | 3/109 (2.8%) | 22/234 (9.4%) | 22/442 (5.0%) |
| **LI** | 12/109 (11%) | 18/234 (7.7%) | 14/442 (3.2%) |
| **RE** | 4/109 (3.7%) | 7/234 (3.0%) | 26/442 (5.9%) |
| **OT** | 4/109 (3.7%) | 9/234 (3.9%) | 8/442 (1.8%) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Note: percentages total more than 100% as a response could include more than one category.

The two most interesting aspects of the data by MSA may be that the percentages of the same category across MSA designations are fairly similar to each other (in Figure 25 above), and the percentages by MSA designation by category closely parallel the percentages in the overall responses by category (comparing Figure 25 to Figure 24, above). A few differences are worth noting, however. Urban libraries were much less likely to view the greatest impact of the Internet in libraries as library as a place in the community (PL) or as a means of providing

communication (IM) than suburban or rural libraries, nor were they as likely to note the benefit of high speed access (HS) than other libraries. Urban libraries, on the other hand, were much more likely to state that library instruction (LI) was an impact. Suburban libraries were more likely to list high speed access (HS) as an impact, while rural libraries were much more likely than either urban or suburban libraries to list recreational activities (RE) as an impact.

*Responses by Poverty Level*

Along with MSA, libraries participating in the survey were also categorized by poverty level, which is based on the percentage of children who receive reduced or free school lunch and live within the service area of the library. The three poverty designations are greater than 40% (GT40), between 20% and 40% (20-40), and less than 20% (LT20). Figure 44 (below) shows the results of the qualitative data analysis by poverty level.

**Figure 44: Qualitative Data Analysis by Poverty Level.**

| | Greater than 40% | 20% to 40% | Less than 20% |
|---|---|---|---|
| **AC** | 9/15 (60.0%) | 65/108 (60.2%) | 489/662 (73.9%) |
| **ED** | 2/15 (13.3%) | 28/108 (25.9%) | 154/662 (23.3%) |
| **PL** | 2/15 (13.3%) | 22/108 (20.4%) | 38/662 (19.3%) |
| **CO** | 4/15 (26.7%) | 15/108 (13.9%) | 103/662 (15.6%) |
| **IM** | 3/15 (20.0%) | 13/108 (12.0%) | 106/662 (16.0%) |
| **GI** | 2/15 (13.3%) | 5/108 (4.6%) | 42/662 (6.3%) |
| **HS** | 1/15 (6.7%) | 1/108 (0.9%) | 45/662 (6.8%) |
| **LI** | 0/15 (0.0%) | 6/108 (5.6%) | 38/662 (19.3%) |
| **RE** | 2/15 (13.3%) | 7/108 (6.5%) | 30/662 (4.5%) |
| **OT** | 1/15 (6.7%) | 3/108 (2.8%) | 17/662 (2.6%) |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Note: percentages total more than 100% as a response could include more than one category.

While the percentages for LT20 and 20-40 are fairly similar in most categories, the GT40 has a number of significant differences in the percentages. The GT40 libraries were less likely to view Internet access as having a positive impact on education (ED), the library as a place in the community (PL), or library instruction (LI). However, the GT40 libraries saw greater impact in the commerce (CO), communication (IM), government information (GI), and the recreation (RE) categories. The difference in the commerce category may be related to searching and applying for employment through the Internet. Also of interest is the fact that high speed access (HS) was considered to be much more of an impact by GT40 and LT20 libraries than the 20-40 libraries.

*Public Library Internet Access and Hurricanes*

Of particular interest is a strand of data revealed by the qualitative data that did not manifest in other avenues of data collection in the study.[16] For libraries in states along the Gulf Coast, the past two hurricane seasons have turned public libraries into outlets for hurricane response and recovery. A number of libraries in Texas, Alabama, Mississippi, Georgia, and Florida asserted that the impacts of Internet access in their libraries were most pronounced in the aftermath of one or more of the recent major hurricanes as communities sought assistance and tried to rebuild.

These libraries indicated four major roles for the Internet access after the hurricanes came:

1. Finding and communicating with family members and friends who had been displaced or evacuated to other cities.
2. Filling out FEMA forms and insurance claims online. The FEMA forms can only be completed online.
3. Searching for news about conditions in the area from which they had evacuated.
4. Trying to find information about their homes or places of work.

These roles demonstrate the tremendous importance of free Internet access in public libraries in event of natural disaster or other type of crisis.

The tone of the comments differed between the level of the effect of the storms. In Florida—which suffered 8 hurricanes and 2 tropical storms in a period of 13 months—the comments were very matter of fact, indicating that Florida libraries are firmly established as outlets for hurricane recovery and response. One library wrote, "During hurricane season, we have found that hurricane victims used libraries to get in touch with family and friends," while another wrote, "In times of crisis (hurricane aftermath) we were there to provide connectivity to the outside world; reaching out to such entities as FEMA, Insurance companies and loved ones, etc."

In the areas struck by the epic devastation of Hurricane Katrina, however, the comments were much more stark and plaintive. One Louisiana library wrote, "during the immediate aftermath of Katrina, our computers were invaluable in locating missing family, applying for FEMA relief (which could only be done online) and other emergency needs. For that time--the computers were a Godsend. Thank you." A Mississippi library noted, "Much of the community damaged or destroyed by Hurricane Katrina. Public has been using our public access computers to contact insurance companies, Federal Emergency Planning Agency (FEMA). Also for some is the only means of staying in contact with family members outside of disaster area."

The volume of people relying on these computers for hurricane recovery was very high in some of these libraries. The story from a Mississippi library illustrates this point, "During the

[16] The findings from this study related to the roles of public libraries in relation to the 2004 and 2005 hurricane seasons can be found in: Bertot, J. C., Jaeger, P. T., Langa, L. A., & McClure, C. R. (2006). Public access computing and Internet access in public libraries: The role of public libraries in e-government and emergency situations. *First Monday, 11*(9). Available: http://www.firstmonday.org.

period of time directly after the hurricane struck [until] the end of November our staff helped customers file over 45,000 FEMA applications, insurance claims, and searches for missing relatives and pets. We have a large number of displaced people who are coming to rely upon the library in ways many of them never expected. I've had so many people tell me that they had never been to a library before they had to find someplace to file a FEMA application or insurance claim. Many of these people knew nothing about computers and would have been totally lost with out the staff's help." Several libraries in northern Alabama and Arkansas wrote about the volume of usage in terms of the number of evacuees in their communities. One rural Arkansas library described having 100 families of evacuees from Louisiana who are relying on the Internet access to pick up the pieces of their lives. Other libraries noted that hurricane relief workers who came to their communities had no access to the Internet beyond what was available at the public library.

While the value of online communities and organizations in facilitating relief in times of natural disasters has been recognized,[17] public libraries and the Internet access they provide are clearly a vital part of dealing with natural disasters, as evidenced by their roles in helping individuals and communities deal with hurricanes and the aftermath.

## Methodology for Qualitative Data Analysis

### *Purpose of Qualitative Question*

The open-ended question on the 2006 Public Libraries and the Internet survey provides insight into the perspectives of librarians regarding the impacts of the Internet and bridges the quantitative data from the survey and the data gathered in the case site visits. More specifically, the question asked "In the space below, **please identify the single most important impact on the community** as a result of the library branch's public access to the Internet." All responding libraries had the opportunity to answer the question, and respondents were able to write as long a response as they desired to the question.

### *Objectives for Qualitative Data Analysis*

The objectives of the analysis of the qualitative data from the survey included:

- To better understand the primary impacts of the provision of public Internet access on patrons and communities;
- To understand the uses of library Internet connectivity by members of the community;
- To provide robust qualitative data that supports quantitative survey findings and case site visit findings; and
- To help develop public access advocacy strategies.

[17] C. Jones and S. Mitnick. (2006). Open source disaster recovery: Case studies of networked collaboration. *First Monday, 11*(5). Available: http://www.firstmonday.org/issues/issue11_5/jones/index.html

*Methodology for Analysis*

A 20% sample of population of responses was analyzed. The sample from the dataset was coded to give an overall picture of the data. Also, the dataset was stratified with one level being analysis in terms of the Metropolitan status (i.e., urban, suburban, and rural) of the libraries, and the second level being analysis in terms of the poverty level (i.e., less than 20%, 20%-40%, and greater than 40%) of the libraries.

The data was stored in an Excel document, which also included other relevant characteristics of the responding libraries, such as Metropolitan status and poverty level. The qualitative data was reviewed by members of the research team. Researchers each individually coded a section of the data sample. To ensure quality of the review process, the researchers drew a representative sample of 20% of each level of analysis, which was then exchanged and crosschecked by the other researchers. The findings from each researcher were also compared using statistical analysis through SPSS software.

The analysis of the question began with a frequency count based on pre-identified categories (described below) of the responses. Since many libraries identified more than one impact, each benefit listed by a library in its response was included in the frequency count.

An analysis of a rough sample of 182 surveys revealed the following general categories of responses:

- Provides equal access to the Internet (41%)
- Educational/homework/research (12%)
- Employment/job search/business (10%)
- Brings people to the library (4%)
- Email (4%)
- Government information/taxes (2%)
- High speed access (2%)
- Literacy (0.5%)
- Other (4%)
- No Answer (18%)

While these were preliminary general categories, they provided guidance in the coding of all of the responses to the open-ended question. As the coding was conducted for the entire dataset, these categories were modified and additional categories were added.

Once the coding of responses was complete, the categories emerged from the coding process were then compared overall and across library demographics (MSA, poverty level). Comparing the strata of the dataset enabled the study team to explore patterns in the identified "impacts" by library type. This approach helped to demonstrate national trends in the "impacts" of public access to the Internet in public libraries.

Finally, the responses were also examined for statements that were particularly telling or poignant. Such quotations provided illustrations of the findings and helped bridge the quantitative data with the information from the case site visits.

# XI. SUCCESSFULLY NETWORKED PUBLIC LIBRARIES

In this portion of the study, members of the study team visited five states—Texas, Iowa, New Jersey, Oregon, and Florida—beginning January 20, 2006 and ending April 13, 2006. The site visits included State Library agencies and public library systems and branches, and also involved interviews with 84 library managers (Appendix 2 is a list of libraries and individuals visited). The site visits had the following objectives:

- **2006 SNPL Description**: What elements describe a Successfully Networked Public Library (SNPL) in 2006?
- **Becoming a SNPL**: What are critical success factors that library managers should address when seeking to become more successfully networked?
- **Roles played by SNPL external partners**: What are the key roles played by SNPL partners such as state library agencies, state library associations, library systems and private donors?
- **Measures that matter**: What measures have SNPL managers found to be useful to manage and to show value?
- **Advocacy and efforts to obtain sustainable funding**: What strategies SNPL managers used when advocating locally for continued public library and networked services' support?

This site visit portion of the study makes no claims for generalization. Rather, the study method (Appendix 3) identifies and points to activities, practices, issues and ideas occurring at one or more of the libraries visited that may be worthy of consideration by any public library seeking to become successfully networked. This portion of the study also seeks to provide a context for the survey results presented earlier.

A brief overview of findings from site visits describing successfully networked public libraries is included in this report (See Appendix 3A). Also included within this report is a sample of the emails sent to participants of the site visits (See Appendix 3B) and a copy of the site visit interview script and site visit survey (See Appendix 3C).

## Findings

### *Defining Success*

An objective of this portion of the study was to better define what a successfully networked public library (SNPL) is in 2006 for several reasons:

1. **Understanding networked services today and tomorrow**: Now that public libraries are connected, what changes in the provision of networked services have occurred and why have they occurred? What factors are likely to affect public libraries' networked services in the future and why? Are there performance indicators that could be usefully measured in the future?
2. **Piloting**: Library managers were interested in "piloting" management data. How am I doing? Where am I in the process? What else could I do? SNPL managers were

very interested in this objective because "there are not enough tools available to assist libraries in becoming successfully networked." All those interviewed agreed that a structure for defining network services did not exist and data of any type were hard to find.

3. **Valuing**: Library managers were also interested in "valuing" data. How does my library's network services compare to other such network services? This objective was not reached aside from identifying potential data elements for future comparisons.
4. **Training**: State Library and library system continuing education staff said they needed aids that they could use with public library managers to assist in planning in order to determine where they were in becoming successfully networked and determining next steps for the library.
5. **Speed adoption**: Providing information that identified examples of real world networked services applications, suggested strategies for help, and review of the most popular applications, hardware, and software in use would be useful to help speed adoption of network services.

The researchers asked the SNPL managers interviewed for their definition of an SNPL.[18] Managers focused on three areas: networked/electronic services offered within the library (e.g., public access workstations, Internet access); services offered by the library's virtual branch (e.g., the libraries web site) and the infrastructure necessary to support both. Figure 45 (below) offers a quick summary of key elements that define a successfully networked public library in 2006.

| **Figure 45: 2006 SNPL Key Elements.** |
|---|
| **A. Infrastructure** |
| 1. **Connection**: **Broadband**: Does the library offer a PUBLIC ACCESS Internet service broadband connection, e.g., 768kbps or greater? **Wireless**: Does the public library offer public wireless Internet access (or is it planned over the next year)? |
| 2. **LAN/WAN**: Is there a public (and staff) LAN/WAN(s) sufficiently fast, secure, reliable and well maintained to meet public (and staff) needs? Includes sufficient current technology, backup, management of IT, and appropriate number of knowledgeable staff. |
| **3. IT Staff**: Does the library have dedicated IT staff sufficient to manage and maintain the library's information technology (IT) and meet public demand for library networked services? |
| 4. **Staff IT**: Does library staff have adequate IT support? May include: staff workstations, LAN/WAN, listserv, blog, IT based calendar/scheduling, intranet, training, etc. |
| 5. **Staff training**: Does staff receive enough IT training to be proficient at their jobs? |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

[18] In order to better define what a SNPL is in 2006, the study began with a broad inclusive definition of networked. "Networked" is used broadly to include public library computing, Internet, networks, telecommunications, integrated library systems and other related electronic resources, services and support. The study asked the State Librarian and Library Development staff and public library managers visited to describe elements of a successfully networked public library in 2006. The individual libraries visited within each state were chosen based on the advice of the State Library and logistical constraints. There was rapid and ready agreement on whom the best example SNPL libraries were in each state. Those interviewed were shown the latest SNPL description as it iteratively evolved and were asked to make comments. Later these managers were shown final draft versions of the description for additional comment.

| **Figure 45 (cont'd): 2006 SNPL Key Elements.** |
|---|
| 6. **Local funding:** Is local funding stable and adequate? Are library IT expenditures, in whole or in part, locally obtained operating funds (or is this planned over the next year)? Locally funded means that library IT staff and equipment are line items on the city or county library budget. Library IT expenditures include funds for dedicated IT staff and for meeting IT replacement plan targets. |
| 7. **Local partnerships**: Is library management proactively[19] engaged in developing local partnerships that involve library network resources and services? Does library management regularly attend local government meetings, meet with local government agency managers, meet with local non-profits/foundations, and regularly attend local business association meetings? |
| 8. **External partnerships/funding**: Does the library regularly and proactively seek, apply and obtain external funding or partnerships for network services? Activities may include systematic environmental and funding scans, receiving electronic (and other) funding alerts, applying for State Library funding and meeting with State Library officials, and applying for e-rate funding. |
| 9. **Planning, policies & procedures**: Does the library have an information technology plan? Does each networked service have appropriate policies and procedures? |
| 10. **Marketing & promotion**: Does each library network service have a plan that identifies target audience(s), means of promotion, and measures of successful promotion? |
| 11. **Evaluation**: Does each network service have a plan for measuring value & improving management? Evaluation shows a service's worth. Management measures assist in planning and balancing workload. |
| 12. **Leadership**: Does the library director and administrative staff provide strong leadership, vision, and support for developing network services, resources, and programs? |
| |
| **B. Within the Library Networked Services** |
| 13. **Public access computing**: Does the library offer sufficient number of public workstations, software (e.g., browser, word processor) and accessories (e.g., printers)? |
| 14. **ILS/OPAC**: Does the library offer an Integrated Library System (ILS)[20] or modules such as an Online Public Access Catalog (OPAC)? |
| 15. **Videoconferencing**: Does the library offer the public access videoconferencing? |
| 16. **ILL**: Does the library, using net services, allow borrowing of materials from other libraries? |
| 17. **Digital collections and equipment**: Does the library provide access to digital collections such as CDs, DVDs, e-books, games, etc? Does library offer access to digital equipment such as camcorders, digital cameras, iPods, MP3s, etc. |
| 18. **Accessible technologies**: Does the library offer sufficient accessible technologies to meet demand? Are these technologies sufficiently advertised? |
| 19. **User training**: Does the library offer sufficient formal and informal training in computer, software, Internet and other library and network services skills to meet public demand? |
| |
| **C. Library's Virtual Branch** |
| 20. **Library web site**: Does the library have a web site that it controls and regularly updates content? |
| 21. **Usability, functionality, accessibility**: Does the library regularly examine its site for usability, functionality and accessibility? For example, are there sufficient interfaces (e.g., kids, teens), navigation aids (navigations bars, site index, FAQs help), use of graphics (and audio), is there multilingual access, is the site ADA compliant? Does the library regularly ask for feedback on its site? |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

[19] Proactive here means that the library manager actively goes outside the library and seeks opportunity rather than waiting for opportunity to walk in the door.

[20] An Integrated Library System (ILS) is a group of automated library subsystems working together and communicating within the same set or system of software to control such activities as circulation, cataloging, acquisitions and serial control. Oklahoma Department of Libraries. Trustee manual: Glossary. <http://www.odl.state.ok.us/servlibs/l-files/glossi.htm>.

| Figure 45 (cont'd): 2006 SNPL Key Elements. |
|---|
| 22. **ILS on the Web**: Is the library's Integrated Library System (ILS) and subsystems available on the library web site? Includes availability of the OPAC, remote access to patron account, remote placing of holds, remote renewals, remotely obtaining a library card, federated search of library collections, remote event, library meeting room scheduling, remote workstation scheduling, and A-to-Z library periodical title list look up. |
| 23. **Collections**: Are library collections accessible on the library web site? May include: subscription database access, downloads of e-books and audio books, videos, structured links to remote collections, podcasts of library programs, RSS news feeds. |
| 24. **Virtual Reference**: Does the library offer access to virtual reference and reader advisor services? These services may originate in the library, be offered remotely, or be a paid service. Examples may include: virtual reference by e-mail chat, or videoconference; or, online book and media clubs and reviews. |
| 25. **Library information**: Is there sufficient information about the library on the web site? May include: library hours, locations, staff directory, library history, newsletter, events calendar, policies and procedures, information, plans, and how to contribute to library financial support. |
| 26. **Community information**: Is there sufficient information about the community on the web site? May include "help me make it through the day" information (time, temperature, maps and directions, traffic, school closings, crossword, news, sports), newspapers and media, community events, calendar and entertainment, local business (directory, employment, startup), local statistics and government information. |
| 27. **Local community content:** Does the library aggregate, collect, organize or present locally produced content on its web site? May include local history: special collections newspapers, images, maps, videos, audio; digitized and indexed. May include community forums (listservs, blogs). May be organized collections of web links or aggregations (e.g., locally produced videos and podcasts). |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

Appendix 4 expands the summary description in Figure 45 (above) of a successfully networked public library as follows:

1. Appendix 4 begins with an introduction to the other parts of the Appendix.
2. Appendix 4-A: *2006 SNPL Checklist*: This checklist provides public library managers with a set of characteristics of a successfully networked public library. These characteristics are clustered into the following areas: connection, IT infrastructure, IT and collections accessed within the library, and public workstations and training offered. Each of the elements covered are treated in more detail.
3. Appendix 4-B: *2006 Successfully Networked Public Libraries Catalog*: The catalog provides more detail on SNPL elements than the Checklist including examples and references.
4. Appendix 4-C: 2*006 Summary of Public Library IT & Network Services*: This quickly communicates a public library's information technology and network services specifications to other library information technology managers, library funding agencies and library vendors.

The next section offers additional observations related to describing SNPLs, based on the site visits.

## Observations

These observations, based on site visit interviews, are arranged by within the categories of library services, the virtual library branch, and the infrastructure that supports both within library and virtual networked services.

*Network Services within a Library*

Observations regarding network services within the library at the SNPLs visited include:

1. **Successful at traditional & networked services**: Successfully networked public libraries also excel in the provision of traditional library services. SNPLs have not dropped traditional services, but they have added a range of networked services.
2. **Successful includes use of all media on a topic**: SNPL managers define successful library use to include the circulation (or use) of all media types (books, audio books, DVDs, databases) on a topic not just one media type. Indeed in some SNPLs all media related to a high interest topic (e.g., employment, genealogy and auto repair) are clustered together by topic (rather than media) in the library. An employment center might consist of a workstation with an opening menu providing links to an online job bank, resume writing software and organized Internet links related to employment. Surrounding the workstation are books and audio books on conducting a job search, resumes, how to learn new skills, and videos and DVDs on interviewing techniques and other employment related topics.
3. **Public access computers**: Library users, staff and local funding agencies tend to view public access computers as *essential* infrastructure, not a service. Applications define services not the technology (or even the software).
4. **Principal networked services**: Appendix 5 summarizes an informal survey of observed uses of network services within a library.[21] A sample of network use by age might include:
    - Younger children: games, watch DVDs, card catalog;
    - Preteen/teen: chat, e-mail, games, music downloads, research/homework, office programs, watch DVDs, card catalog;
    - Adults: resumes/job search, research, training on computer use/internet classes, tax forms and e-tax, office programs, card catalog, distance education tasks, genealogy, games;
    - Staff: interlibrary loans, card catalog, research, office programs, e-mail.
        - **Subscription databases**: Both staff and users expressed widespread dissatisfaction with these services particularly when compared to Internet alternatives such as Google and Yahoo. Subscription services were faulted because:
    - User authentication was time consuming ("I had my answer on Google before the subscription service recognized I was a legitimate user.").

[21] Method: SNPL managers at libraries visited in three states were asked via e-mail in February 2006 to report observed usage of network services within a library. Reporting public libraries were of all sizes and demographics (rural, suburban, and urban). Reports were summarized and distributed to elicit additional comments and in an effort to reach saturation/consensus.

- Searching was more difficult, less intuitive, and often less rewarding than Internet services.
- Quality of material (often peer reviewed) did not add enough value.
  - **Integrated Library Services** (ILS): Both staff and users expressed dissatisfaction with public library ILS. ILS were faulted because:
- Searching: search time was consuming, cumbersome and often less rewarding than Goggle or Yahoo.
- Not comprehensive: Users wonder why ILS does not provide organized access to library holdings and subscription databases and Internet and …"anything we as library users have access to" via one easy to use search.
- Not as convenient: Free commercial Internet services did not require authentication and other procedures or navigational requirements.
  - **Improved branch services**: Historically, public library branch resources[22] and services[23] were not as good as those offered at the main library of the system e.g., the branch collections were not as rich and specialized expert staff unavailable. Recently, many SNPL managers have adopted the strategic objective of offering the same level of library services in the branches as is available at the main library. This change in strategy has been enabled and driven by the availability of network technology (i.e., branch broadband connections and public access workstations). Network technology is also redefining what is a system and branch – look for further discussion below. It is also a force for equitable distribution of resources and services within a library system, and enables those who control the network to impose, to some degree, consistent, minimum service standards, levels and access, and influence on local content/collection quality.
  - **Network technology: New services or new efficiency**: At several of the most successfully networked public libraries, interest in the use of network technology focused primarily on improving the efficiency of existing operations rather than introducing new services. Indeed, new services would not be introduced unless there was improved efficiency for existing services. Users did not want to give up old services and the library did not have the resources to add new services while continuing the old.

Many SNPLs have not reduced traditional library services as they embrace network services. Rather, SNPLs continue to provide what their users demand: both the traditional and the new networked services. Library managers expect and need network technology to improve operational efficiency as much, if not more, to introduce new network-driven uses and to attract new users. Many SNPL managers, driven by newly available network technologies, have as a strategic goal to provide the same levels of services at every branch.

[22] Digital collections, unlike physical collections, may be offered at both main and branch libraries. Network technologies have even improved the distribution of print-based materials.

[23] Perhaps the most dramatic improvement in branch services is in reference. Virtual reference services make high quality reference service backed by adequate reference collections possible at every branch.

## SNPL's Virtual Branch

Observations regarding the development of a SNPL's virtual branch to serve its remote and mobile, network connected users based on interviews with the SNPLs visited include:

1. **Virtual branch**: The SNPL's web site is becoming a new branch of the library, in essence a virtual branch. These virtual branches have access to similar staff levels, resources, and management as physical branch facilities within the organization. A management goal is to offer the same (or similar) library services that are offered at any branch in the system.
2. **Local community centered**: Many SNPL managers perceive the audience for their SNPL virtual branch to be the local community,[24] who are registered members of the library. This is true even though branch services could be available to anyone with an Internet connection, regardless of their location. SNPL managers note that historically public libraries serve local communities and that their principal source of funding is local. Few if any models exist for rewarding state or national distribution of local virtual branch produced services.[25] Some SNPL managers recognize the audience of remote users that have an interest in the local community (e.g., those thinking of relocating or visiting the local community).
3. **Slower to develop than network services within a library**: SNPLs were among the first to develop web sites in their communities. Some SNPLs helped other local government, non-profits, and businesses develop their first web pages, but then these services appeared to languish. One common reason offered by SNPL managers was that their communities did not have reliable Internet connections (often not even dialup).[26] As connection availability increases SNPL managers are devoting more resources to their virtual branches.
4. **Community broadband penetration may be an important indicator**: The degree to which community members have broadband connections may well be a key indicator of the likely use of public library virtual branches. Simply, if the community is not connected, particularly at broadband speeds, they will not access Internet based services like the virtual branch of the library.
5. **Virtual branch services need not be locally produced**: SNPLs and external partners are actively exploring remote production and delivery of services to local virtual branches. Current examples include remotely delivered content and collections (subscription databases),[27] reference (virtual reference),[28] and virtual branch hosting itself.[29]

[24] This observation is made with the understanding that the local community may consist of several counties encompassing a small area or the community may include millions of potential users. As will be noted below, these same SNPLs have been generous in providing infrastructure beyond their local communities.

[25] Forward looking library systems and State Libraries are looking for ways to speed the process of moving locally developed virtual services and innovations to the rest of the libraries within the system or state.

[26] To be clear, the SNPL was connected (often with broadband) and computers were widely available in the community (home, work, and school), but the connection between network services and home (office, school, etc.) was poor. One rural, deep IT pocket SNPL visited was participating with other community agencies and businesses, Verizon and the Department of Homeland Security, to develop a county-wide wireless connection to enable network connections at greater than 19.2kbps via dialup.

[27] See Appendix 6 for a list of State Libraries that offer subscription databases and other collections to local libraries.

6. **Public libraries lack an identity or brand in the virtual world**: Library users will not find a standard set of core content or services when accessing a library's virtual branch outside of a community or perhaps a library system. For example, will the library OPAC or ILS be accessible on the web site? This is similar to the historic situation with traditional library services. How long can I check out a book? Does the library have DVDs? This lack of a consistent core set of content or services makes marketing, promoting, or branding of library services (among other tasks) difficult. Without a compelling virtual identity there is no compelling reason for use, as documented in the 2005 OCLC Perceptions study.[30]
7. **Usage low but rapidly increasing**: Virtual branch usage may be low but a number of SNPLs report rapid growth in use. Library managers suggest that usage should continue to increase as the community gets connected and libraries focus more attention on their virtual branches.
8. **Center of innovation**: Virtual branch development is a clear area of public library innovation. Two conflicting interpretations of the status of virtual branch libraries are in play. Virtual branch services lack a common identity and do not offer the ease of access, convenience and collection size of established commercial competitors. Library managers suggest that until recently virtual branch development may have been premature because their communities were not connected. Yet, virtual branch usage appears to be increasing and a great deal of innovation is under way.

## Infrastructure

Adequate infrastructure underpins SNPL within library and virtual services. Three elements stand out at the successfully networked public libraries visited: adequate public access computing, adequate and stable funding, and savvy knowledgeable leadership.

### *Public access computing*

Many SNPLs were early adopters of public access computing including workstations, local area networks (LAN), and Internet connections, along with various software applications. Many SNPLs visited have partnered with vendors to develop library applications. All used external funds (federal, state, local, and private) to establish or upgrade their public access computing hardware, network, and software. Public access computing infrastructure supports all successful network activities, yet it becomes taken for granted as demand is regularly met. SNPLs recognize that they may never meet public access computing peak demands, but they have established reasonable demand targets and are meeting them.

---

[28] See Appendix 7 for a list of State Libraries that support virtual reference services for local library (and general public) use.

[29] A number of state libraries are developing remote web site hosting using the open source content management system called Plone <http://plone.org/> based on Zope. This will enable the State Library to offer local libraries a form-based web site. The State Library stores and maintains the web site. The local library supplies local content. For example, see Oregon's Plinket <http://www.plinkit.org/> or Iowa's Plow (Putting Libraries on the Web) <http://www.statelibraryofiowa.org/ld/gatesgrants/stay/sc-index>.

[30] OCLC. (2005). Perceptions of libraries and information resources. Dublin, OH: OCLC. <http://www.oclc.org/reports/2005perceptions.htm>.

*Adequate, stable funding*

All of the SNPLs visited made use of external funds as a catalyst to explore new technologies and applications, to demonstrate proof of concept, and to upgrade capacity sooner or beyond what they thought they would need (only to find out it was not enough). However, the libraries visited would not have been able to sustain successful network services without adequate and stable local support. Several observations based on SNPL interviews may be useful:

1. **Transition from external to local support**: Currently, many SNPLs are making the transition from external sources (via grants) to local funds as a more sustainable source of support for network services.
2. **Local payment of replacement costs**: A key factor is whether a library has a technology replacement plan, whether the library has met replacement targets, and whether the funding comes from local sources. One SNPL, whose IT costs were paid for by a local foundation, went so far as to obtain a loan from a local bank to pay for IT replacement. His point to the county commissioners was there must be local government buy in for library network services to be sustained. The county is paying back the loan and giving the library a predictable, regularized, replacement line item for future budgeting.
3. **In-house dedicated IT staff**: Some public libraries buy a local computer consultant's time when they need it. Other libraries depend on volunteers, which is often problematic as a strategy for IT staff support. A hallmark of an SNPL is they have library dedicated IT staff, whose payment comes from local sources.
4. **Local funding = local ownership**: Local funding is a measure of local ownership, buy in, and support of the services offered.
5. **Stable funding is as important as adequate funding**: Stable funding was another hallmark of SNPLs. Many SNPLS were library districts.[31] In two cases, funding for network services was received from local family foundations. The library district model allows the library to directly seek approval from voters for the use of tax revenue to support library services. SNPL managers noted that stable funding was a prerequisite to becoming a successfully networked public library because it enabled the library do realistic multi-year planning and financing.
6. **Support is not limited to money**: All noted that support for network services was not limited to money. For example, local government agencies allowed library staff participation in IT related staff training, offered enhanced benefits (without charge to the library), provided IT support, and in some cases shared equipment.
7. **Who should run the IT shop – The library?** In some cases, the public library's IT operation was as large as the rest of the municipality's operations combined. Should the library opt to take over the entire city's IT operation? In most cases, there was little interest on the part of the library's IT staff for such expansion of responsibilities.
8. **New library network service users do not equal new revenue**: New library users as a result of their use of library network services and public access computing may not equal new sources of library revenue. In essence, more of the library's tax base might be

[31] Library districts are generally regarded as a preferred way to receive local library support. See for example, Hennen, Thomas J. Jr. (2005). Public library district legislation. <http://www.haplr-index.com/public_library_district_legislat.htm>.

receiving a tax benefit (due to their new library use), but the library had not received additional funds.

9. **Remote distribution of service and support might reduce local burden**: SNPLs recognized that the network made cooperative development and delivery of some services via the network both feasible and a likely way of obtaining future support. Examples included: virtual reference, licensed databases offered, sometimes at a discount, by State Libraries, and remote web hosting initiatives under development by a number of State Libraries. The news was not all positive, however. There were reports of rural county commissioners refusing a request to open their library several more hours each week, since the new virtual reference service offered by the State Library could meet residents' needs when the library was not open.

Adequate funding must also be stable funding for a library to become successfully networked. SNPLs are currently making the transition from external funds to local support for their network services infrastructure. Local funding of IT replacement costs and library dedicated IT staff are critical.

## Leadership

Several observations about the leadership of successfully networked public libraries and their staff can be made:

1. **Director level**: An experienced, savvy, library director was critical. Almost all of the library directors interviewed had a number of years of library management experience. Some were nearing retirement, which will soon present problems for those libraries. All were known as library leaders within their state if not nationally.
2. **Dedicated IT manager**: Addressing the need for dedicated IT staff leadership was critical. Even small libraries that are successful realize that they need knowledgeable, dedicated staff to help with IT planning, IT maintenance, ILS and other software installation, management of the increasingly large and local IT budget, and management of the library's new virtual branch (the library web site with local content and services). Each of those functions, depending upon the size of the library (system) can be a full time job. No one solution fit all libraries, and many solutions were creative. In one case, the IT staff issue was successfully addressed by a State Library regional consultant. There was a key leadership quality beyond the obvious need for library IT knowledge and planning and management ability. Successful IT leaders were effective communicators of technical issues and solutions, and they were able to bridge IT and library cultures. The difference between a library that had addressed its IT management issue and one that had not was both subtle and profound. One library director likened it to the difference between dialup and broadband – you didn't know you had a problem until you had tried the solution.[32]

[32]For example, the subtle: the library IT infrastructure quietly worked, so quietly in fact, reliability was taken for granted. The less subtle, most SNPL directors could readily point to savings due to good IT managers. Often the savings were substantial. The profound changes the way libraries do business: replacing branch level reference services and collections with video chat staffed by reference librarians and headquarters.

3. **More than an MLS**: Often good library leaders and good staff do not come with an MLS tag attached. Several excellent IT managers lacked college degrees. Several more had liberal arts degrees. Today's SNPLs require a diversity of skills and degrees, including skills gained through means other than graduate school. In the SNPLs visited, skill trumped degree, race, culture, gender, and other factors. SNPL managers not only recognized this reality, they embraced it. There remain unresolved issues in this area, however. IT staff pay, often at or above the library directors, was an issue. One very successful SNPL director had to isolate new MLS hires from the old for "fear of contamination from old library ways."
4. **Continuous change**: To become an SNPL means to undergo significant, near continuous change. This means making mistakes, as well as living with disruption and some confusion. Library leaders need to be willing to change their behavior, motivate others to do so, and be willing to sanction those who do not change with appropriate speed. Getting the balance right between not moving too fast and not moving at all requires exceptional leadership and the SNPLs visited have it.
5. **Continuous education**: SNPL managers are generally strong advocates for providing each staff member with the training (and technology) they need to be proficient at their jobs. A majority of SNPLs have paid for some of the IT training needed by key staffers beyond that available from the State Library or State Library association.

Senior management leadership, while necessary, was not sufficient to becoming n SNPL. A sufficient number of knowledgeable and highly motivated staff at all levels of the organization also needed to be available.

### Infrastructure

Additional observations regarding infrastructure contributions to the development of a successfully networked public library include:

1. **New buildings**: The majority of the SNPLs visited were in new facilities, were about to move in to new facilities, or were planning new facilities or branches. The development of virtual library services might prompt, in part, the need for new physical library facilities.
2. **Connectivity**: The sense at the SNPLs visited was that while bandwidth demand may never be met, the problem was being effectively managed in a temporary sense. The most successful of the SNPLs already anticipated a new "bandwidth crunch" on the horizon as large digital transfers (e.g., streaming video, podcasting, etc.) become more common. Most of the libraries visited had or were thinking about offering wireless. One rural library was working with a number of partners to offer a county wide wireless solution. The payoff for the library was increased use of its virtual library.
3. **Continuous planning**: Most SNPLs conduct extensive and continuous, formal and informal network service planning. The planning is closely linked to broader planning efforts in the library and with the city or county.
4. **Insufficient service planning, marketing, and evaluation**: Most SNPLs did not do enough systematic marketing, promotion, and evaluation of their network services. Basic questions that were not addressed included issues of who the service is for and how we

will know if we are succeeding. Larger questions like who does the library serve, what value do we offer each client group, what evidence do we have, how may the service generate sustained revenue are not systematically addressed. Designating annual funds for the marketing and promotion of individual services are rare.

Infrastructure enables the network services to be offered within the library and virtually. Successfully networked public libraries have devoted adequate attention to key infrastructure requirements

## Becoming an SNPL

So what can be done to assist more libraries to become successfully networked? What are critical success factors that library managers should address when seeking to become more successfully networked? Figure 46 (below) identifies basic critical success factors to becoming a more successfully networked public library in 2006. Appendix 4 gives a more detailed look at SNPL success factors.

**Figure 46: 2006 Successfully Networked Public Library Critical Success Factors.**

**Infrastructure**

| Critical Success Factor | Discussion |
|---|---|
| Adequate & stable funding | Does the library have adequate, stable funding? The library district approach is favored by many. |
| Library dedicated IT staff | Does the library have IT staff dedicated to the library? IT staff must handle more than day to day maintenance. IT staff should be part of management team involved in service planning etc. IT staff must be able to effectively communicate with other library staff. |
| Leadership | Do the library director and administrative staff provide innovative, highly motivated, and visionary leadership to staff and within the local community? Can they articulate the vision with clarity and excitement? |
| Library broadband connection | Dialup and inadequate broadband (e.g., reduces desktop access to dialup speeds during peak demand) is not an option – the public will not use it. Wireless is worth considering. |
| Adequate networked workstations | Does the library have an adequate number of workstations with adequate performance specifications, locally networked with broadband Internet access? This is a basic requirement. |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

| **Figure 46 (cont'd): 2006 Successfully Networked Public Library Critical Success Factors.** | |
|---|---|
| Web based Integrated Library System (ILS) (OPAC at minimum) | This is a basic service within a library and a virtual library. The service provides a link to the past (better access to physical library materials) and a bridge to the future while highlighting the convenience of the new over the old (i.e., card catalog). Minimum OPAC requirements may include Z39.5 compliant records. This is a perfect system level activity with less benefit if you go it alone. |
| **Within Library Network Services** | |
| **Critical Success Factor** | **Discussion** |
| Services/Applications/software | What services or applications or software will you offer for use within the library? For example, a library ILS, subscription databases, employment center, Office Suite of software. |
| Training | What programs and training will you offer that involves use of the network services within the library? |
| Service Plan | This does not have to be elaborate but takes some thought. Here are two approaches. Develop a plan to occupy each workstation for most hours that they are available with productive, satisfied users (within the library mission – no pornography, no gambling?!). Develop a marketing plan for each network service that you offer that identifies who the audience is for the service, how the service will be promoted to the audience, how the groups will use the service (i.e., identify potential conflicts, scheduling, etc.), identify ways to evaluate if the service is being successfully used, include a plan for gathering evidence that shows each service's value. Included might be a range of library polices – take a look at policies that other libraries have found necessary |
| **Virtual Branch Services** | |
| **Critical Success Factor** | **Discussion** |
| Community broadband penetration | Do local government, schools, community organizations, offices and homes have broadband access? If not, virtual branch use will be slowed. |
| Library web site | This is the centerpiece of the service. Easy, convenient access to the library's web site content is essential. The library must control access to the content and it must be easy to change wherever and whenever the library wants to do so. Implied is someone(s) on the library staff who is trained to make these web site changes. |
| Virtual content | The manner in which content can be delivered virtually is extensive, e.g., websites, databases, etc., see the range of options available in Appendix 5 *Catalog.* |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

| Figure 46 (cont'd): 2006 Successfully Networked Public Library Critical Success Factors. | |
|---|---|
| **Critical Success Factor** | **Discussion** |
| Virtual services | Key services include the library's ILS, subscription databases, virtual reference, and any "self-service" items such as requesting a hold on current best sellers. |
| Service plan | Develop a marketing plan for each network service that you offer that identifies who the audience is for the service, how the service will promoted to the audience, how the groups will use the service (i.e., identify potential conflicts, scheduling, etc.), identify ways to evaluate if the service is being successfully used, include a plan for gathering evidence that shows each service's value. Included might be a range of library polices – take a look at policies that other libraries have found necessary. |

Source: Bertot, J. C., McClure, C. R., Jaeger, P. T., & Ryan, J. (2006). *Public Libraries and the Internet 2006: Study Results and Findings.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available: http://www.ii.fsu.edu/plinternet/

## Role of External Partners in SNPL Development

*SNPL Roles with External Partners*

All of the successfully networked public libraries visited recognized early that they could not become so without external support[33] beyond that traditionally given by local and state governments. A distinctive, defining, characteristic of the SNPL libraries was their proactive approach to partnering. SNPLs did not wait to be invited. SNPLs did not passively wait for support to "just happen." They actively scanned for potential partners and then actively sought them out for further discussion. SNPLs conduct regular environmental scans, engage, apply, negotiate and match needs with potential funding sources, and then SNPLs successfully deliver results that match or exceed donor and external supporter expectations.

SNPLs often used external support to strategically advance their network services to the next level. For example, most of the libraries visited obtained their first networked workstation with external support, external support funded the move from dialup to broadband connections, standalone workstations were networked together, and computer labs were acquired using external funds. External funds allowed the public libraries to introduce new networked service and prove its worth. This in turn provided these libraries with persuasive evidence when they sought internal operating funds for these now established networked services. The SNPLs visited were distinguished by their efforts to actively seek and find external sources of funding. External funding often enabled these libraries to advance to the next level of network service provision, demonstrate its worth, and embed the new service funding in internal operating.

[33] External support is used here to mean aid (may be financial, in kind or other) applied for or received beyond traditional sources such as local government appropriations and direct state aid.

*Who are the Key External Partners in SNPL Development?*

None of the libraries studied would be as successful without the assistance of external partners or other internal units within local government. Successfully networked public libraries external partners may include:

1. **City and county governments:** In some cases these entities are the principal source of library funding. In other cases, the library forms its own taxing district. In either case, a positive working partnership is a common element in SNPL development;
2. **State libraries:** (for a list see Chief Officers of Library State Agencies Member profiles <http://www.cosla.org/>. This relationship is discussed in more detail below;
3. **National (ALA, PLA) and state library associations**: (for a list see ALA. State and regional chapters. <http://www.ala.org/ala/ourassociation/chapters/stateandregional/stateregional.htm>. SNPL managers interviewed mentioned four key roles: advocacy for continued funding at local state and national levels and related to library policy (CIPA, Internet filtering, privacy), continuing education and training opportunities, fostering communication, and establishing communication mechanisms and standards development;
4. **Library systems**: See State Library and system role below;
5. **Consortia and multi-type library consortia** (MLCs): See State Library and system role below;
6. **Multi-state consortia and cooperatives** (e.g., Bibliographical Center for Research (BCR) <http://www.bcr.org/> and Online Computer Library Center (OCLC) < http://www.oclc.org/>). See State Library and system role below.
7. **Federal agencies**: In particular, the Institute of Museum and Library Services (IMLS) <http://www.imls.gov/> and its Library and Services and Technology Act (LSTA) funding administered, through the State Libraries. See below for further discussion;
8. **Private foundations**: Including national (e.g., Bill & Melinda Gates Foundation, U.S. Library Program <http://www.gatesfoundation.org/Libraries/USLibraryProgram/>), state (e.g., Tocker Foundation <http://www.tocker.org/index.html> assisting small rural libraries in Texas), or local library level (e.g., Joe Barnhart Foundation <http://www.beeville.net/JoeBarnhartFoundation/Index.htm> focused on the Joe Barnhart Bee County Library, Beeville, TX or the Michael & Susan Dell Foundation's <http://www.msdf.org/> Wired for Youth <http://www.wiredforyouth.com/> centers at 10 Austin Public Library <http://www.ci.austin.tx.us/library/> branches.).
9. **Industry and corporations** who may offer public libraries free or discounted products and services (e.g., Verizon's Access New Jersey <http://www.accessnewjersey.net/anj/index.asp>).

External funding and partnerships were essential to the development of successfully networked public libraries.

*Roles of ALA and the Bill & Melinda Gates Foundation in SNPL Development*

All participating SNPLs viewed both ALA and the Bill and Melinda Gates Foundation as essential to the SNPL development process. Their contributions were so central in enabling successfully networked public libraries to flourish that their efforts were almost taken for granted. That these organizations would lend their prestige to the SNPL effort focused positive attention on public libraries, their role in serving the underserved, and the importance of network technology and services to society.

In the case of ALA, four contributions were frequently mentioned by SNPL managers interviewed. ALA provided a communication forum essential to the advance of many new ideas. ALA provided continuing education and training to diffuse network technology and services' new ideas. ALA advocated for funding and developed and advocated for policies essential for the provision of networked services. ALA, through the Washington Office, kept members informed as to federal activities and issues – especially on important topics such as the E-rate.

In the case of the Bill & Melinda Gates Foundation, SNPL managers interviewed mentioned several key contributions. They stated that the Gates Foundation's contribution was both unexpected and generous. The Gates Foundation often played two important roles serving as a catalyst to advance the library to the next level of networked service and at the same time sustaining previous advances until local support arrived. The Gates Foundation hardware, software, training, and documentation were high quality raising the standard in each of these areas.

*State Library, System, and Consortia Role*

State Libraries continue to play a significant, often primary, external role in enabling public libraries to become successfully networked in the states visited. All SNPLs had positive working relations with and had received funding from their State Libraries. State Libraries receive funding from their state governments and also receive federal Library Services and Technology Act funds from the Institute of Museum and Library Services. State Library Development units have established working relationships with libraries in their state often through regional library systems fully or partially supported by the State Library. In some states, member supported library systems and multi-type and multi-state library consortia also play significant roles in SNPL development.

State Libraries, library systems, and consortia have used a variety of mechanisms[34] to influence or enable public libraries to become successfully networked including:

1. **Funding Agency**: direct aid, targeted or competitive grants, group discounts, funding opportunity scanning and grant application assistance;
2. **Demonstration models**: State Library and agency web sites, funded demonstration models that may deserve wider application within the state (and beyond);

[34] These roles are not exclusive to State Libraries, systems, or consortia. Other external partners may also play these roles in certain states and contexts. For example, the Bill & Melinda Gates Foundation supports WebJunction <http://www.webjunction.org/>, a national effort to foster and coordinate library communication.

3. **Innovation champion**: environmental scanning, communication coordination, and regular review of professional and trade literature;
4. **Library consultants**: direct provision of professional advice and support;
5. **Continuing education and training:** ongoing training in deployment and use of information technologies, telecommunications, information policy, etc.
6. **Evaluation**: annual and targeted surveys, community focus groups, management of key statistics and performance measures;
7. **Regulation & standards:** knowledge local governmental technology guidelines and regulations and of Z39.50 and other standards such as those from the National Information Standards Organization;
8. **Advocacy**: negotiating with other external partners, lobbying federal, state, and local governments, advocating for policy development, and advocating for library marketing and promotion activities.

These mechanisms are further described in Appendix 8. State Libraries, systems, and consortia review these support mechanisms when a new network idea, technology, application, or service becomes available to further support SNPL development. The roles that these external partners play are not uniform across states (or in the case of systems within the states). The roles they play depend very much on the local context and the needs of local libraries. See Appendix 9 for an example of how two State Libraries served as Internet Service Providers (ISP) and how one State Library continues to do so, while commercial providers now offer ISP services used by SNPLs in the other state.

*External Partners: Future Roles*

The function and meaning of external partner, funding agency, vendor, system, consortia, and state library are all in flux and are all being re-examined with the "first generation library network" nearing completion and the next generation library connection already on the horizon. One model emerging from SNPLs and State Libraries has transformed the local public library into a virtual, multi-owner, information department store, bazaar, or farmers market. Like the present Internet, the emerging "next generation" public library 2.0 may have more than one answer to such basic questions as: Who owns what, who provides what service from where, who can use the service, what will it cost, who pays, when, how? Will there be a local public library anymore? Will there be a regional, state, or national public library instead, or none at all? Will Google predominate, or all of the above and more? Interesting, tip-of-the-iceberg trends mentioned by the SNPL manager interviewed include:

1. **Who will provide "local" reference**: The reference desk is all but gone in Orange County Florida. If you are at a branch or if you are at the main library, talk to Olive[35] and

[35] Picture a box with video screen and a phone on a desk with chair, or a telephone call box with video screen sitting where the reference desk used to be. A person with a reference question picks up the phone and is immediately connected with a reference librarian in a backroom of the main branch somewhere via videoconference hookup. In small libraries this might be the library's reference service. At Orange County's 14 branches (Land area 907.6 square miles, Total Population: 1,013,947, Circulation 650,000+ per month) this is the reference desk. At the main library as well as the branches the paper reference collection is all but gone, the reference desk is vacant. At malls or shopping centers, this could be part of a satellite library. See Orange County Public Library. (2006). *Olive*. (PLA presentation).

videoconference uplink to the "back room" reference experts. Or have you had a "chat"' or sent an e-mail to the virtual reference site near you when your local branch was closed (See Appendix 7 for state wide virtual reference sites)?

2. **Subscription databases**: State libraries buy them, systems and consortia buy them, and so do individual libraries. Yet, by the time a public library user fights his way through the authentication process, let alone the search procedure, the average Internet user already has a "good enough" answer and is 4 minutes into the latest music video. One wonders whether public library subscription databases persist solely because they are so deeply embedded in librarian identity.
3. **Virtual branch hosting (Open source)**: A number of State Libraries are working together to develop remotely hosted local public library web sites using open source software.[36] The State Library maintains the web site on its server for free. Local libraries provide the content using pre-established forms. This effort should advance the less successfully networked public libraries to the next level. This is an important achievement in and of itself. Equally important may be what the State Libraries learn about requirements for multi-state partnering to develop or improve essential network services. However, this asset cannot be fully utilized until potential partners can work out a roadmap for participants to follow. SNPL managers already know that the partnerships must be win-win for all. Early experience suggests that working out the process may be more time consuming than the actual development.
4. **Open source ILS**: The State Library of Georgia is developing an open source integrated library system called Evergreen <http://open-ils.org/>.
5. **Open source federated searching**: The State Library of Texas, like other states is considering a federated search engine. This software can search for items across a number of different databases (within constraints). The selection was an open source product from Index Data <http://www.indexdata.dk/keystone/>. Houston Public Library, already paying for a federated search engine, was quick to switch.
6. **Desktop workstation maintenance**: Soon, if the New Jersey State Library Hub project <http://www.njstatelib.org/LDB/Technology/hblbtoc.php> has its way, it will be doing remote desktop maintenance on New Jersey public library workstations in addition to providing safe, reliable, and secure network connections at any speed you want. What has worked well in enterprise computing ought to work well in the statewide library enterprise.
7. **Collections**: Audio books, e-books, Internet collections, video clips, music, reviews, films: some you own, some the library owns, some you pay, some you don't. Some are in your local library.

The issues are not new, but a threshold in connectivity and access has been crossed. Who will public library external partners be? How will their roles be redefined? Will the public libraries re-establish their identity in the virtual world now that they are connected?

---

<http://72.14.203.104/search?q=cache:Sbayabzmal8J:www.placonference.org/handouts/264_Gronlund_Gregg_083158_032906011241.doc+Information+Systems+Department+Head+Orange+County+Library+System&hl=en&gl=us&ct=clnk&cd=4>.

[36] See, for example, Oregon's Plinkit project (Public Library INTerface KIT) <http://www.plinkit.org/>. The open source software is Plone based on Zorp.

## Measuring Library Services and Resources

Principal findings from interviews with SNPL managers include:

1. **Time**: SNPL managers state that few of their colleagues have time to measure the quality and impact of all the various services and resources being provided. The issue is not one of ability, nor is it of knowledge or motivation. It is simply lack of time. As a consequence, the most useful measures are pre-collected, pre-analyzed data already attractively packaged in a variety of formats for a variety of audiences. The most effective set of measures were embedded in a PowerPoint budget hearing template where a library only had to plug in pre-collected local library data.[37]
2. **Success requires evaluation**: Many library managers do not have time to evaluate, but many SNPL managers do considerable ongoing evaluation of library services.
3. **Useful measures: Piloting & Valuing**: SNPL managers find two types of measures especially useful. These measures that:
    - Help pilot or manage network operations of services better, and
    - Show the value of network services.[38]
        - **Network use low yet still need value evidence**: Network service usage at many SNPLs is thought to be "low" although usage is often rapidly growing. Showing value without high use is problematic. For example, it may be that for some libraries, they are in the unusual position of having e-metrics available, but do not yet see the need to employ them.
        - **Relationships matters**: Network services are often funded today without valuable, usage-based evidence. Instead, SNPL managers often obtain network funding based on prior relationships, proven worth in other areas, or because the library has made positive contributions in other areas of their local government's mission or operations.

These principal points raised by SNPL managers interviewed are discussed more fully next.

### *Who has Time to measure?*

Repeated comments by the SNPL managers interviewed made the researchers ask: Who are the potential SNPL evaluators? Who has the time to evaluate SNPL management or value? Several clusters of public libraries offered the following:

1. **Libraries with no staff to dedicate to evaluation, even part time:** Librarians at most small libraries, which make up the majority of libraries, barely have enough time to run the library and little time to evaluate it. These librarians would give priority to quick,

[37] Iowa Library Service Areas and the State Library of Iowa. (2006). Telling the library story toolkit. <http://www.statelibraryofiowa.org/ld/tell-library-story>. The State Library of Iowa will host about 300 Iowa public web sites using this approach.

[38] The TexShare cost avoidance data is a useful measure that matters that shows the value of a network service, in this case State Library provided subscription databases. This data shows how much an individual Texas library saves because it does not have to individually subscribe to the core set of TexShare Databases. Texas State Library and Archives Commission. (2002 to present). Costs avoided by local libraries due to the TexShare Database Program. <http://www.texshare.edu/programs/academicdb/costavoidance.html>.

easy, ready-to-use evaluation tools, or opt to outsource the evaluation piece. Lack of time may preclude tutorials, long explanations, moderately complicated or new evaluation techniques.

2. **Libraries with staff to dedicate some time to evaluation**: The next level up are those libraries that have one or more librarians that can dedicate some portion of their time to items beyond the day-to-day running of the library. These librarians would still give priority to quick, easy, ready-to-use evaluation tools.
3. **Large urban libraries**: These libraries have planning and evaluation staff and are further distinguished by the need for more sophisticated management-valuing techniques (due to size and competition).
4. **Library systems**: Evaluation or training in evaluation techniques may be a service that a system offers to member libraries. One expected form of evaluation may be to show the system's value.
5. **Libraries with the same Integrated Library System (ILS)**: Libraries visited had an active interest in learning to use their ILS statistical modules, particularly to improve operational efficiency, workload management, and for piloting. On its face, this is a need best met by ILS vendors or ILS interest groups. Yet, based on interviews with SNPL evaluators, there is much to be accomplished.
6. **Intermediaries:** This group may include library systems, consortia, and State Library, Library Development Coordinators and State Data Coordinators, even consultants. One role that this group may play is to train public library managers in evaluation techniques, including required annual statistical survey completion, annual budget presentations, technology planning, and strategic planning. Another role, now that libraries are connected, might be to do the evaluation and remotely presenting usable results via the network.

In sum, the potential SNPL evaluators and measures may be different than assumed. What are needed are not necessarily new measures but practical, easy-to-use, plug in/templates that yield ready-to-use presentations.

*What Types of Evaluation Packages/Templates are needed?*

One suggestion offered is to construct evaluation packages and templates around recurring public library evaluation needs. Those interviewed mentioned: annual budget hearing, annual statistical report, annual report (good indicator of whether a library has staff dedicated to evaluation), technology plan, funded project evaluation (LSTA funded projects may require output measurement), status of electronic services (reports to Boards and local funding agencies showing value of new and expensive workstations, equipment, Internet connection, etc.), status of any new service report, workload management reports (impact of new or modified service on staff and resources), and summer reading reports.

*Piloting Measures*

Piloting measures enable managers to manage and adjust workloads and technology operations to match changes in network services or to account for the introduction of a new service. For example, what staff adjustments will need to be made if patrons are allowed to place

up to 10 remote holds? What additional bandwidth will be needed if the library adds a 20-workstation lab?

Pilot data are produced primarily by application software report modules, for example, an ILS statistics report module or a print manager software module. Often, library staff does not spend a lot of time collecting data, however, many statistics reporting modules are poorly designed. The data produced are often incompatible even with early versions of the same product, let alone other products. The data sometimes count different things with the same descriptor. The report modules produce output in variety of formats or in a non-standard format. All of these issues are well documented but seldom addressed by software vendors. As soon as local libraries develop workarounds, a new version is introduced or the vendor is sold. Data collection time is down; data analysis time is up. The most successful SNPL managers are patient and persevere.

*Valuing Measures without Value (based on Use) Evidence*

The traditional method of demonstrating value is to collect evidence of high use of service and combine it with the logical arguments: use is high customers want it. What are libraries to do when those interviewed suggest that network service use is low at SNPLs? "I would never use my usage data when seeking funds because use is not there yet," noted one SNPL director. Peer comparison is rare because the network service data from peer libraries are generally not available. Cost per use comparisons are not done because the costs per use are so high. Comparison with traditional services is not done because traditional services had the better numbers. Aggregation of traditional and network measures (e.g., gate count plus virtual visits) are generally not done either because the network service data are so low it did not add much. Many SNPLs note that network services use is rapidly rising. Reports that feature the rapid growth in use of a network service may be persuasive.

In general, public library network services are currently supported for the following reasons according to SNPL managers interviewed:

1. The library manager believes they are worthwhile;
2. External funding agencies are increasingly persuaded of the worth of network services;
3. A regular stream of data is provided that shows increasing use (rather than high use) of network services or evidence (e.g., testimonials) is provided that shows that the service is valued; and
4. The high costs of network services are mitigated by external funding.

But the sense was that the evidence was not there *yet* to make the traditional high use, high value continued/increased funding argument.

## The Role of Advocacy in SNPLs

*SNPL Managers are Advocacy Leaders*

SNPL managers were distinguished by their belief that advocacy is a central part of their job description. Distinguishing characteristics include:

**Proactive**: A distinguishing characteristic of all of the SNPLs visited was their proactive approach when compared to other public libraries. Library managers actively and systematically looked for opportunities to:

- Show what the library was already doing to address local, state, and regional issues;
- Partner with others to address these issues together, even if it was *only* to provide information; and
- Look for funding for the libraries as part of these proactive, joint problem-solving efforts
- SNPL managers did not wait to be invited nor did they wait to be discovered. SNPL managers were out knocking on doors.

**Opportunistic**: The SNPL managers were masters at perceiving an opportunity to make the library's worth visible to others and to obtain funding or support particularly when the source did not mention libraries, but did not exclude them either. SNPL managers all recognized that financial support was only one of many types of support that successful libraries need.

**Prepared**: SNPLs were often, but not always, better prepared than peer government agencies to make their potential contribution known and to make their funding case. Part of the preparation included assembling relevant evidence and arguments based on the evidence.

**Positive relationships with other local leaders**: SNPL managers had a year-round positive relationship with elected and appointed officials and government agency and nonprofit leaders, as well as community opinion makers. SNPL managers were not meeting strangers when they went to the annual library budget hearing.

SNPL managers made a number of other observations, several of which are quickly summarized here:

1. A good argument supported by evidence is generally not enough to ensure funding – a positive relationship may tip the scales in the library's favor.
2. Library managers did not receive advocacy training in library school. The training received was ad hoc, on the job and unsystematic.
3. All knew of fellow library managers who were reluctant to engage in advocacy. "It's not my job." The general feeling was that with training these reluctant library managers could find their niche in the library advocacy effort.
4. Library managers and appointed government officials both noted that the stereotypical library manager appeared to be aloof or absent from local government activities. Some attributed the lack of involvement to a partially or fully independent funding stream. All agreed the stereotype created a barrier to productive relations.

SNPL managers were distinguished by their proactive, opportunistic, prepared attitude, and their engagement with the community and their fellow community leaders approach to advocacy for their library.

*Advocacy absent Usage Evidence*

So how do SNPL managers advocate for network services and their libraries as they encourage the use of these services? SNPL managers had prompt responses that were variations on a theme:

1. Establish a relationship with key local funding agencies. "You have made a mistake if the only time that you have seen local funding decision makers all year is when you come to the annual budget hearing with your hand out."
2. Show up at county and city council meetings.
3. Be viewed as a contributing unit of city and county government (even if the library is separately funded).
4. Be proactive, do not wait for opportunity to knock, seek it out;
5. Find out what other local government agencies' problems areas are and make the library part of their solution.
6. Join local business organizations and involve the library in their work.
7. Seek out opportunities to present the library, its services and its accomplishments to local community groups.

These activities (and others) should seek to convey the following messages:

1. The library is competently administered;
2. The library provides good services and is well regarded;
3. The library is actively working with other units of government, community groups, and local business to solve community problems; and
4. The library actively seeks partners to advance the community's agenda.

SNPL managers suggested the following "simple, if-then equation." If the library is viewed as well-run and well-regarded, supportive of other city and county government agencies, elected officials, community groups, and business, then when the library says a new service is important and ought to be funded, even absent evidence of need or use, the new service is likely to receive support. This suggests several alternative measures for assessing a library's value; see Appendix 10 for a summary.

**Advocacy summary**

The successfully networked public library managers interviewed were distinguished by their advocacy for their libraries and network services with local and remote partners, funding agencies and users. Key elements of their advocacy approach include the following:

1. **Have a good "product;" Be competent and run an efficient and effective library**: SNPLs were successful in much of what they set out to do in the provision of traditional

as well as network services, and that was a common perception among local and external partners.

2. **Recognize that advocacy is required**: SNPL managers appear to operate from a different mindset than other library managers. SNPL managers recognized that being good at what you do is insufficient. Taken to an extreme, "it could be like pausing to navel gaze at the OK Corral." Instead, "there are a whole set of other skills they never taught you in library school" that are required. Advocacy is critical. Repeatedly tell others how good you are, tell others how the library contributes to solving their problems, and tell others what the library needs to do the job.
3. **Identify the key stakeholders**: SNPL managers knew, almost by intuition, who were the key local and external stakeholders. Those users, funding agencies, opinion leaders who could positively influence the library's success and in particular the success of the library's network services.
4. **A logical argument may not be enough**: Libraries could once make a logical argument and obtain support, such as "There at the founding;" "Champion of democracy;" or "Cultural bastion." Often, that is no longer the case.
5. **Logical argument + compelling evidence still may not be enough**: There is a great deal of work necessary to get local library managers up to speed on the argument and evidence requirements of library advocacy. Libraries should focus on how to identify locally relevant arguments and to then assemble suitable evidence. See for example the EDMS project[39] just underway. What if the evidence is not there or the argument plus evidence is insufficient to persuade funding agencies in light of other local funding demands?
6. **Presentation matters too**: It is essential that the library director can provide a clear, understandable, and graphic presentation about the library, its needs, its accomplishments, the importance of technology and public workstation computer with related services, the library vision, and the resources needed.
7. **Building a positive relationship**: Another key SNPL manager difference was that they were out of the building, proactively engaged with local government, community groups, local business, and other key stakeholders solving community problems and regularly highlighting the library's role and the library's network services role in their solution.

Effective library advocacy is a learned skill; most often it is learned on the job. There are effective roles for external partners in assisting local library advocacy efforts. Elements of effective advocacy as identified by the SNPL managers interviewed include: begin with a competent, well run library and craft locally relevant arguments, supported by compelling evidence, that are well presented and build on a pre-established, positive relationship. SNPL managers point out that advocacy is not doing one thing well, but balancing a number of essential elements effectively. Effective advocates need an annual plan of advocacy events.

### Conclusions and Recommendations from Case Sites

This section presents a number of conclusions, recommendations, and next steps based on the findings of the case site portion of the study. These are offered in the context of actionable

[39] FSU. Information Institute. (2006). Evaluation Decision Management System (EDMS). <http://www.ii.fsu.edu/projects/effective-eval/>.

items to assist in sustainability and continued enhancements to the connectivity and network-based services and resources of SNPLs.

*The connection issue*

The perception among the State Libraries and SNPLs visited is that the only public libraries not connected are the ones where everyone is waiting for the library director to retire or there is some unusual barrier where existing telecommunications and wireless solutions will not work. As an SNPL director summarized, "Some days I worry that we have spent too much time and too much of our capital getting everyone connected and not enough on producing Internet content and services."

In fact, the need for greater bandwidth connections at public libraries remains a pressing issue. Library managers at the most successfully networked public libraries note that when planning for library bandwidth capacity demands for the near future, with podcasts, streaming video, and other large downloads prevalent, obtaining needed bandwidth may be difficult or costly.

*Next Step: Use the connection*

The general consensus was that the near-term will be used to capitalize on this "first generation of library connectivity." Issues to be addressed include:

1. **Establish a virtual identity for public libraries**: All of the SNPLs visited were aware of the findings of the OCLC Perceptions study in the fall of 2005.[40] The study suggested that today's Internet users rarely thought of the library when meeting their information needs. The most successful (both in traditional and network service provision) of the successfully networked public libraries were worried the most.
2. **Build relationships with traditional and new partners**: Existing and near-term library broadband connectivity will permit remote delivery of services within the library, virtual branch services, infrastructure services, services to library staff, and direct services to library patrons wherever and when ever they are needed. Technology will continue to press while political, economic, legal, and security issues and agreements slowly get worked out among traditional and new library partners.
3. **Develop public library branded, network based, content, and services:** The long-term goal of many libraries is that when people use the Internet, they would be aware of and use the useful, high quality, probably free, content and services offered by the public library. SNPLs recognize the need for public library branded content and services. Who will produce the content or services or organize public libraries to produce public library branded content and services? What will be the content? What will be the service?
4. **Library branded content?** At present, the principal, networked, public library content consists of digitized, local, special collections (audio, video, photographs, maps, historic

[40] OCLC. (2005). *Perceptions of libraries and information resources study.* Dublin, OH: OCLC Inc. <http://www.oclc.org/reports/2005perceptions.htm>. From that page: "The findings indicate that information consumers view libraries as places to borrow print books, but they are unaware of the rich electronic content they can access through libraries."

documents). Local public libraries are very interested in making more local digital content available. Often the material is made available without attention to national standards and cataloging, thus making statewide and national aggregation difficult. Branding such material may be difficult in any case. Ownership of library digital collections is questionable when it is not public domain. Public libraries have traditionally left the final processing of digital collections into commercial grade products and their retailing to others.

5. **Library branded services?** At present, the principal networked public library service is virtual reference, which is in its infancy – particularly in usage.
6. **Redefine the traditional vendor relationship or bypass it?** There was a great deal of dissatisfaction with library vendor products such as subscription databases, ILSs, federated search engines, and web hosting software particularly compared with open source or freely available Internet alternatives. State Libraries and others are actively developing open source options.
7. **Connectivity 2.0**: Prepare for order of magnitude increases in bandwidth demand as high bandwidth transfers, such as streaming audio, e-government, video, and music become the norm. One consideration is that a connectivity threshold of what constitutes "good enough bandwidth will continue to be a moving target and ever increasing.

*Importance of local library functions*

The need for local, MLS-trained catalogers has been greatly reduced due to cooperative cataloging via the network process begun before the Internet. Yet the need for cataloging persists, and it even flourishes as it is reinvented.[41] One unexpected need for better cataloging has come as states try to integrate semi-Z39.50 compliant local catalogs into statewide catalogs.[42] Some see organizing the Internet as the next massive job awaiting catalogers.

A similar process is under way with locally provided reference service. Is there a need for a reference librarian or an expensive, local, reference collection when electronic databases and virtual reference services are available? Are MLS qualified reference librarians needed in every library? What qualifications do library staff members need today to provide reference services at branch libraries? Why should reference librarians be tied to a desk? Are there not Bluetooth headsets, PDA, laptops, wireless? Why shouldn't reference librarians or aides be roving the library, or be at local public gatherings, or at the mall? Some County Commissioners

[41] See for example: Byrd, Jackie, Charbonneau, Gary & Charbonneau, Mechael et. al. (2006, January 15). A white paper on the future of cataloging at Indiana University. Bloomington, IN: Indiana University Libraries. <http://www.iub.edu/~libtserv/pub/Future_of_Cataloging_White_Paper.pdf>.
Calhoun, Karen. (2006, March 17). The changing nature of the catalog and its integration with other discovery. Washington, DC: Library of Congress. <http://www.loc..gov/catdir/calhoun-report-final.pdf>.

[42] E.g., State Library of Iowa. Cataloging supplement. < http://www.statelibraryofiowa.org/ld/cataloging-supplement>. "During the last year it became clear that we as a library community need to improve the cataloging records in the SILO Locator < http://z3950.silo.lib.ia.us/cgi-bin/zform.CGI?SILO>. Librarians who use the SILO Locator and Interlibrary Loan know some of the problems. These include the difficulty of retrieving and searching through duplicate records for the exact same item and not being able to request and receive a particular format for library customers. Improving the records in the Locator will save staff time and make it easier to accurately fill interlibrary loan requests for a particular format."

in one state are not listening to arguments to increase small public library hours. Why should they increase hours when citizens can use a statewide 24/7 virtual reference service?

A similar trend can be seen in network and workstation servicing with the goal being remote maintenance of networks and the desktop workstation. Even the multi-State Library effort to host local public library web sites remotely raises the question of what are local public library functions and what functions can be performed at the system, regional, state, or larger levels.

*The importance of the MLS and other degrees*

The variety of professions holding public library management positions (let alone staff positions) appears to have dramatically increased in the last several years, evolving from just the traditional MLS to include several other fields. The library management team degrees may now include: MBAs, MPAs, and various IT, social work, and education degrees to name those encountered during the study. Even more remarkable, in SNPLs, they have all found ways for folks with these various degrees to do meaningful work together.

However, at the some of the most successful SNPLs, some traditional MLS librarians, particularly those whose education is less recent, seem to have more difficulty adapting in an environment of rapid technological change. They do not appear to be able to adapt as fast as newly minted MLS hires or hires from some other fields. But at the same time, some public library managers appear more often satisfied with the MLS graduates they are hiring, and that included those who had taken the distance education option.

*Virtual branches but with only virtual funds and resources*

SNPLs are quickly moving to the notion that their library web site and services has created another library branch – a virtual branch. Providing this new branch with commensurate management, staff, funds, accountability, authority, etc. as a traditional branch is still under development. In some of the libraries visited, web masters sit on the management team, they have control of a budget, and there may even be additional IT staff available. This management approach and concept appears useful and will increase in importance as community broadband penetration increases and virtual branch use follows.

*Network service use: A tricky balance*

Network service managers appear constrained by a number of less well-known factors when it comes to encouraging network service use. There is value to being relevant and up-to-date. Build it and they will come may not always be true, and this approach requires experimenting with new things and sometimes failing. Not every library is equipped to succeed using this approach.

The most successful SNPLs continue to be quite successful in the provision of traditional library services. Library patrons do not want the library to drop any service, as they all are successful or have strong user advocates. As a result, these libraries require new information

technology to first make the library more efficient freeing up resources so that a new service can be offered. Then, the impact of a new service on users, staff, and infrastructure must be well enough understood so as to not overwhelm library staff.

There are infrastructure concerns like connection speed, network and hardware quality, software bottlenecks, available staff, bulky procedures, hours of operation, unions, funding, etc. These can mitigate new and exciting services, development, and implementation.

Network service usage appears to take longer to grow than most funding agencies expect. SNPL managers need to find ways to increase use rapidly before funding interest wanes. What if the network service is ready, but the community, or a key segment of the community, is unable to use it? Virtual branch planners are beginning to pay closer attention to such factors as community broadband penetration. Broadband at well beyond 769kbps is essential now and will become more important in the future.

Network service managers are identifying the constraints, relationships, and heuristics inherent in the new virtual world. For example, in simpler days, if you wanted to increase the importance and use of network services within the library, then you would increase the number of public workstations. Soon, however, those workstations had to be repaired and new software had to be installed (and it could not be done remotely) and workstations needed to be replaced on a schedule. But what is the point of adding workstations when there is not enough trained staff to assist users, when library hours have been cut, and when that formal IT training program never got off the ground? Complexity and the ability to manage it has become a significant constraint to networked services development. Can this area be defined and systematized better so that network services can be managed better and usage increased?

### *Measuring Library Services and Resources*

#### Piloting Measures

SNPL managers interviewed had a great deal of interest in data, largely supplied by vendor or external software, which assisted them to manage, or pilot, their organization better. For example, when a new network service is introduced or modified, how will staff workload be affected? The present situation may be politely described as uncoordinated chaos. At present, there is a great deal of opportunity to better order network service management evaluation.

#### Valuing Measures

The development of national, standardized, measures appear to be in advance of their need. The current use of library network services, while rapidly growing, appears to be, in general, relatively low. Thus, network services use data cannot currently supply the evidence needed to make the logical argument for sustained or increased funding. It is likely that this situation will soon change given the apparent rapid growth in the use of library network services.

#### Network Service Marketing, Promotion, and Evaluation

In general, library network services at the libraries visited, like traditional library services, are not systematically or broadly marketed. The prevailing philosophies in a restricted funding environment are: I would rather spend the money on building it better in the hope that they will come. Or, do you want me to build it substandard, market the service, and possibly have the user be disappointed? Marketing and promoting public library networked services appears to be virgin territory for a number of libraries.

However, marketing may require nontraditional efforts like: learning how to resolve database authentication issues; learning how to put an icon on every public library web site; and learning that paper-based marketing is useful for web-based products and services. A particular future area of need is the development of simple, easy-to-use guidelines for network service marketing and evaluation plans. Network service plans should address basic questions like: who is the audience for the service, are there constrains on use, what management data are needed, how will the library know when the service is a success, are there data that could be collected that show the service's value to funding decision makers and others?

## Advocacy

When SNPL managers were asked how they continued to obtain funding for library network services without use data, another facet of the valuing and advocacy process was revealed: the importance of individual competence, prestige, relationships, and being part of a team of community leaders seeking community improvement. SNPL managers understand this, but less successfully networked libraries may not. The study makes some suggestions for how public library leaders might increase their value to their community in this area. When a service is new and evidence lacking, community trust in a library manager's judgment may fill the gap until usage evidence picks up.

## Additional research

The site visits to a number of successfully networked public libraries suggests a number of areas where additional research and study should be done. Briefly, these include the following:

1. *Update the definition of a successfully networked public library on a regular basis*. It is important to recognize that the factors contributing to being a SNPL in 2006 may not be the same factors in 2007 or 2008. Longitudinal data that redefines SNPL on a regular basis can assist libraries become more successful over the years.
2. *Analyze high-speed connectivity*. Identify what are appropriate "high speed" connectivity needs (e.g., beyond 769kbps) given the service plans and requirements of the library, better understand connectivity capacity in different library settings, and develop strategies to assist libraries to move to higher speed connectivity. In addition, an issue here is the actual bandwidth of individual workstations given how connectivity is fractionalized after entering the library.
3. *Study the roles of public libraries in disasters and e-government*. Data from the 2006 survey clearly showed a broad range of services and activities provided by libraries in support of disaster preparedness and its aftermath as well as in a host of e-government

services (drug prescription sign-up; government services, immigration, etc.). Analysis of these services, how to use the provision of these services for local advocacy, and providing guidelines to assist libraries in the provision of these services would be important tools for libraries.

4. *Identify best practices in use to promote public access computing and high-speed connectivity*. Findings from the 2006 survey identified incredible community contributions from libraries in the Gulf Coast during the 2005 hurricane season. Most have not marketed or used these successes to advocate for the library; why not? And what strategies can be put in place for public libraries to better promote their public access computing and high-speed connectivity?

These are four key initiatives that could provide significant insights and assistance to public libraries as they continue to build upon their public access computing services, their information technology infrastructure, and the development of networked services to improve advocacy and funding at the local level.

## APPENDICES TABLE OF CONTENTS

## APPENDIX 1: SURVEY INSTRUMENT

*Please note that the survey's appearance is different than the web-based survey instrument, but does reflect the printed version included in the packets sent to library directors.

## 2006 National Survey of Public Library Internet Connectivity

**Instructions**: The Information Use Management and Policy Institute (www.ii.fsu.edu) in the College of Information at Florida State University, with support from the Bill & Melinda Gates Foundation and the American Library Association, is surveying a national sample of public libraries regarding their Internet connectivity and services. Drs. John Carlo Bertot and Charles R. McClure are the study managers. The questions below are divided into branch and system level questions. It may be the case that we are requesting that you respond to questions for your entire library system including all branches or selected branches with some system-wide questions. The survey is available on the web at http://www.plinternetsurvey.org, while this print version is included for your convenience. If you prefer to complete the print survey, please do so and return it to the address at the end. There is a glossary of terms on the back of the survey form to assist you complete the survey. Please e-mail or call John Bertot (pl2006@ci.fsu.edu, 850.645.5683) with any questions/issues you may have regarding the survey. Thank you for your participation! **PLEASE COMPLETE THE QUESTIONNAIRE BY MARCH 17, 2006.**

## A. LIBRARY BRANCH LEVEL QUESTIONS

### A: Connectivity and Access

1a. How many **total hours per week** is this library branch **open to the public**? (TYPE THE APPROPRIATE NUMBER IN THE BLANK, ROUNDING TO THE NEAREST HALF HOUR)

_____ hours/week (e.g., 30, 30.5)

b. The **total hours per week** that this library branch is **open to the public has**: (MARK ONE ● ONLY, AND ENTER THE APPROPRIATE NUMBER IN THE BLANK)

| | | |
|---|---|---|
| O | Increased since last fiscal year | _____ # hours increased (round to nearest half hour) |
| O | Decreased since last fiscal year | _____# hours decreased (round to nearest half hour) |
| O | Stayed the same as last fiscal year | |

2. Is this library branch currently **connected to the Internet** in any way? (MARK ONE ● ONLY)

| | |
|---|---|
| O | No (If 'no' please skip to question 10) |
| O | Yes, staff access only (If 'yes' please skip to question 10) |
| O | Yes, public and staff access (if 'yes' please go to question 3) |

3. Is **wireless Internet access available for public use** (e.g., with patron laptops, PDAs, or other wireless devices) within the library branch? (MARK ONE ● ONLY)

| | |
|---|---|
| O | Yes, it is currently available |
| O | No, it is not currently available, but there are plans to make it available within the next year |
| O | No, it is not currently available and there are no plans to make it available within the next year |

4. Please indicate **the number and age of PUBLIC ACCESS Internet workstations** provided by this library branch (include in the count circulating laptops and multi-purpose workstations that allow access to the Internet and circulating laptops. Exclude workstations that only access the library's Web-based Online Public Access Catalogs). Even if you cannot estimate the ages of the workstations, please provide the total number of workstations. (ENTER THE APPROPRIATE NUMBERS IN THE BLANKS)

| Number of Public Access Internet Workstations | Average Workstation Age |
|---|---|
| _____ workstations | _____ workstations less than 1 year old |
| | _____ workstations 1-2 years old |
| | _____ workstations 2-3 years old |
| | _____ workstations greater than 3 years old |

5a. Are there plans to **add additional public access workstations** at this library branch **during the next two years**? Include in the workstation count the number of circulating laptops that the library may be adding. (MARK ONE ● ONLY. IF APPLICABLE, INCLUDE THE APPROPRIATE NUMBER)

| | |
|---|---|
| O | The library plans to add _____ workstations within the next two years |
| O | The library is considering adding more workstations within the next two years, but does not know how many at this time |
| O | The library has no plans to add workstations within the next two years |
| O | The library has plans to REDUCE the number of workstations to a total of _____ workstations within the next two years |

5b. Are there plans to **replace existing public access workstations** at this library branch **during the next two years**? Include in the workstation count the number of circulating laptops that the library may be replacing. (MARK ONE ● ONLY. IF APPLICABLE, INCLUDE THE APPROPRIATE NUMBER)

| | |
|---|---|
| O | The library plans to replace _____ workstations within the next two years |
| O | The library plans to replace some workstations within the next two years, but does not know how many at this time |
| O | The library has no plans to replace workstations within the next two years |

5c. Is the library branch able **to maintain its workstation replacement or addition schedule**? (MARK ONE ● ONLY)

| | |
|---|---|
| O | Yes |
| O | No |
| O | The library has no workstation replacement or addition schedule |
| O | Not applicable |

5d. Please identify the **three most important factors** that affect the library branch's ability or plans to **add more public access workstations**. (MARK ● UP TO THREE)

| | |
|---|---|
| O | Space limitations |
| O | Cost factors |
| O | Maintenance, upgrade, and general upkeep |
| O | Staff time |
| O | Inadequate bandwidth to support additional workstations |
| O | The library is purchasing laptops for in-library patron use instead of desktops |
| O | The library is not adding more workstations, but is providing (or about to provide) wireless access for patrons with laptops to help to meet public demand |
| O | The current number of workstations meets the needs of our patrons |
| O | Other (please specify): _____ |

6. **On a typical day,** does this library branch **have people waiting** to use PUBLIC ACCESS Internet workstations? (MARK ONE ● ONLY)

| | |
|---|---|
| O | Yes, there are fewer public access Internet workstations than patrons who wish to use them at any given time |
| O | Only at certain times during a typical day are there fewer public access Internet workstations than patrons who wish to use them |
| O | No, there are always sufficient public access Internet workstations available for patrons who wish to use them |

7. Please identify the library's **Internet connection provider**: (MARK ONE ● ONLY)

| | |
|---|---|
| O | The library connects directly to an Internet Service Provider |
| O | The library connects via a network managed by a regional library consortium or library cooperative (e.g., through an integrated library system) |
| O | The library connects via a network managed by a non-library entity (e.g., municipal, county, or state government) |
| O | Other (please specify): _____ |
| O | Don't know (If you do not know how your library connects to the Internet, please contact an individual or group who may know before checking "Don't know") |

8a. Please indicate the **maximum speed** of this library branch's **PUBLIC ACCESS Internet service connection**. (MARK ONE ● ONLY)

| | |
|---|---|
| O | Less than 56 Kbps (kilobits/second) |
| O | 56 Kbps – 128 Kbps |
| O | 129 Kbps – 256 Kbps |
| O | 257 Kbps – 768 Kbps |
| O | 769 Kbps – 1.5 Mbps (megabits/second) |
| O | Greater than 1.5 Mbps |
| O | Don't know (If you do not know your library's connection speed, please contact an individual or group who may know before checking "Don't know") |

8b. Given the uses of the library branch's public Internet access services by patrons, does the library branch's **PUBLIC ACCESS Internet service connection speed meet patron needs**? (MARK ONE ● ONLY)

| | |
|---|---|
| o | The connection speed is insufficient to meet patron needs |
| o | The connection speed is sufficient to meet patron needs at some times |
| o | The connection speed is sufficient to meet patron needs at all times |
| o | Don't know |

9. In the space below, **please identify the single most important impact on the community** as a result of the library branch's public access to the Internet?

**For libraries that are not connected to the Internet or only provide staff access**

10. Please indicate the **three most important factors** that affect **your library branch's ability to provide public access Internet services**: (MARK ● UP TO THREE)

| | |
|---|---|
| o | The library does not have space for workstations and/or necessary equipment for public access Internet services |
| o | The library cannot afford the necessary equipment (i.e., workstations, routers, etc.) for public access Internet services |
| o | The library does not have adequate access to telecommunications services (e.g., phone lines, leased lines, cable, other) for public access Internet services |
| o | The library cannot afford the recurring telecommunications costs for public access Internet services |
| o | The library does not have the staff necessary to install, maintain, and/or upgrade the technology necessary for public access Internet services |
| o | The library does not control its access to Internet services (i.e., local/county government provides access) |
| o | There is no interest among library staff or management in connecting the library to the Internet |
| o | There is no interest within the local community in connecting the library to the Internet |
| o | Other (please specify): _____ |

## B. LIBRARY SYSTEM LEVEL

### B.1: Funding Connectivity

11. Please indicate the appropriate funding situation for this library's **total operating budget and Internet information technology budget** (e.g., Internet-related technology and infrastructure, space, wiring, telecommunications services, workstations, servers, furniture, etc.) for the library's last fiscal year: (MARK ● ALL THAT APPLY, AND, IF APPLICABLE, TYPE THE APPROPRIATE NUMBER IN THE BLANK)

| Budget Type | Funding Situation | | |
|---|---|---|---|
| | Increased since last fiscal year | Decreased since last fiscal year | Stayed the same as last fiscal year |
| Total operating budget | o _____ % increase | o _____ % decrease | o |
| Internet Information technology budget | o _____ % increase | o _____ % decrease | o |

12a. If this library is, or will be, **receiving E-rate discounts during the July 1, 2005 E-rate funding year**, please indicate which services are fully or partially funded by E-rate: (MARK ● ALL THAT APPLY)

| | | |
|---|---|---|
| Internet connectivity | ○ Yes | ○ No |
| Telecommunications service | ○ Yes | ○ No |
| Internal connection costs | ○ Yes | ○ No |

12b. If this library **did not apply for E-rate discounts in 2005**, it was because: (MARK ● ALL THAT APPLY)

| | |
|---|---|
| o | The E-rate application process is too complicated |
| o | The library staff did not feel the library would qualify |
| o | Our total E-rate discount is fairly low and not worth the time needed to participate in the program |
| o | The library receives it as part of a consortium, so therefore does not apply individually |
| o | The library was denied funding in the past |
| o | The library has applied for E-rate in the past, but because of the need to comply with CIPA's (Children's Internet Protection Act) filtering requirements, our library decided not to apply in 2005 |
| o | The library has applied for E-rate in the past, but no longer finds it necessary |
| o | Other (please specify): _____ |

## B.2: Public Access Internet Services and Community Impact

13. Please identify the **Internet-based services the library makes available to users** either in the library or remotely (e.g., website). Include services that the library may not provide directly (i.e., statewide databases, digital reference): (MARK ● ALL THAT APPLY, WHEN APPLICABLE MARK BOTH COLUMNS)

| Service/Resource | Library Provides | Other Provides (state library, regional consortia, other) |
|---|---|---|
| Digital reference/Virtual reference | O | O |
| Licensed databases | O | O |
| E-books | O | O |
| Video conferencing | O | O |
| Online instructional courses/tutorials | O | O |
| Homework Resources | O | O |
| Audio content | O | O |
| Video content | O | O |
| Digitized special collections (e.g., letters, postcards, documents, other) | O | O |
| Other (please specify):_____ | O | O |

14. Please identify the **three most important** ways in which your library uses **public access Internet services as a means to try to contribute to the local community**? (MARK ● UP TO THREE)

| | |
|---|---|
| O | Provide information for local economic development |
| O | Provide information about state and local business opportunities |
| O | Provide computer and Internet skills training |
| O | Provide real estate-related information |
| O | Provide community information |
| O | Provide information for local business marketing |
| O | Provide services for job seekers |
| O | Provide investment information or databases |
| O | Provide education resources and databases for K-12 students |
| O | Provide education resources and databases for students in higher education |
| O | Provide education resources and databases for home schooling |
| O | Provide education resources and databases for adult/continuing education students |
| O | Provide information for college applicants |
| O | Provide access to local public and local government documents |
| O | Provide access to federal government documents |
| O | Provide access to and assistance with local, state, or federal government electronic services (e.g., driver's license applications, tax filing, other) |
| O | Other (please specify): _____ |

**15. Please identify the** three most significant impacts **of the library's** patron information technology training offerings **on the community that the library serves: (MARK ● UP TO THREE)**

| | |
|---|---|
| O | The library does not offer patron information technology training services |
| O | Facilitates local economic development |
| O | Offers technology training opportunities to those who would otherwise not have any |
| O | Helps students with their school assignments and school work |
| O | Helps business owners understand and use technology and/or information resources |
| O | Provides general technology skills |
| O | Provides information literacy skills (i.e., how to access and use Internet-based resources) |
| O | Helps users access and use electronic government services and resources (e.g., license applications, tax filing, other) |
| O | Other (please specify): _____ |

THANK YOU FOR YOUR PARTICIPATION!

**For questions concerning the survey, please contact:**

**John Carlo Bertot** <pl2006@ci.fsu.edu>
Professor and Associate Director
Information Use Management and Policy Institute
College of Information
Florida State University
244 Shores Building
Tallahassee, FL 32306
(850) 645-5683 phone
(850) 644-4522 fax

| GLOSSARY OF SURVEY ABBREVIATIONS/KEY TERMS | |
|---|---|
| **CIPA (Children's Internet Protection Act)** | A Federal law requiring the use of filters on public access Internet workstations (see below) when the library receives either LSTA or E-rate (see below) funds. |
| **Digital Reference/ Virtual Reference** | The provision of interactive reference services for patrons via email, chat, or other electronic means. |
| **E-books** | Digital documents, licensed or not, where searchable text is prevalent, and which can be seen as analogous to a printed text. (Based on NISO Standard Z39.7 definition, see http://www.niso.org/emetrics) |
| **E-rate Funds** | Funding provided by the federal government through the Universal Service Fund to libraries to cover expenses associated with Internet access. |
| **Fiscal Year** | A financial 12-month period as reckoned for reporting, accounting, and/or taxation purposes (i.e., the date range that a library uses in reporting to local government agencies). |
| **Information Technology Budget** | Funds allocated specifically the costs associated with information technology. |
| **Information Technology Training** | Formal or informal training sessions that cover specific topics (e.g., Web browser basics, Internet searching, basic computing skills). |
| **Kbps** | Kilobits per second. |
| **Library Branch** | A library facility. In the case of some public libraries, there is only one facility. Other public libraries have several facilities, which are sometimes referred to as branches. |
| **Licensed Databases** | Collection of electronically stored data or unit records (facts, bibliographic data, and texts) with a common user interface and software for the retrieval and manipulation of the data. Licensed databases are those typically contracted through a vendor by the library for patron access (e.g., Gale, Ebsco, ProQuest). (Based on NISO Standard Z39.7 definition, see http://www.niso.org/emetrics) |
| **Mbps** | Megabits per second. |
| **Online Public Access Catalogs (OPACs)** | An electronic catalog of library materials and/or services that patrons can access. |
| **Public Access Internet Workstations** | Those workstations (see below) within the library outlet that provide public access to the Internet, including those that provide access to a limited set of Internet-based services such as online databases. This includes circulating laptops |
| **Wireless Internet Access** | Internet access that does not require a direct connection (typically Ethernet) for access. Most typically, wireless access adheres to the IEEE 802.11 standard for interoperability and compatibility. |
| **Workstation** | A computer and related components (including a monitor, keyboard, hard drive, and software) that are capable of displaying graphical images, pictorial representations, and/or other multi-media formats. |

## APPENDIX 2: SUCCESSFULLY NETWORKED PUBLIC LIBRARIES VISITED

## Florida

State Library and Archives of Florida 500 South Bronough Street, R.A. Gray Building Tallahassee, FL 32399-0250

Tampa Bay Library Consortium (TBLC) <http://www.tblc.org/> 1202 Tech Blvd Suite 202 Tampa, FL 33619-7864

Orange County Public Library <http://www.ocls.info/> Orange County Public Library <http://www.ocls.info/> 101 E. Central Blvd. Orlando, FL 32801

Winter Park Public Library <http://www.wppl.org/ > 460 E. New England Ave. Winter Park, FL 32789

## Iowa

Iowa State Library Ola Babcock Miller Building 1112 E. Grand Ave. Des Moines, IA 50319-0233

Bayard Public Library <http://www.bayard.swilsa.lib.ia.us/> 315 Main Street PO Box 338 Bayard, IA 50029

Waverly Public Library <http://city.waverlyia.com/library.asp> 1500 West Bremer Avenue Waverly, Iowa 50677

Decorah Public Library <http://www.decorah.lib.ia.us/> 202 Winnebago St. Decorah, IA 52101

Davenport Public Library <http://www.davenportlibrary.com/> 321 Main Street Davenport, Iowa 52801-1490

## New Jersey

New Jersey State Library <http://www.njstatelib.org/> 185 W. State Street, Trenton, N.J. P.O. Box 520 185 W. State Street, Trenton, N.J. 08625-0520

East Brunswick Public Library <http://www.ebpl.org/> 2 Jean Walling Civic Center, East Brunswick, NJ 08816

Cumberland County Library <http://www.clueslibs.org/> 800 East Commerce Street Bridgeton, NJ 08302

Newark Public Library <http://www.npl.org/> 5 Washington Street Newark, NJ 07101

Burlington County Library <http://www.bcls.lib.nj.us/> 5 Pioneer Boulevard, Westampton, NJ 08060

## Oregon

Oregon State Library 250 Winter St. NE, Salem, OR 97301-3950

Tillamook County Library <http://tillamook.plinkit.org/> 210 Ivy Avenue Tillamook, OR 97141

Multnomah Public Library <http://www.multcolib.org/> 801 S.W. 10th Avenue Portland, OR 97205

Deschutes Public Library <http://www.dpls.lib.or.us/> 507 NW Wall Street, Bend 97701

Baker County Library District <http://www.bakercountylibrary.org/main.html> 2400 Resort Street Baker City, OR 97814

## Texas

Texas State Library and Archives <http://www.tsl.state.tx.us/l> PO Box 12927 Lorenzo de Zavala State Archives and Library Building, 1201 Brazos Street Austin, TX 78711-2927

Joe Barnhart Bee County Library <http://www.bclib.org/> 110 W. Corpus Christi Beeville, TX 78102

Boerne Public Library <http://www.boerne.lib.tx.us/> and Blog <http://www.boernelibrary.blogspot.com/> 210 North Main Street (and Blanco Street) Boerne, TX 78006

Austin Public Library <http://www.ci.austin.tx.us/library/> Central Library (800 Guadalupe) Daniel Ruiz Branch (1600 Grove Blvd.) Austin, TX 78741

# APPENDIX 3: CASE STUDY APPROACH AND METHOD

## Introduction

An overview of the study approach includes the following elements:

- **Secure funding**: These case studies are part of the 2006 *Public libraries and the Internet*[43] study funded by the Bill and Melinda Gates Foundation;[44]
- **Research questions**: Define the exploratory study's initial research questions;
- **Study populations and site selection**: Identify the study populations and select state and individual library participants then schedule visits;
- **Methods and study instruments**: Decide on methods to be employed and develop study instruments;
- **Site visits**: Conduct site visits. A summary of each site's visit reviewed by key participant at each site. Case summaries and analysis done after each state's visits so that prior results may inform next state's interviews.
- **Follow up data collection**: Data from site visits prompted the need for additional data collection via telephone and e-mail interviews.
- **Data analysis**: Data analysis is done across all the states and sites visited.
- **Final report**: Draft and review of final report.

The general approach employed by the researcher was an iterative learning strategy. The researcher sequenced individual data collection events and their analysis such that findings from one activity could be incorporated into subsequent data collection and analysis events. This iterative learning approach allowed the researcher to modify, adapt, and refine their data collection and analysis activities as he continued data collection activities.

### Study Population & Site Selection

The study team defined two populations: state libraries and successfully networked public libraries. The principal criteria used to select the states and public libraries visited were:

- **Geographic diversity:** Effort will be made to select states from different parts of the country;
- **Size:** Effort will be made to select both small and large states and small and large public libraries;
- **Willingness to participate:** The study will make moderate demands on the state and public libraries involved in terms of time and staff commitment. The states and public libraries chosen have to be willing to participate and assist in site visit logistics;
- **Study team familiarity with state and public libraries**: The researchers chose states with which the study team had recent state and public library experience. This was deemed a factor due to the limited time the study team could spend in each state;
- **Local expert advice**: Where possible, the advice of the project advisory committee, state library managers and knowledgeable local public library managers will be sought regarding selection of public library participants;

[43] *Public libraries and the Internet* studies <http://www.ii.fsu.edu/plinternet.cfm>.
[44] Bill and Melinda Gates Foundation <http://www.gatesfoundation.org/Libraries/>.

- **Funding and logistics limitations**: The study has limited funding to conduct the study and certain logistical constraints.

The study team applied a two step process in order to select sites for this study: identify states to visit and then identify successfully networked public libraries within the state.

The state library population consisted of the state librarian and knowledgeable members of the state library development team. The state library development unit has the best overview understanding of public libraries within the state. This unit frequently visits public libraries, provides training and assistance to them, and obtains various data from them. This unit is the most knowledgeable within the state regarding public libraries and their development including library networks, computing, Internet use, integrated library systems, subscription database use, web site design and development. Funding and logistics limited the number of states visited to five. The states selected were Texas, Iowa, New Jersey, Oregon and Florida (in the order they were visited).

The second defined population was the successfully networked public libraries or systems within the states' selected. This group consisted of the public library or system director and relevant library staff. Successfully networked public libraries within a state were chosen in consultation with state library staff. The state library staff was given a verbal and written description of the site selection criteria for the public libraries the study team wished to visit. The state library staff at each state had no difficulty identifying potential sites. The state librarian (or designate) then assisted the study team by making initial contacts and with logistics.

### Study Instruments

A one page description of the study was prepared for use with State Library participants, see Appendix 3-A. The web site at each public library visited was examined prior to its site visit. Each site visit was preceded by an e-mail outlining the types of research questions to be asked during the site visit. See Appendix 3-B for a sample pre site visit note. Each site visit began with a tour of the facility and general introduction to the library. In-person group and individual interviews were conducted as arranged by the library director[45] at each site visited. A general script containing research questions asked at each site visit was prepared prior to each visit. See Appendix 3-C for a public library interview script. Additional follow up interviews were conducted after each site visit as needed.

### Site Visits

A typical site visit lasted a half day to a full day depending largely on logistics. The visit began with a tour of the public library (and branches where possible). Then the visit continued with individual and group interviews scheduled by the library director. Documentation regarding the library, statistics, planning and services was collected as available. A summary of the data collected was reviewed by a site visit participant for factual accuracy and as an

[45] The State Librarian selected staff to be interviewed at the State Library site visits.

opportunity to collect additional data. Subsequent e-mail or phone follow-up interviews were conducted as needed.

## Project Schedule & Tasking

The study began October 2005 and was completed in June 2006. Project logistics, site visits and interviews will be coordinated and conducted by Joe Ryan. Table 3-1 summarizes key project tasks and schedule. SNPL project documents, including site visit reports and the final report, will be available on the Florida State University, School of Information Studies, Information Use Management and Policy web site <http://www.ii.fsu.edu/>.

**Table 3-1. Key Project Tasks and Schedule**

| Timetable | Task |
|---|---|
| October 2005-December 2005 | Project planning and logistics including identification of study objectives, population. Identification of states and public library participants. |
| December 2005 | Scheduling site visits. Conduct of preliminary phone interviews. |
| January 23 week 2006 | Conduct Texas site visits |
| January 30 week 2006 | Conduct Iowa site visits |
| February 13 week 2006 | Conduct New Jersey site visits |
| March 27 week 2006 | Conduct Oregon site visits |
| April 3-13 2006 | Conduct Florida site visits |
| April-May 2006 | Interview analysis, report generation and review |
| June 30 | Draft report |

## Efforts to Ensure Data Quality

Field evaluation is an art requiring quick assessment of opportunities and dangers to data quality on site. As Schatzman & Strauss (1973, p. vii) note:

> …much of the research process consists of dealing with a flow of substantive discoveries and with field contingencies that variously modify the research; therefore the researcher is constantly attentive to options which are circumstantially presented to him, or which are created by him. Thus the field researcher is depicted as a *strategist*; for without linear-specific design - the researcher must develop procedure as he goes.

But field research is also a science, involving the systematic effort to reduce error due to researcher bias, incomplete or inaccurate data, and a host of other causes.

The study team will take a number of steps to reduce the threats to data quality in the present evaluation, both during data collection and later during analysis (as suggested by Guba & Lincoln, 1981; Miles & Huberman, 1994; Patton, 1990; and Schatzman & Strauss, 1973) including:

- Pre-structured research questions and interview instruments, pre-planned fieldwork, and where possible pre-planned final report.

- Standard, well-regarded methods familiar to the evaluators and appropriate to the setting (McClure, Ryan & Bertot, 2002). Primary methods were qualitative (Miles & Huberman, 1994) including the use of documentary evidence, interviews (Spadley, 1979), focus groups (Kruger & Casey, 2000 and Morgan, 1988) and preparation of case studies (Stake, 1994 and Yin, 1994).
- Fully documented research design decisions in writing and in discussions among the study team.
- Respond flexibly to the new and unexpected opportunities the data offer.
- Document fully the data collected. Evaluators conducted follow-up interviews where necessary.
- Triangulated the data collected and used mixed methods.
- Pre-structured data analysis and reporting as suggested by Miles and Huberman (1994).

Each of the above and other efforts increase the validity and reliability of the evaluation findings and provided a firm basis for making recommendations.

## References

Creswell, J.W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage Publications.

Guba, Egon G. & Lincoln, Yvonna S. (1981). Effective Evaluation: Improving the Effectiveness of Evaluation Results Through Responsive and Naturalistic Approaches. San Francisco: Jossey-Bass.

Krueger, Richard A. & Casey, Mary Anne. (2000). *Focus Groups: A practical guide for applied research* (3rd ed.). Thousand Oaks, CA: Sage.

Miles, Matthew B. & Huberman, A. Michael. (1994). *Qualitative Data Analysis*. Newbury Park, CA: Sage.

Morgan, David L. (1988). *Focus Groups as Qualitative Research*. Newbury Park, CA: Sage.

Patton, Michael Quinn. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park, CA: Sage.

Rossi, P.H. & Freeman, H. (1993). *Evaluation: A systematic approach* (5th ed.). Thousand Oaks, CA: Sage.

Schatzman, Leonard and Strauss, Anselm. (1973). *Field Research: Strategies for a Natural Sociology*. Englewood Cliffs, NJ: Prentice-Hall.

Spradley, James P. (1979). *The Ethnographic Interview*. New York: Holt, Rinehart and Winston.

Stake, Robert E. (1994).Case studies. In Denizen, Norman K. & Lincoln, Yvonna S. (Eds.). (1994). *Handbook of Qualitative Research* (pp. 236-247). Newbury Park, CA: Sage.

Yin, Robert K. (1994). *Case Study Research: Design and methods*. Newbury Park, CA: Sage.

## APPENDIX 3-A: STATE LIBRARY ONE PAGE PROJECT BRIEFING

## Site Visits Describing Successfully Networked Public Libraries
## Public Libraries and the Internet 2006 Study

Florida State University's, Information Institute[46] conducts a national, biennial, *Public libraries and the Internet* study.[47] The 2006 study, funded by the Bill and Melinda Gates Foundation[48] and the American Library Association, will contain *Public libraries and the Internet: Best Practices* case studies. The case studies will tell the stories of exceptional rural, urban and suburban public libraries or systems who have successfully addressed significant challenges to provide a range of innovative public access Internet services. The study will address the following research questions:

- **Visions of Success**: What is a definition of a successfully networked public library? What factors, management, infrastructure, and activities describe successfully networked public libraries?
- **Getting from A to B**: What strategies and factors contributed to your successfully networked public libraries' achievement? Are there programs or approaches at the local, state, or national levels that can assist public libraries become successfully networked?
- **Measures of Value**: Are there measures that describe successfully networked public libraries that show their value and provide a lever to use with public library funders?
- **Sustainable Funding**: Has your successfully networked public library generated new, sustaining revenue? What varieties of local, state, and national support do successfully networked public libraries obtain?
- **Issues and next steps**: What issues does your library face now related to Internet connectivity? What are the next steps these libraries plan?

Large and small, rural and urban successfully networked public libraries and systems will be visited. In particular, libraries that struggled to become successfully networked are of especial interest.

**We would like your help to**: (a) agree to have your state participate in the site visits, (b) identify 3-4 highly successfully network connected public library sites for Joe Ryan to visit in your state; (c) assist him in making the initial contacts with these libraries; and, (d) allow him to meet with selected state library staff to discuss these questions when we visit the state.

[46] Florida State University, School of Information Studies, Information Use Management and Policy Institute <http://www.ii.fsu.edu/>.
[47] *Public libraries and the Internet* studies < http://www.ii.fsu.edu/plinternet.cfm>.
[48] Bill and Melinda Gates Foundation < http://www.gatesfoundation.org/Libraries/>.

## APPENDIX 3-B: SAMPLE E-MAIL NOTE TO SITE VISIT PARTICIPAINTS

**Site Visits Describing Successfully Networked Public Libraries**
**Public Libraries and the Internet 2006 Study**

## Introduction

Thank you for agreeing to participate in the "best practices" portion of the Information Institute at Florida State University's College of Information's (read library school) biennial *Public Libraries and the Internet 2006 Study* funded by the Bill and Melinda Gates Foundation. I will be visiting and doing case studies of "successfully networked public libraries" in five states (Oregon, Texas, New Jersey Florida, Iowa) as part of the study. I am hoping to learn about the libraries' story, find out what you are like, how you got to where you are, see if you have found sustainable funding and how, and look for measures that you are using to define success and persuade others of your networked libraries value. I have lots of questions, you may not have all the answers, and that's OK. I am sure I'm not asking all the right questions and that you will straighten me out!

## What is Involved

During my visit, I would like to interview you, relevant members of your staff and others (board members, funding decision makers) depending on how long I can be there. Anyone who might help address the questions I am trying to answer.

It would be helpful to have a copy of any written documentation that describes the library and the story. For example, annual reports, statistical summaries, parts of planning documents or grant reports that relate to the networking/Internet side of the library's operation, newspaper articles, etc. You can give them to me when I visit or mail them in advance.

After my visit I will send you a visit summary to see if I heard things correctly and to give you a chance to add anything else you forgot to say.

## Details

Florida State University's, Information Institute[49] conducts a national, biennial, *Public libraries and the Internet* study.[50] The 2006 study, funded by the Bill and Melinda Gates Foundation[51] and the American Library Association, will contain *Public libraries and the Internet: Best Practices* case studies. The case studies will tell the stories of exceptional rural, urban and suburban public libraries or systems who have successfully addressed significant challenges to provide a range of innovative public access Internet services. The study will address the following research questions:

[49] Florida State University, School of Information Studies, Information Use Management and Policy Institute <http://www.ii.fsu.edu/>.
[50] *Public libraries and the Internet* studies <http://www.ii.fsu.edu/plinternet.cfm>.
[51] Bill and Melinda Gates Foundation <http://www.gatesfoundation.org/Libraries/>.

- **Visions of Success**: So what makes your public library "successfully networked?" What factors, management, infrastructure, activities and data describe your successfully networked public library?
- **Getting from A to B**: How did the library achieve success? What strategies and factors contributed to becoming a successfully networked public library, particularly insights that might be of use to other public libraries? What constitutes support for a successfully networked library? Are there programs or approaches at the local, state, or national levels that you used or that ought to exist to assist public libraries become successfully networked?
- **Measures of Value**: Are there measures that describe your successfully networked public library that show its value, help you manage or provide a lever to use with public library funding decision makers? What worked for you?
- **Sustainable Funding**: Has you public library found ways to generate new, sustaining revenue to support your work? What varieties of local, state, and national support have your library obtained?
- **Issues and next steps**: What issues do you face now related to network service provision? What are the next steps does your library plan?

The study will use a qualitative case methodology to provide a range of evidence to better understand factors affecting successfully networked public libraries. The study will better define the context, issues and potential strategies useful to understanding and improving Internet services offered by U.S. public libraries.

**Who is Joe Ryan**

Joe Ryan <jzryan@earthlink.net> is President of Ryan Information Management and Senior Research Associate, Information Institute, Florida State University. He co-developed the manual: *Statistics and Performance Measures for Public Library Networked Services*, Chicago: American Library Association used by libraries throughout the country. He co-developed the Florida State University, Information Institute's <http://www.ii.fsu.edu/> E-Metrics Instruction System (EMIS) <http://www.ii.fsu.edu/emis/>. EMIS is a web-based instruction package designed to introduce basic measures of electronic resources and services to library managers, students and others. He is currently working with the Institute to develop the Evaluation Decision Management System (EDMS) <http://www.ii.fsu.edu/projects/effective-eval/> funded by the U.S. Institute for Museum and Library Services (IMLS). He has worked with libraries to show their value and "return on investment." He has studied public libraries and the digital divide for IMLS. And, he looks forward to meeting you!

## APPENDIX 3-C: BASIC PUBLIC LIBRARY INTERVIEW SCRIPT AND BRIEF SURVEY

## Basic Public Library Script

### Introduction

Florida State University's, Information Institute conducts a national, biennial, *Public libraries and the Internet* study. The 2006 study, funded by the Bill and Melinda Gates Foundation[52] and the American Library Association, will contain *Public libraries and the Internet: Best Practices* case studies. The case studies will tell the stories of exceptional rural, urban and suburban public libraries or systems who have successfully addressed significant challenges to provide a range of innovative public access Internet services. We are calling you, "successfully networked public libraries" and I have questions. I am going to networked broadly to include your computing resources and services, internal networks, telecommunications, Internet services, integrated catalog, etc.

### What's Your Story?

1) Describe the library, particularly the networking resources and services?

> Probe: Is any of this in writing that I could have copies made – planning documents, newspaper articles or annual reports.
>
> Check against library fact sheet previously assembled.

2) In chronological fashion, how did you became "successful?" What is the history of Internet use, computing, networking at the library?

> Probes: Is any of this in writing that I could have copies made – planning documents, newspaper articles or annual reports.
>
> Ask about management, staffing, infrastructure, activities and data that describe.
>
> Probe: Any advice or insight for other library managers?

### Measures that Matter

3) Are there measures that you use to manage your network resources and services?

> Probe: What measures are they and how do they help? Vendor supplied data?

4) Are there measures that you use to show the library networked services' value or worth or as evidence to convince funding decision makers?

> Probe: What measures are they and how do they help? Vendor supplied data?

[52] Bill and Melinda Gates Foundation <http://www.gatesfoundation.org/Libraries/>.

## Successfully Networked Minimum Standard

5) Would a state or national minimum standard that describes the elements of a successfully networked public library work as a funding lever?

Probe: How might you use such a minimum standard?

6) What are the data elements for a successfully networked public library standard?

Suggest: Bandwidth, workstations per 5000, IT budget/ operating, management issues: equipment replacement policy, budgeting, policies (privacy? ), technical…..?

Probe: Would there need to be different standards based on population served?

## Funding

7) Are there programs or approaches at the local, state, or national levels that you used or that ought to exist to assist public libraries become successfully networked?

8) Have you found any, new, sustainable sources of funding or support for the library's networked resources or services?

Probe: Are there new library users as a result of the new network services? Have they generated any new support?

Probe: Are there new types of support needed as a result of the introduction of networked services?

Probe: What has worked for you when obtaining support for network resources and services?

## Issues

9) What challenges and issues do you currently face related to the networked side of your library operations?

## Next Steps

10) What next steps do you plan related to the networked side of your library operations?

# APPENDIX 4: INTRODUCTION TO SNPL CHECKLIST, CATALOG, & SUMMARY

## Introduction

The origin of the *2006 Successfully Networked Public Library (SNPL) Checklist*, *Summary* and *Catalog* is the need to better define and describe successfully networked public libraries.[53] These documents may be useful for at least the following reasons:

- No state or national standards or norms could be referenced because they did not exist. The documents reported here only begin the process necessary to create a norm. The sample size for the case studies is too small, *Survey* data may be more generalizable in the areas covered. These documents are not standards. There has not been nearly enough peer review by appropriate standard making bodies. But the documents might foster standards development in this area in the future.
- Library managers want some general benchmarks, norms or standards to tell them how well they were doing and what they needed to do next to be come more successfully networked. The *Checklist* and *Catalog* aid in this effort.
- Library managers want to compare themselves to other libraries for the above reason and as potential evidence in budget presentations. A next step here might be a web based system that allows public libraries to report their *Checklist* and *Summary* results
- Library CIOs need a better way to present an overview of the organizations technology, resources and services to vendors and others – see the *Summary*.
- Library managers need a document like the *Checklist* to begin a library network services review and discussion with Library Board and local funders.
- State Library development trainers want a training aid to help library managers to think systematically about their networked resources and services. The *Checklist* and *Catalog* aid in this effort.
- State and national library leaders, vendors and funders need a more precise sense of the range of activities, resources and services involved in becoming a successfully networked public library so as to better support public libraries or to better create useful products and services.

As historical documents, the *Checklist*, *Summary* and *Catalog* along with the *Survey* may provide a useful "digital" snapshot of public library networked services circa 2006.

[53] These documents are part of the *2006 On Becoming Successfully Networked Public Libraries* case studies. The case studies visited 19 public libraries in five states. The case studies intent was to provide a narrative underpinning to the quantitative data being presented in the sister publication: *2006 National Survey of Public Library Internet Connectivity* a biennial survey conducted by a team led by John Bertot and Charles R. McClure. The researchers from both studies are all from the Information Use Management and Policy Institute (http://www.ii.fsu.edu/) in the College of Information at Florida State University. The work was supported by the Bill & Melinda Gates Foundation and the American Library Association.

## Work Products

Appendix 4 contains the following documents for use by public library managers and others in their effort to become successfully networked.

### Appendix 4-A: 2006 SNPL Checklist

This document provides public library managers with a set of characteristics of successfully networked public library. These characteristics need to be considered as a public library becomes successfully networked. These characteristics are clustered into six areas: connection information technology (IT) infrastructure, IT and collections accessed within the library, public workstations and training offered. Each of the elements covered are treated in more detail in the accompanying *Catalog.*

### Appendix 4-B: 2006 Successfully Networked Public Libraries Catalog

The *Catalog* covers the areas of interest to library managers seeking to become more successfully networked in more detail than the *Checklist*. In addition, examples and references are offered for each successfully networked element where known.

### Appendix 4-C: 2006 Summary of Public Library IT & Network Services

The *Summary* sheet is designed to quickly summarize the public library's information technology and network services. This may be useful to communicate with other library information technology managers, library funders and library vendors. The *Summary* is organized roughly similar to the *Checklist* and *Catalog*. A reader might find further *Summary* data element detail in the *Catalog* entries and examples.

## APPENDIX 4-A: 2006 SNPL CHECKLIST

***Checklist* Introduction**: This is a *Checklist* of the basic elements found in successfully networked public libraries in 2006 arranged in broad categories including: connection, information infrastructure, networked services accessed from within the library and library web site services. The objective is to provide public libraries with a rough way to compare their progress toward becoming successfully networked with a composite of characteristics present at already successfully networked public libraries. The *Checklist* is accompanied by a *Catalog* providing a more detailed look at the characteristics of a successfully networked public library in 2006. Both *Checklist* and *Catalog* are based on: *2006 Becoming Successfully Networked Public Library* study conducted by Joe Ryan and supplemented by the *2006 National Survey of Public Library Internet Connectivity* a biennial survey conducted by a team led by John Bertot and Charles R. McClure. The researchers from both studies are all from the Information Use Management and Policy Institute (http://www.ii.fsu.edu/) in the College of Information at Florida State University. The work was supported by the Bill & Melinda Gates Foundation and the American Library Association. Note: The *Checklist* is not a national norm because there is not sufficient evidence available nor is it a national standard because there has not been sufficient national peer review. The *Checklist* is offered to public library managers, and those who support them, in the absence of such needed national norms and standards, as a place to start on how to become a more successfully networked public library. Thank you for your participation!

**Checklist Instructions**: The *Checklist* questions are designed with enough flexibility to be answered by large and small libraries and by library systems for member libraries. Many questions are designed to prompt discussion and prompt a trip to the *Catalog* which follows, as much as be checked off. **Hyperlinks**: To see the relevant sections of the more detailed *Catalog* press the *Ctrl* key while clicking on To the catalog. To return from the catalog to your location within the *Checklist* press the *Ctrl* key while clicking on To the checklist. Complete the *Checklist* by reporting on all libraries that your organization supports.

| Basic Facts | |
|---|---|
| 1. Library Name | |
| 2. FSCS ID | |
| 3. Contact name | |
| 4. Contact e-mail | |
| 5. Contact phone | |
| 6. Population of legal service area | |
| 7. Total circulation | |
| 8. Total operating revenue | |
| 9. Total income per capita | |
| 10. Year of most recent state survey | |
| Answer above questions using data from most recent State Library annual survey. Use question 10 to report the year of the survey. | |

| **FUNDING FYI from the 2006 National Survey of Public Library Internet Connectivity Question 11** | | | |
|---|---|---|---|
| Please indicate the appropriate funding situation for this library's total operating budget and Internet information technology budget (e.g., Internet-related technology and infrastructure, space, wiring, telecommunications services, workstations, servers, furniture, etc.) for the library's last fiscal year. | | | |
| | **Increased since last fiscal year** | **Decreased since last fiscal year** | **Stayed the same as last fiscal year** |
| Total operating budget | | | |
| Internet information technology budget (e.g., Internet-related IT and infrastructure, space, wiring, telecom. services, workstations, servers, furniture, etc.) | | | |

A. Broadband Connection for Public Use

| 11. Indicate the maximum speed of the library's PUBLIC ACCESS Internet service broadband connection. (MARK ONE ● ONLY) | |
|---|---|
| | Library not connected, connected only by dial up, or does not offer public Internet connection. |
| | 56 Kbps – 128 Kbps |
| | 129 Kbps – 256 Kbps |
| | 257 Kbps – 768 Kbps |
| | 769 Kbps – 1.5 Mbps (megabits/second) |
| | Greater than 1.5 Mbps |
| The 2006 National Survey of Public Library Internet Connectivity study indicates re speed | |

| **12. Gi**ven the uses of the library's public Internet access services by patrons, does the library's **PUBLIC ACCESS Internet service connection speed meet patron needs**? (MARK ONE ● ONLY) | |
|---|---|
| o | The connection speed is insufficient to meet patron needs at all branches |
| o | The connection speed is insufficient at some branches at all times |
| o | The connection speed is sufficient to meet patron needs at some times at all branches |
| o | The connection speed is sufficient to meet patron needs at all times at all branches |
| o | Don't know |
| The 2006 National Survey of Public Library Internet Connectivity study indicates | |

| **Wireless connection** *To the Catalog* | |
|---|---|
| **13. Is wireless Internet access available (or planned over the next year) for public use** (e.g., with patron laptops, PDAs, or other wireless devices) within the library? (MARK ● ONLY IF WIRELESS SERVICE EXISTS, EXISTS IN PART (of building or system) OR IS PLANNED WITHIN NEXT YEAR.) | |
| o | Yes, it is currently available (in whole or in part) or there are plans to make it available within the next year. |

B. Information Technology (IT) Infrastructure

(MARK ● IF THE LIBRARY HAS SUCCESSFULLY ADDRESSED)

| | |
|---|---|
| o | 14. **IT Staff**: Library have dedicated IT staff sufficient to manage and maintain the library's information technology and meet public demand for library networked services. *To the Catalog* |
| o | 15. **Staff IT** Library has successfully addressed staff IT and IT training needs. *To the Catalog* |
| o | 16. **Staff training**: Staff receives enough IT training to be proficient at job. *To the Catalog* |
| o | 17. **Intranet**: Library uses information technology effectively to promote internal staff communication? This may be as elaborate as an intranet or a library staff listserv or blog or using a word processor to produce a weekly staff schedule. *To the Catalog* |
| o | 18. **Library networks** (LAN(s), WAN(s), etc) are sufficiently fast and reliable and well maintained. Includes sufficient current technology, backup, management of IT and appropriate number of knowledgeable staff. *To the Catalog* |
| o | 19. **Security**: Library has successfully addressed network security issues. Includes: adware, spy ware, virus, malicious software, browser front end blocks and firewalls. Includes: workstation use, Internet acceptable use, CIPA/filtering policies. *To the Catalog* |
| o | 20. **Funding:** Library has adequate support from local sources to meet IT needs. Includes replacement policy with annual replacement targets met. Includes IT being a line item on city or county library budget. *To the Catalog* |
| o | 21. Library has applied for external IT related funding from state, federal and private sources. Includes e-rate funding provided by the federal government through the Universal Service Fund to libraries to cover expenses associated with Internet access. *To the Catalog* |
| The 2006 National Survey of Public Library Internet Connectivity study indicates | |
| o | 22. **Policies & procedures**: Library has an information technology plan and it is incorporated into the library's strategic or long range plan. Each networked service has appropriate policies and procedures. *To the Catalog* |
| o | 23. **Marketing**: Each networked service has a marketing and promotion plan and a percent of the budget is allocated to implement the plans. To the Catalog |
| o | 24. **Evaluation**: Each networked service has an evaluation plan. A minimum evaluation consists of identification of who audience for the service is, a measure that assists in managing the service better (e.g., usage), a measure of the service's value that is meaningful to the service's funding decision maker or specific stakeholder, a schedule and plan for data collection and analysis. To the Catalog |
| The 2006 National Survey of Public Library Internet Connectivity study indicates about e-rate Q12ab | |

C. Networked Services Accessed from Within the Library

(MARK ● IF THE LIBRARY OFFERS IT OR SERVICES FOR PUBLIC USE WITHIN THE LIBRARY)

| **IT & Collections Accessed from the Library *To the Catalog*** | |
|---|---|
| o | 25. Library offers a range of IT for public use at the library and has appropriate policies and procedures in place. IT may include typewrites, public phone, photocopier, fax, cassette player, VCR, and DVD players. |
| o | 26. Library provides access to digital collections (may include, CDs, DVDs, e-books, games)? |
| o | 27. Library loans IT equipment (e.g., camcorders, digital cameras, iPods) and has appropriate policies and procedures? |
| o | 28. Library offers sufficient accessible technologies and sufficiently advertises availability of accessible technologies to the public. An accessible or adaptive technology enables a person with a disability to be self-sufficient in a library. It includes any device or equipment which allows an individual to work or gain access to information independently. |
| o | 29. Library offers videoconferencing and advertises its availability to the public. |

| **Public Access Workstations** To the Catalog | |
|---|---|
| (ENTER NUMBER OF WORKSTATIONS BY TYPE FOR PUBLIC USE) | |
| **Number** | **Workstation type** |
| | 30. Total number of public workstations |
| | 31. # public access Internet workstations |
| | 32. # public workstations connected to a library network (LAN, WAN) |
| | 33. # public workstations offering basic software (may include browser, word processor, spreadsheet, presentation software, e.g., Microsoft Office) |
| This compares to the following national norms found in the 2006 National Survey of Public Library Internet Connectivity study indicates number and age of workstations | |

| **Public Workstations & Training** To the Catalog | |
|---|---|
| (MARK ● IF THE LIBRARY HAS ADDRESSED THE ISSUE.) | |
| o | 34. Library has sufficient public Internet workstations to meet peek demand? |
| o | 35. Library has sufficient Black and White computer printers to meet peek demand? |
| o | 36. Library offers special purpose computer printers (e.g., color, large bed)? |
| o | 37. Library offers scanner(s) connected to a workstation? |
| The 2006 National Survey of Public Library Internet Connectivity study indicates re wait | |
| o | 38. **Training**: Library trains the public in computer, Internet and library skills necessary to take advantage of the information technology. To the Catalog |
| The 2006 National Survey of Public Library Internet Connectivity study indicates Q15 re patron training | |

| **Integrated Library System (ILS) and related service** To the Catalog | |
|---|---|
| **Definition:** An Integrated Library System (ILS) is a group of automated library subsystems working together and communicating within the same set or system of software to control such activities as circulation, cataloging, acquisitions and serial control. Oklahoma Department of Libraries. Trustee manual: Glossary. <http://www.odl.state.ok.us/servlibs/l-files/glossi.htm>**.** | |
| (MARK ● IF THE LIBRARY OFFERS WITHIN LIBRARY ACCESS TO AN ILS, SUBSYSTEM OR RELATED SERVICES INDICATED BELOW) | |
| o | 39. Does the library have an ILS? |
| o | 40. Does the library have an Online Public Access Catalog (OPAC) |
| o | 41. Does the library have other ILS subsystems appropriate to the library. May include: acquisitions, cataloging, federated searching of all library collections (all collections in one search request), reports, and serials subsystems and self check outs. |
| o | 42. Does library participate in regional or statewide library card programs? |

D. Library Web Site Resources & Services

(MARK ● IF THE LIBRARY OFFERS RESOURCE OR SERVICE ON LIBRARY WEB SITE)

| **Library Web Site Resources & Services To the Catalog** | | | |
|---|---|---|---|
| o | 43. Does library have a web site? | 37. Enter URL or No: | |
| o | 44. **Usability, functionality, accessibility**: Web site examined for usability, functionality, accessibility. There are sufficient interfaces and navigation aids. Navigation and accessibility may include: navigations bars, site index, multiple interfaces (e.g., kids, teens), multilingual access, ADA compliance, Help, Contact Us, FAQs, use of graphics etc.) *To the Catalog* | | |
| o | 45. **Web site feedback**: Library regularly asks for feedback on web site and networked services. *To the Catalog* | | |
| o | 46. **ILS on the Web**: Is the library's Integrated Library System (ILS) and subsystems available on the library web site? Includes availability of the OPAC, remote access to patron account, remote placing of holds, remote renewals, remotely obtaining a library card, federated search of library collections, remote event, library meeting room scheduling, remote workstation scheduling, and A-to-Z library periodical title list look up. *To the Catalog* | | |
| o | 47. **Information about the Library**: Is there information about the library available on the library web site? May include: library hours, locations, staff directory, library history, newsletter, events calendar, policies and procedures, information, plans and how contribute to library financial support. *To the Catalog* | | |
| o | 48. **Collections web accessible**: Are library collections accessible on the library web site? May include: subscription database access, downloads of e-books and audio books, structured links to remote collections, podcasts of library programs, RSS news feeds. *To the Catalog* | | |
| o | 49. **Virtual Reference**: Are virtual reference and readers advisor services available on the library web site? May include: virtual reference by e-mail or chat, online book and media clubs and reviews, and remote ILL request. *To the Catalog* | | |
| o | 50. **Community Information**: Is there information about the community available on the library web site? This may include "help me make it through the day" information such as: current time and temperature, airline schedules, weather, traffic conditions, daily crossword, school closings, tax information, news and sports headlines, voting information, consumer information, Wall Street and tourist events and activities. May include: a local business directory, business startup information, community directory, social service directory, employment information and links, local entertainment and community events listings, local maps, school information, local statistics, and hosting of community virtual forums via listserv or blog. *To the Catalog* | | |
| o | 51. **Community History**: Is community history and other special collections available on the library web site? May include items (documents, newspapers, images, maps, videos, audio) that are digitized, indexed and made available to larger collections of related materials regionally, statewide or nationally. *To the Catalog* | | |
| o | 52. **Government Information**: Is local, state and federal government information available? *To the Catalog* | | |

## Impact on Community of Public Library Provision of Internet Access

HOW DO YOU RANK IN IMPORTANCE THE FOLLOWING IMPACTS ON YOUR COMMUNITY OF PUBLIC LIBRARY PROVISON OF INTERNET ACCESS

| **Impact on Community of Public Library Provision of Internet Access** | | |
|---|---|---|
| **Your Ranking** | **Community Impact** | **Survey Ranking** |
| | 53. To be completed. | |
| | | |
| | | |
| | | |
| | | |
| Survey ranking from: 2006 National Survey of Public Library Internet Connectivity Question 9. | | |

## Library Public Access Internet Service's Contribution to the Community

WHAT ARE THE MOST IMPORTANT WAYS IN WHICH YOUR LIBRARY USES PUBLIC ACCESS INTERNET SERVICES AS A MEANS TO TRY TO CONTRIBUTE TO THE LOCAL COMMUNITY?

| **Impact on Community of Public Library Provision of Internet Access** | | |
|---|---|---|
| **Your Ranking** | **Community Impact** | **Survey Frequency** |
| | To be completed. | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Survey ranking from: 2006 National Survey of Public Library Internet Connectivity Question 14. | | |

| **FYI Sample of Internet-based services libraries make available to their communities** | | | |
|---|---|---|---|
| From: 2006 National Survey of Public Library Internet Connectivity Q13 | | | |
| **Service/Resource** | **Someone Provides** | **Library provides** | **Other Provides** (state library, regional consortia) |
| Digital reference/Virtual reference | | | |
| Licensed databases | | | |
| E-books | | | |
| Video conferencing | | | |
| Online instructional courses/tutorials | | | |
| Homework Resources | | | |
| Audio content | | | |
| Video content | | | |
| Digitized special collections (e.g., letters, postcards, documents, other) | | | |
| Other (please specify):_____ | | | |

## APPENDIX 4-B: SUCCESSFULLY NETWORKED PUBLIC LIBRARY CATALOG

## Introduction

The *Catalog*, is arranged in the same broad categories as in the *Checklist*: connection, information infrastructure, networked services accessed from within the library and library web site services. But the data elements are in much greater detail and, perhaps most useful, examples are provided to illustrate the data elements. For example, the library manager is asked, "Does your library provide movie downloads via your web site?" Then, in the example column, notes that Denver Public Library expects to be the first public library in the country to offer such a service in March 2006). A left hand column is offered for you to mark off those data elements you may wish to return to for additional consideration. The *Catalog* seeks to offer ideas that move a public library further along toward becoming successfully networked and examples so that libraries will avoid re-inventing the wheel and to make adoption smoother, easier and quicker. Send additions and corrections to Joe Ryan <jzryan@earthlink.net>. **Hyperlinks**: To see the relevant sections of the *Checklist* press the *Ctrl* key while clicking on To the checklist to return from the *Checklist* to the *Catalog* press the *Ctrl* key while clicking on To the catalog.

A. Broadband Connection for Public Use

| **Wireless Connection** **To the Checklist** | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Is public wireless service available? | Report Yes if wireless service is available, or planned in the next three months, throughout public service areas in the library. Report Partial if wireless service is available, or planned in the next three months, in any rooms public or staff areas of the library. Report no if no wireless is available or planned in the next three months. **Why it matters**: Can provide an indicator of the pace of public library adoption of this technology. Can be used in peer comparison. |
| o | Wireless brands: | E.g., Polaris wireless access manager. <http://www.gisinfosystems.com/products_Services/wam_info.asp>. List all wireless product brands used, e.g., point of presence brand. **Why it matters:** Can be used as a rough indicator of popularity. |
| o | Wireless connection: ISDN LAN | Indicate how wireless points of presence are hardwired to library network. Two options are ISDN or LAN. **Why it matters**: There are pros and const to either choice. This provides a rough indicator of preferred approach among peer libraries. |
| o | WiFi standard used: | Report WiFi standard used, e.g., IEEE 802.11g,I,n **Why it matters**: Wireless technology is still evolving. The standard in use is a rough indicator of the currency of the service offered. Can be used when selecting wireless technology and in peer comparison. |
| o | # Wireless sessions: | Measure of number of wireless sessions. **Why it matters**: Can be added to in library use count as new category or to virtual visits count. Indicator of the popularity of new service. |
| o | Is the service advertised in print and on the web? | E.g., Austin (TX) Public Library. Wireless@APL. <http://www.ci.austin.tx.us/library/wireless_at_apl.htm>. Tempe (AZ) Public Library. Wireless Internet Access. <http://www.tempe.gov/library/help/wireless.htm>. |

B. Information Technology (IT) Infrastructure

| IT Staff Requirements To the Checklist | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Staff specifically dedicated to support of IT needs? (in hours per week) | |
| o | Volunteer: __ Hrs./Wk. | |
| o | Library staff: __ Hrs./Wk. | |
| o | External staff: __ Hrs./Wk. | |
| o | Total: __ Hrs./Wk. | |
| o | IT Staff – line item in local government budget request. | |

| Staff Information Technology *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a Successfully Networked Public Library** | **Definitions and Examples** |
| o | Does library have a plan of scheduled replacement of staff workstations? | **Why it matters**: This is first step in recognition that this technology will need to be replaced and that a budget line should be created. |
| o | Has library maintained replacement schedule? | **Why it matters**: The above plan must be realistic. |
| o | % of staff workstations that have the below: __% Internet connection, __% Spreadsheet __% Word processing __% Presentation __% Database __% Desktop publishing __% Web design | This is a minimal estimate. Next step is to collect usage data on each software package |

| Staff IT Training *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a Successfully Networked Public Library** | **Definitions and Examples** |
| o | Is there a policy on staff training? | **Why it matters:** The start of valuing staff training. |
| o | Total annual number of staff training? ___ hours | **Why it matters**: A rough estimate of staff training that can be compared historically and to peers. |
| o | What % of all staff (may include volunteers): | These are local library manager estimates. Last listserv question can also include regular reading of a library blog or Web Junction. |
| o | __% Are proficient in hardware and software in area of responsibility? | |
| o | __ % Can troubleshoot hardware & software in area of responsibility? | |
| o | __% Can train others on hardware & software in area of responsibility? | |
| o | __% Have an e-mail account? | |
| o | __% Belong to a library-related listserv or receive an RSS feed? | **Why the above questions matter**: Can be used as a rough measure to assess staff IT competency and can be compared historically and to peers. |

## B. Information Technology (IT) Infrastructure

| **Staff Intranet** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a Successfully Networked Public Library** | **Definitions and Examples** |
| o | Are staff workstations used to produce schedules, staff newsletters, etc. to communicate with each other internally? | Basic |
| o | Does the staff have its own listserv or blog? | More common |
| o | Does the library have a staff Intranet, or a common area on a staff server?<br><br>Does the intranet have: | Advanced: An Intranet may consist of a set of shared files on a server accessible to library staff, may consist of web based intranet or may used software specifically designed for the purpose. An intranet's purpose is to rapidly communicate shared current and historic internal information as well as shared computer resources. |
| o | Staff news, announcements, calendar | The intent is to suggest intranet content ideas. |
| o | Planning & policies (incl. committee work drafts) | |
| o | Forms (tech aid request, supply order form) | |
| o | Library & staff schedules and scheduling | |
| o | Staff directory (pictures, birthdays!) | |
| o | Personnel policies & procedures (volunteer handbook) | |
| o | Staff e-mail | |
| o | Quick ILL requests, UPS delivery schedule | |

## B. Information Technology (IT) Infrastructure

| Library Networks: Fast, Reliable Well Maintained *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a Successfully Networked Public Library** | **Definitions and Examples** |
| o | Complete the Summary of public library IT and networked services attached. | **Why it matters**: This provides an overview of the library's IT and networked services useful for you, IT consultants and vendors. |
| o | Does the library house server(s) in a separate, secure, adequate, well ventilated space with isolated ground circuits and back-up power protection? | **Why it matters**: These are basic precautions to secure library servers and preserve their operation. Adapted from: Kentucky Library Association and Kentucky Department of Libraries. (2002). Kentucky public library standards: Direction and service for the 21st century. |
| o | Does library keeps an inventory of hardware and software? | |
| o | Does library track licensing requirements? | |
| o | Does library maintain original hardware and software documentation? | |
| o | Does library have a plan for scheduled replacement of computer & network equipment? __ None (0) __ (3) 3-4 yrs. __ 5+ yrs. (5)<br><br>Has library maintained replacement schedule? | E.g., North Texas Regional Library System. (2004). Technology management report series: Gates computers sustainability and replacement plan. <http://www.ntrls.org/techbytes/TMR/Gates_plan.pdf>. **Why it matters**: This is the first step toward the recognition that this technology will need to be replaced and that a budget line should be created. |
| o | Library LANS: (Check one which best describes) __ All on one LAN __ Public & staff on separate LANS __Public LAN (only) __Staff LAN (only) __ No LAN | **Why it matters**: A library LAN allows sharing of resources (e.g., printers) and easier maintenance (e.g., easier installation of software upgrades) but requires good security. |
| o | Does library have network performance management software? | Measures aspects of network performance to keep performance at a planned level including: user response times, network throughput, and line utilization. Then analyzes measures to establish baseline levels. E.g., ProactiveNet <http://www.proactivenet.com/>. Concord Communications' eHealth Suite <http://www.concord.com/>. Lucent Technologies. <http://www.lucent.com/>. For an introduction see: See Boss, Richard. Network management. Chicago: ALA TechNotes series. <http://www.ala.org/ala/pla/plapubs/technotes/networkmanagement.htm>. **Why it matters**: Poor network performance, rather than not enough IT, can be the cause behind many problems noticed by library patrons – e.g., slow network response. |

## B. Information Technology (IT) Infrastructure

| **Security** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a Successfully Networked Public Library** | **Definitions and Examples** |
| o | Adware/spyware block: | Report a brand used or No if software is not used. See: Landesman, Mary. (2005, April). Spyware stoppers. PC Magazine. <http://www.pcworld.com/reviews/article/0,aid,119572,00.asp>. |
| o | Browser front end | E.g., NetShift <http://www.softplatz.com/Soft/Business/Other/NetShift.html>, CybraryN. Solutions. <http://www.cybraryn.com/solutions/Web_Browser_Control.htm>. **Why matters**: Prevents unauthorized operating system access via Explorer. |
| o | Use of filtering software (Check one which best describes)<br>__All public workstations filtered<br>__ Filtered or non filtered workstation alternatives offered | |
| o | Filtering/CIPA software | See Boss, Richard. Meeting CIPA requirements with technology. Chicago: ALA TechNotes series. <http://www.ala.org/ala/pla/plapubs/technotes/internetfiltering.htm>. Galecia group. Library filters <http://libraryfiltering.org/>. |
| o | Firewall software: | E.g., Check Point <http://www.chsckpoint.com>. Network Associates. <http://www.networkassociates.com/>. |
| o | Malicious software block. | E.g. McAfee Spamkiller <http://us.mcafee.com/root/package.asp?pkgid=156>. |
| o | Virus block | See: Bradley, Tony. (2006, March). New virus fighters. PC World. <http://www.pcworld.com/reviews/article/0,aid,124163,00.asp>. |
| o | Does library have a IT disaster and recovery plan? | A disaster plan addresses what to do when there is loss of equipment, damage to data, loss of software functionality or the loss of data communication. For an overview see Boss, Richard. Disaster planning for computers and networks. Chicago: ALA TechNotes series. <http://www.ala.org/ala/pla/plapubs/technotes/disasterplanning.htm>. |
| o | Does the library have a policy on use of chat? Does the library attempt to block? Block? | Report if library has chat policy. Report if library attempts to block chat use (via hardware or software). |
| o | Does the library have a policy on large file (E.g., music, video, audio book) downloading?<br>Does library attempt to block large file downloads? | Report if library has large file download policy. Report if library attempts to block large downloads (via hardware or software). |

## B. Information Technology (IT) Infrastructure

| IT Funding *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Has library manager conducted a scan of potential funding sources over the past month? | A scan consists of examining print or web sources that regularly identify sources of library funding. These may include system, regional or State Library sources as well as national sources including: Grants for nonprofits: Computer technology <http://www.lib.msu.edu/harris23/grants/2comptec.htm> and Libraries <http://www.lib.msu.edu/harris23/grants/2lib.htm>. Technology grants news <http://www.technologygrantnews.com/>. **Why it matters**: Successfully networked libraries often relied on external funding and systematically scanned for external support. |
| o | Did library apply for e-rate last year? | |
| o | # information technology grant applications made by library over the past year? | Count of information technology related grant applications the library made over the past year. Include e-rate application and any system, regional or State Library, IT related grant applications as well as other sources. **Why it matters**: Many successfully networked public libraries regularly seek external sources of support. Can be used for historical comparison. |
| o | # library IT grants applications approved over the past year? | Count of the number of library IT related grant applications that were funded over the past year. |
| o | Ratio annual grant applications to approved grants | Divide # information technology grant applications made by library over the past year by # library information technology grants applications approved over the past year. **Why it matters**: Can be used for historical comparison. |
| o | # local government meetings attended by library managers over the past month? | Examples of meetings include (but are not limited to) city or county council meetings, meetings with elected or appointed officials, local government committee meetings, local government agency visits, provision of information to local government officials. Exclude personal meetings – e.g., paying your local property tax. **Why it matters**: Successfully networked public libraries had managers that actively participated in local government even if local support was independent of it. This has led to partnerships and funding opportunities. |
| o | Is funding for information technology and its replacement a line item on the library's budget to local government? | **Why it matters**: Successfully networked public libraries have begun to transition from non local (often one time grant) funding sources to beginning to seek or obtain local government funding for information technology and staff from local governments. These are tangible measures of that transition. Measures may be used for historical or peer comparison. |

## B. Information Technology (IT) Infrastructure

| IT Funding To the Checklist | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Is funding for library information technology staff a line item on the library's budget to local government? | |
| o | Does the local library pay for electronic resource or service subscriptions or licenses? | E.g., subscription fees for a licensed database. Do not include any amount paid for an Internet connection. There is interest in knowing how much is spent for what resources. However the subscriptions are packaged differently so comparison is difficult. |
| o | How much has library reduced periodical subscriptions due to full text subscription databases availability? | How much has the library reduced its periodical subscriptions as a result of the availability of full text subscription databases? $_____ |
| o | How much has the library reduced its reference collection as a result of the availability of subscription databases? | How much has the library reduced its reference collection as a result of the availability of subscription databases? $_____ |
| o | How much has the library increased spending for e-books over the past three years? | How much has the library increased spending for e-books over the past three years? $_____ |
| o | How much has the library increased spending for DVDs over the past three years? | How much has the library increased spending for DVDs over the past three years? $_____ |
| o | Does library pay for subscription databases and other online resources? If so, how much annually? | This is an estimate by the library manager. |

| **IT Policy, Plans & Procedure Summary** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Library has IT plan and it is incorporated into library strategic plan. | |
| o | Library has IT disaster recovery plan | |
| o | Every networked service has appropriate policy and procedures. | E.g., Have public workstations then have workstation acceptable use policy, Internet acceptable use policy, CIPA filtering policy. |
| o | Every networked service has a marketing plan that includes advertising and public relations. | See marketing section of Catalog. |
| o | Every networked service has an evaluation plan | See evaluation section of Catalog |
| o | Library has a plan to support IT, including its realistic replacement, and networked services. | See funding section of Catalog. |
| o | Library has policy to for staff IT and staff IT training. | See staff IT and training section of the Catalog. |
| o | Library makes IT (and other) plans, information, and polices available on its web site. | See policies on the web site section of the Catalog. |

## B. Information Technology (IT) Infrastructure

| Networked Services Marketing *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Does a marketing plan or marketing plan for IT services exist? | See: Ohio Library Council. Marketing the library. <http://www.olc.org/marketing/sampleplan.htm>. New Mexico State Library. Library marketing plan workbook. <http://www.stlib.state.nm.us/files/Marketing_Plan_Workbook.pdf>. Kansas State Library. Library Development. Marketing the small library. <http://www.skyways.org/KSL/development/marketingthesmalllibrary.pdf>. Cavill, Patricia M. (1998). Marketing plan worksheet. <http://www.sla.org/chapter/cwcn/wwest/v1n3/cavilb13.htm>. |
| o | % annual operating spent on marketing IT services? _____% | A library manager estimate. **Why it matters**: Can be used for historical and peer comparison. A tangible measure of library's focus on marketing. |
| o | # IT related services that the library offers? _____ | |
| o | # IT related services that receive basic marketing attention? _____ | This is an estimate by local library manager. Basic marketing attention consists of written identification of audience, promotional activities and budget, and measures of marketing success (e.g. descriptive output – what was done?). **Why it matters**: Provides a rough estimate of marketing activity, establishes need to have a marketing plan for every library service, can be used to compare historically and to peers. |
| o | % of IT related services receive basic marketing attention? _____% | Divide # IT related services receiving basic marketing attention by # IT related services offered then multiply by 100. |
| o | How many releases about the library, its programs or services have been made over the past month? _____ | Boerne (TX) Public Library. Library's weekly newspaper column. <http://www.boerne.lib.tx.us/>. Hickory (NC) Public Library. Staff columns. <http://www.ci.hickory.nc.us/library/columns2006.htm>. |
| **Media and Public Relations** | | Ohio Library Council. Public relations. <http://www.olc.org/marketing/4pr.htm>. |
| o | Does library have public relations plan? | Lake Bluff Public Library. (2005, January). Public relations plan <http://www.nsls.info/resources/marketing/LakeBluffPLMarketingPlan012705.pdf>. Minneapolis Public Library. Media toolkit. <http://www.mpls.lib.mn.us/media.asp>. |
| o | Does library have public relations contact? Do you let anyone know? | |

## B. Information Technology (IT) Infrastructure

| Networked Services Evaluation *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Is there an IT services evaluation plan? | |
| o | % annual operating spent evaluating IT services? | A library manager estimate. **Why it matters**: Use for historical and peer comparison. |
| o | % of individual IT related services that are evaluated? | A minimum evaluation consists of identification of who audience for service is, a measure that assists in managing the service better (e.g., usage), a measure of the service's value that is meaningful to service's funding decision maker, a schedule and plan for data collection and analysis. |
| o | When was the last customer survey of library networked services conducted? _____ (indicate in months) | Surveys do not have to be elaborate or even electronic. See: Northeast Kansas Library System. New pathways to planning. <http://skyways.lib.ks.us/pathway/>. **Why it matters**: Can be used for historical and peer comparison. |

## C. Networked Services Accessed from Within the Library

| IT & Collections Accessed from the Library To the Checklist | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Library offers public phone and has policies and procedures. | |
| o | Library offers photocopier and has policies and procedures. | Warren-Trumbull (OH) County Public Library. Photocopier policy. <http://www.wtcpl.lib.oh.us /Reference/photocopy.htm>. |
| o | Library offers cassette, VCR and DVD players and has policies and procedures. | |
| o | Library offers public fax and has policies and procedures. | This is a service where library users are permitted to send and receive faxes for a fee. Lincoln (NB) Public Library Fax policy. <http://www.lincoln.lib.nh.us/policies.htm#Fax1>. |
| o | Is video conference service offered to the public? | For example, for distance education, continuing education, remote business or committee meetings, trial depositions, etc. **Why it matters**: Libraries are increasingly viewed as community providers for this technology. |
| o | # annual video conference users: | **Why it matters**: A possible usage measure. |
| o | Library loans equipment (e.g., camcorders, digital cameras, DVD players, I pods) for loan and has policies and procedures? | Colchester-East Hants (Nova Scotia) Public Library. Digital camera loan. <http://cehlibrary.ednet.ns.ca/computer_services /sonycamera.htm>. Stephens, Michel. (2005, April 15) iPod experiments. Library Journal, <http://www.libraryjournal.com/article /CA515808.html> |

C. Networked Services Accessed from Within the Library

| **Public Access Workstations & Training** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | # public access Internet workstations | Report data already collected under any of the following: # public access Internet workstations (EMIS) <http://www.ii.fsu.edu/emis /modulestart.cfm?moduleid=AB0CEA50-F480-45CD-A8C6B49B9EE56AB7>, Available Internet workstations (NISO) (5.6.2--NISO) <http://www.niso.org/emetrics/current/subcategory5.6.2.html> or Number of Internet Terminals used by the public] (NCES). General definition is the number of Internet terminals (personal computers Used by General Public PCs), dumb terminals, and laptops), whether purchased, leased or donated, used by the general public in the library. |
| o | Bandwidth per available workstation | Divide Internet bandwidth (in bps, 56 Kbps (kilobits/second) = 56,000 bps, 128 kps = 128,000 bps T1= 1,000,000 bps) by number of public access workstations. **Why it matters**: May be used in a rough indicator of adequacy of bandwidth. |
| o | Population served per Public Access Internet Workstation _____ | Divide population of the legal service area by # public access Internet workstations. See EMIS <http://www.ii.fsu.edu/emis/catalog_entrydetails.cfm?emetric_key=65>. **Why it matters**: North Carolina Public Library Directors Association, Guidelines <http://www.ils.unc.edu/Daniel /NCPLDA/guidelines.html#tech> and Kentucky Library Association and Kentucky Department of Libraries. (2002). Kentucky public library standards: Direction and service for the 21st century. <http://www.kdla.ky.gov/libsupport /standards/manual.pdf> both recommend one workstation per 2,500 population served. Can compare workstations availability across different size libraries. Also useful for peer comparisons. |
| o | % of staff workstations that have the below: __% Internet connection, __% Spreadsheet __% Word processing __% Presentation __% Database __% Desktop publishing __% Web design | This is a minimal estimate. Next step is to collect usage data on each software package. |
| o | Print management | Management of workstation printer copies and charges. See North Texas Regional Library System. (2003). <>. E.g., Pharos <http://www.pharos.com/>. CybraryN. Solutions. <http://www.cybraryn.com/solutions/default.htm>. Envisionware <http://www.envisionware.com /copiers_printers.htm>. |

C. Networked Services Accessed from Within the Library

| **Public Access Workstations & Training** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Are workstations accessible?<br>Are accessible technologies advertised? | Assistive technologies are ones that aid library patrons with disabilities basic e.g., include: magnifying machines, closed-captioned videos and DVDs, and books on tape and CD. For a partial list see Michigan State University. Assistive technology Center. Equipment in the ATC. <http://www.lib.msu.edu/services/atc/equipment.html>. TechSoup. Accessible technology. <http://www.techsoup.org/howto /articles/access/index.cfm>. Librarians Connections. Assistive technologies…<http://www.disabilityresources.org/DRMlibs-ass.html>. E.g. Fayetteville (AK) Public Library. Assistive technology workstations. <http://www.faylib.org/services/assistive_technologies.asp>. Hennepin County (MN) Public Library. Accessibility at Hennepin County Public Library. <http://www.hclib.org/pub/info/Accessibility.cfm>. |
| o | IT user training _____ Formal IT user training ____ Point of use IT user training _____ | Information Technology User Training is the combined count of the attendance at Formal User IT Training 1 and use of Point-of-Use (POU) IT Training. 2 The results are reported in three counts: Information Technology User Training, Formal User IT Training and POU IT Training. See EMIS instructions <http://www.ii.fsu.edu/emis/module_slide.cfm?moduleid=CFB2B640-FE88-495E-BB878D03102129BD&fk_presentationid=9710F3A3-1B82-445F-87D187C555C6D50D&slideid=A8BE17CA-538B-4234-80437E423382385F&slidenumber=2>. **Why it matters**: This data may assist in reallocation of Reference budget to meet demand for formal training. POU training may be counted as part of reference transactions. Data can be evidence of library's contribution to local job re-skilling. |
| o | Does library have scheduled replacement plan for public workstations? __ None __ 3-4 yrs. __ 5+ yrs. | **Why it matters**: This is first step in recognition that this technology will need to be replaced and that a budget line should be created. |
| o | Has library maintained replacement schedule? __ No plan __Yes __ No | **Why it matters**: The above plan must be realistic. |

C. Networked Services Accessed from Within the Library

| Integrated Library System (ILS) & Related Services *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Does the library have an integrated library system (ILS)<br><br>Does the library have any of the below modules: | Does the library have an integrated library system? An Integrated Library System (LS) is a group of automated library subsystems working together and communicating within the same set or system of software to control such activities as circulation, cataloging, acquisitions and serial control. Oklahoma Department of Libraries. Trustee manual: Glossary. <http://www.odl.state.ok.us/servlibs/l-files/glossi.htm>. **E.g.**, If so, respond with the ILS brand, name/source of open source software or Local (for locally developed). If no ILS or plans to introduce over the next three months, respond No. **Why it matters**: An ILS may be a core of a local library's electronic resource and service offerings. Knowing the most popular brands in aggregate may assist in ILS selection. E.g., Koha (open source). <http://koha.org/about-koha/> [See West Liberty (IA) Public Library Migrates to Koha. <http://oss4lib.org/node/506>], Autographics. <http://www4.auto-graphics.com/>, Sirsi/Dynix <http://www.sirsidynix.com/>, TLC <http://www.tlcdelivers.com/tlc/automate.asp >. |
| o | Acquisitions module | E.g., Innovative Interfaces. Millennium. Acquisitions. <http://www.iii.com/mill/acq.shtml> See e.g., Lugg, Rick & Fischer, Ruth. (2005, July 15). Acquisitions' Next Step. LJ.com. <http://www.libraryjournal.com /article/CA623005.html> |
| o | Cataloging | E.g., Innovative Interfaces. Millennium. Cataloging. <http://www.iii.com/mill/catalog.shtml>. |
| o | Federated search | Allows searching of multiple library collections or databases with one search query E.g., Autographics. AGent Portal <http://www4.auto-graphics.com/agentportal_federatedsearch.htm>. ExLibris MetaLib <http://www.exlibris-usa.com/metalib.htm>. Index Data. <http://www.indexdata.dk/keystone/>. Innovative Interface. MAP. <http://www.iii.com/mill /digital.shtml#map>. Serials Solution. Central search <http://www.serialssolutions.com /promotion/centralsearch.asp>. |
| o | Kids search engine/catalog | E.g., Innovative Interfaces. Kid online. <http://www.iii.com/mill/webopac.shtml#kidsonline>, Sirsi/Dynix/DRA. School Rooms. <http://www.schoollibraryjournal.com/article/CA6286452.html>. See also non ILS kids search engines under web services below. |
| o | OPAC | Provides an Online public access catalog. E.g., Innovative Interfaces. Millennium. WebOPAC. <http://www.iii.com/mill/webopac.shtml>. |

C. Networked Services Accessed from Within the Library

| **Integrated Library System & Related Services** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Reports module | E.g., Sirsi/Dynix Directors station <http://www.sirsidynix.com/Solutions/Products/analytical.php>, Innovative Interfaces Report writer and Web management reports <http://www.iii.com/mill/serials.shtml>. |
| o | Serials module | E.g., Innovative Interfaces. Millennium. Serials <http://www.iii.com/mill/serials.shtml>. |
| o | # Self check outs | Self check outs (and the underlying RFID technology tags) allow automated check out of library materials by patrons without assistance of library circulation personnel. Report the number of public self checks available. Respond 0 if no self checks are offered. For a review of vendors see <http://www.libraryjournal.com/index.asp?layout=articlePrint&articleID=CA456766>or Library yellow pages <http://www.librariansyellowpages.com/LYPSearch/SearchByCategory.aspx?Tag=131>. **Why it matters**: Self checks address personnel shortages and respond to independent minded patrons. May assist library managers by indicating brand popularity. |

D. Library Web Site Resources & Services

| **Library Web Site Usability & Functionality** *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| **Web site functionality & usability** | | Overview: Covey, Denise Troll. (2002). Usage and usability assessment: Library practices and concerns. Washington, DC: Council on Library and Information Resources. <http://www.clir.org/pubs/reports/pub105/contents.html>. |
| **Interfaces** Does the library offer any of the following interfaces? | | A web site interface provides a distinctive way of viewing often the same library resources and services and those uniquely suited for the interface's principal audience. |
| o | Kids interface | E.g., Central Rappahannock VA Regional Library <http://www.kidspoint.org/>, Newark (NJ) Public Library. Kids <http://www.npl.org/Pages/KidsPlace/index.html>. OPLIN. Oh kids! <http://www.oplin.org/ohkids/index.htm>. |
| o | Teen interface | E.g., Boston Public Library. Extreme teen lounge <http://www.bpl.org/teens/>. Carnegie Library of Pittsburgh. Teens real life. <http://www.clpgh.org/teens/>. Austin Public Library. Youth (wired). <http://www.youthwired.sat.lib.tx.us/>. OPLIN. Oh teens! <http://www.oplin.org/teenhome.php>. |
| o | Senior interface | E.g., Phoenix Public Library. Senior living <http://www.phoenixpubliclibrary.org/seniorliving.jsp>. Brooklyn Public Library. Seniors. <http://www.brooklynpubliclibrary.org/seniors/>. Lawrence (KS) Public Library. Senior services <http://www.lawrence.lib.ks.us/seniorservices/index.html>. |
| o | Parents and Teachers | E.g., Harris County (TX) Public Library. Parents and teachers <http://www.hcpl.net/kidsite/pandt/pt.htm>. OPLIN. Oh teach! <http://www.oplin.org/main.php?Id=64&msg=> |
| o | My Library, myBistro (personalized interface) | Overview: University Libraries of Notre Dame. Issues to be addressed by my library adopters. <http://dewey.library.nd.edu/mylibrary/librarians-guide.shtml>. E.gs., Charlotte & Mecklenburg County Public Library. Brarydog. <http://www.brarydog.net/>; Worthington (OH) Libraries. My library. <http://www.worthingtonlibraries.org/MyLibrary/Login/index.cfm>. |

D. Library Web Site Resources & Services

| Library Web Site Usability & Functionality: Navigation Aids *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Multilingual | E.g., Polaris multilingual PowerPAC. <http://www.polarislibrary.com/Polaris/SubSys/Multilingual.asp>. Queens (NY) Library. (see upper right). <http://www.queenslibrary.org/>. San Antonio Public Library (in Spanish). <http://www.sanantonio.gov/library/espanol/?res=1024&ver=true>. Austin Public Library (Spanish). <http://www.ci.austin.tx.us/library/spanish.htm>. Morton Grove (IL) Public Library. Russian Webrary. <http://www.webrary.org/ref/rusmenu.html>. |
| o | Navigation bar | E.g., (left side) Bayard (IA) Public Library. <http://www.bayard.swilsa.lib.ia.us/>. (top) Cumberland County (NJ) Public Library. <http://www.clueslibs.org/>. |
| o | Site index | Chicago Public Library. Site index. <http://www.chipublib.org/003cpl/contentsa2z.html>. |
| o | Site search | E.g., Clearwater (FL) Public Library. Search the CPLS site. <http://www.clearwater-fl.com/cpl/index.asp> |
| o | ADA compliant | TechSoup. Accessible technology. <http://www.techsoup.org/howto/articles/access/index.cfm>. Toronto Public Library. Accessibility options. <http://www.torontopubliclibrary.ca/acc_index.jsp>. Phoenix Public Library. Font size (bottom). <http://www.phoenixpubliclibrary.org/>. Baker County (OR) Public Library Small, normal, large text (right side top) <http://baker.plinkit.org/>. To test your site use: Watchfire. WebXACT. <http://webxact.watchfire.com/> or Web Accessibility Versatile Evaluator (WAVE) <http://www.wave.webaim.org/index.jsp> or A-Prompt <http://aprompt.snow.utoronto.ca/>. Minow, Mary. (1999, April).Does Your Library's Web Page Violate the Americans with Disabilities Act? California Libraries. 9 (4), p. 8-9. <http://www.librarylaw.com/ADAWebpage.html>. Ohio Library Council. Evaluation and usability of the library web site. <http://www.olc.org/marketing/5evaluation.htm>. |
| o | Help? | Phoenix Public Library. Help pages. <http://www.phoenixpubliclibrary.org/help.jsp>. |
| o | Contact us | Davenport Public Library. Contact us. <http://www.davenportlibrary.com/Default.aspx?PageId=114&nt=114>. |
| o | FAQs | Phoenix Public Library. Frequently asked questions (FAQs). <http://www.phoenixpubliclibrary.org/faq.jsp>. |
| o | Most popular links on home page | E.g., Burlington County (NJ) Public Library. Quick links (Upper left side). <http://www.bcls.lib.nj.us/>. Multnomah County (OR) Public Library. Most popular (upper right). <http://www.multcolib.org/>. |
| o | Services A-Z | E.g., Burlington County (NJ) Public Library. Services A-Z. <http://www.bcls.lib.nj.us/services/>. Multnomah County (OR) Public Library. Services A-Z index. <http://www.multcolib.org/services/atoz.html>. |

## D. Library Web Site Resources & Services

| Library Web Site Usability & Functionality: Media Use *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Graphics | OPLIN. Oh kids! <http://www.oplin.org/ohkids/index.htm>. |
| o | Sound | Florida Electronic Library. Florida Memory Project. Net making and net fishing in Florida: Audio interview with Billy Burbank III <http://www.floridamemory.com/OnlineClassroom/netmaking/>. |
| o | Photographs | Poplar Creek (IL) Public Library.<http://www.poplarcreek.lib.il.us/>. Carnegie Library of Pittsburgh. Teens real life. <http://www.clpgh.org/teens/>. Deschutes (OR) Public Library. Pictures from central Oregon. <http://www.dpls.lib.or.us/images/postcards/co2.jpg>. Tacoma (WA) Public Library. South sound photo album. <http://search2.tpl.lib.wa.us/southsound/sspaabout.asp>. |
| o | Video clips<br>Web cams | Toledo-Lucas County Public Library. Video for dial up and broadband users. <http://www.library.toledo.oh.us/video/OKorg%20spot-1.wmv>. Pasadena Central Public Library. Coffee cam. <http://www.cityofpasadena.net/library/coffeecam.asp>. Alliance Library System. (2005). Why the library matters. Toronto, Canada:Tumbleweed Press <http://www.tumblebooks.com/>. <http://www.tumblebooks.com/librariesmatter.swf>. |
| o | Virtual tour | Mill Valley Public Library. Virtual tour. <http://www.millvalleylibrary.org/tour.html>. Seattle Times. Seattle Public Library tour <http://seattletimes.nwsource.com/news/local/library/>, Grosse Point (MI) Public Library. Ewald branch virtual tour. <http://www.gp.lib.mi.us/information/virtual/ewald/index.html>. Cedar Falls (IA) Public Library. Library walkaround. <http://www.wplwloo.lib.ia.us/cfpl/022904-walkaround/index.html>. OCLC. WorldCat: Find-in-a-library. <http://www.oclc.org/productworks/holdingsonamap.htm>. |
| o | Podcasts of library programs | Lansing (MI) Public library. Podcast information page. <http://www.lansing.lib.il.us/podcast.htm>. Thomas Ford (IL) Public Library. Click a story. <http://www.fordlibrary.org/clickastory/>. Eash, Esther Kreider. (2006, April). Podcasting 101 for K–12 librarians. *Computers in libraries, 26* (4), <http://www.infotoday.com/cilmag/apr06/Eash.shtml> NB. May have to go the route of <http://www.infotoday.com/cilmag/apr06/> then looking for this free article. Vogele, Colette. (2006). Podcasting legal guide. San Francisco: Creative Commons. <http://wiki.creativecommons.org/Podcasting_Legal_Guide>. |

## D. Library Web Site Resources & Services

| Ways to Offer Financial Support on Library Web Site *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Library Foundation link | E.g., Princeton (NJ) Public Library Foundation. <http://www.princetonlibrary.org/yoursupport/foundation/index.html>. |
| o | Friends link | E.g., Friends of Libraries USA (FOLUSA). <http://www.folusa.org/>. E. Brunswick (NJ) Public Library. Friends of the Library. <http://www.ebpl.org/About_The_Library/Friends_of_The_Library.asp>. |
| o | News of fund raising efforts | E.g., Boerne (TX) Public Library. Annual book sale. <http://www.boerne.lib.tx.us/>. E. Brunswick (NJ) Public Library. Donations, gifts and tributes. <http://www.ebpl.org/About_The_Library/Donations_Gifts_and_Tributes.asp> |
| o | Volunteer page | E.g., Joe Barnhart Beeville (TX) Public Library. Volunteer page (job description, application (e-mail capacity), contacts). <http://www.bclib.org/support_files/html/volunteers.htm>. |
| o | Library store | E.g., Denver Public Library. Browse photos for purchase online. <http://denverlibrary.org/photo_gallery/index.cfm>. Spartenburg (SC) Public Library store. <http://www.infodepot.org/store.htm>. Los Angeles Public Library store. <http://www.libraryfoundationla.org/cgi-bin/store/>. E.g., Canton (MI) Public Library. Secondhand prose. <http://www.cantonpl.org/friends/index.html>. Princeton (NJ) Public Library. Library store. <http://www.princetonlibrary.org/store/index.html>. |
| o | Library café menu and hours | E.g., Boston Public Library. Restaurants. <http://www.bpl.org/general/restaurants.htm>. Canton (MI) Public Library. Library Café. <http://www.cantonpl.org/info/cafepage.html> |
| o | Wish list | Apache Junction (AZ) Public Library. Library wish list. <http://www.ajpl.org/library/wishlist.htm> |
| **Personnel** | | To the Checklist |
| o | Staff directory | Newark (OH) Public Library. Staff directory. <http://www.npls.org/staff.cfm>. |
| o | Staff employment | Las Vegas-Clark County Library District. About the library -- Employment. <http://www.lvccld.org/about/employment.cfm>. |
| **Policy & Procedures** Is this policy on the web site? *To the Checklist* | | Resource: Wisconsin Association of Public Librarians. Sample policies for small public libraries <http://www.owls.lib.wi.us/info/3ps/policies/sample_policies.htm>. |
| o | ADA compliance | Kenosha (WI) ADA compliance policy <http://www.kenosha.lib.wi.us/policies/simmonsada.pdf>. Beloit (WI) Public Library. ADA compliance policy. <http://als.lib.wi.us/BPL/adapolicy.htm>. |
| o | CIPA/filtering | New York Public Library. Policy on public use of the Internet. <http://www.nypl.org/pr/pubuse.cfm>. Northland Public Library. Computer use policy. <http://www.einetwork.net/ein/northland/computers/policy.html>. |

## D. Library Web Site Resources & Services

| Policies & Procedures Available on the Library Web Page *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a Successfully Networked Public Library** | **Definitions and Examples** |
| o | Circulation | Includes: how to obtain library card, fines, renewals, etc. Kenton (KY) Public Library. Library circulation policies. <http://www.kenton.lib.ky.us/information/card.html>. Norfolk (VA) Public Library. Circulation policies. <http://www.npl.lib.va.us/policies/pol_circ.html>. |
| o | ILL policy & procedures | Delphi (IN) Public Library. ILL policy. <http://www.carrollnet.org/dpl/ill.html>; Hershey (PA) Public Library. ILL policies <http://www.carrollnet.org/dpl/ill.html>; Skokie Public Library. ILL policies <http://www.skokie.lib.il.us/s_about/loan.html>. |
| o | Internet acceptable use | E.g., Albany (OR) Public Library. Acceptable use policy <http://library.ci.albany.or.us/services/iaup.php>. San Antonio Public Library. Acceptable use policy. <http://www.youthwired.sat.lib.tx.us/YWacceptable_use.htm>. |
| o | Library mission | E.g., Mid Hudson Public Library. Sample mission statements. <http://midhudson.org/department/member_information/missions.htm>. Decorah (IA) Public Library. Mission and goals. <http://www.decorah.lib.ia.us/mission.html>. |
| o | Privacy | E.g., Henrico County (VA) Public Library. Privacy policy. <http://www.co.henrico.va.us/privacy.html>. Pasadena (CA) Public Library. Privacy policy. <http://www.ci.pasadena.ca.us/privacyStatement.asp>. New York Public Library. Privacy policy. <http://www.nypl.org/legal/privacy.cfm>. Seminole County (FL) Public Library. Privacy policy <http://www.seminolecountyfl.gov/guide/privacy.asp>. |
| o | Workstation use | E.g., Orange County (FL) Public Library. Workstation use policy <http://www.ocpl.org/about-wrkstsn.asp>. Chelmsford (MA) Public Library. Workstation use policy. <http://www.chelmsfordlibrary.org/library_info/policies/workstation_use_policy.html> |

## D. Library Web Site Resources & Services

| **Plans** | | *To the Checklist* |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Strategic/Long range plan | E.g., Evanston (IL) Public Library. Strategic plan <http://www.epl.org/library/strategic-plan-00.html>. Brantford (Ontario) Public Library. Strategic plan. <http://www.tbpl.ca/internal.asp?id=78&cid=267>. St. Charles (IL) Public Library. Strategic plan. <http://www.st-charles.lib.il.us/contact/policy/strategicplan.htm>. |
| o | IT plan | E.g., Chapel Hill (NC) Public Library. IT plan. <http://www.ci.chapel-hill.nc.us/documents/Library/Library%20Master%20Plan/Library%20Information%20Technology%20Plan%202003-2007.pdf |
| **Information about the Library** | | *To the Checklist* |
| o | Library news | E.g., Brevard County (FL) Public Library. Newsletter. <http://www.brev.org/contact_us/subscribe_eletter.htm>. Newsletters: Orange County (FL) Public Library offers Books and Beyond. Fresh Picks, Informed Teen and Technology @ OCLS http://www.ocls.info/News/Newsletters/default.asp?bhfv=8&bhqs=1>. Library blogs: e.g., Boerne (TX) Public Library's blog. <http://www.boernelibrary.blogspot.com/>. Homer Township Pub. Lib. Library newsletter: RSS/Atom news feed. <http://www.homerlibrary.org/newsfeed.asp>. See also: RSS Bandit <http://www.rssbandit.org/> |
| o | Annual report | E.g., Geneva (IL) Public Library. Library statistics. <http://www.geneva.lib.il.us/AnnualReport.pdf>.Bethlehem (PA) Public Library. Annual report <http://www.bethlehempubliclibrary.org/pdfs/annualreport04_05.pdf>. Volusia County (FL) Public Library. Annual report. <http://www.vcpl.lib.fl.us/vcplannual.html>. |
| o | Library/history | E.g., Boerne (TX) Public Library. Our history. <http://www.boerne.lib.tx.us/ourhistory.htm>.Cerritos (CA) Public Library. Library history. <http://www.ci.cerritos.ca.us/library/libhistory.html>. Selby (FL) Public Library. Library history. <http://suncat.co.sarasota.fl.us/Libraries/selbyhistory.aspx> |

## D. Library Web Site Resources & Services

| Information about the Library (Continued) | | To the Checklist |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Library/branch directory | A library directory should do more than list name, address, phone and e-mail. A good directory should be an invitation. A good directory should include a building picture, contact person, address (including phone and e-mail), hours (including holiday closings), map and directions by car and public transportation, an overview of resources (meeting rooms (with remote booking possible) workstations (with remote booking possible), assistive technology, special collections) and services. E.g., Las Vegas-Clark County Library District. Library locations. <http://www.lvccld.org/about/locations.html>. |
| o | Library Board | Clintonville (WI) Public Library. Library Board and minutes. <http://www.owls.lib.wi.us/cpl/board/board.asp>. |
| o | Library statistics | E.g., Hartford Public Library provides useful library and community statistics about it branches, e.g., Godwin Branch <http://198.134.159.33/goodwinprofile.html>. Louisville (CO) Public Library. Library statistics (includes database use). <http://www.ci.louisville.co.us/library/2005_2004Statistics.htm>. Johnson City (TN) Public Library. Library statistics (3 electronic). <http://www.jcpl.net/stats/documents/JCPL-Stats-FY05-06-M06.pdf>. |
| **Web Site Feedback** *To the Checklist* | | Does the library have on its web site, or did offer in the past year? |
| o | Web customer survey | See: SeniorCorpTechCenter. Using Survey Monkey to create an online Survey. <http://www.seniortechcenter.org/reference_library/internet/surveymonkey.php>. Vendors include: SurveyMonkey <http:// www.surveymonkey.com/> SurveyTracker <http://www.surveytracker.com/software/software.htm>. E.g., Lee County (FL) Public Library System. Survey of electronic resources. <http://www.lee-county.com/library/ref/Electronic%20Resources/EResourcesurvey-INter.htm>. |
| o | Feedback form | Form that asks for patron comments or suggestions. E.g. Mesa (AZ) Public Library. How do we measure up? <http://www.mesalibrary.org/about_us/forms/suggestion_form.asp>. |
| o | Web site rating | E.g. Phoenix Public Library. Rate this page (bottom). <http://www.phoenixpubliclibrary.org/>. |

## D. Library Web Site Resources & Services

| ILS and Related Services on Library Web Site *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Integrated library system (ILS) on web site? | An Integrated Library System (LS) is a group of automated library subsystems working together and communicating within the same set or system of software to control such activities as circulation, cataloging, acquisitions and serial control. Oklahoma Department of Libraries. Trustee manual: Glossary. <http://www.odl.state.ok.us/servlibs/l-files/glossi.htm>. The question here is whether the ILS is available on the Internet. Note: the below general services may be ILS subsystems E.g., Autographics. <http://www4.auto-graphics.com/>, Innovative Interfaces. <http://www.iii.com/>, Sirsi/Dynix. <http://www.sirsidynix.com/>. |
| o | OPAC | Online public access catalog (OPAC) of the library's collections. See above. |
| o | Federated searching of library collections | Allows searching of multiple library collections or databases with one search query E.g., Autographics. AGent Portal <http://www4.auto-graphics.com /agentportal_federatedsearch.htm>. ExLibris MetaLib <http://www.exlibris-usa.com/metalib.htm>. Index Data. <http://www.indexdata.dk/keystone/>. Serials Solution. Central search <http://www.serialssolutions.com/promotion/centralsearch.asp>. |
| o | A-Z periodical list | EBSCOhost. A to Z service. <http://www.ebsco.com/atoz/default.asp>. Serials Solutions. A-to-Z title lists. <http://www.serialssolutions.com/azreports.asp>. Taylor periodical administration System. <http://www2.taylor.edu/library/upland/sjo/tpas.html>. |
| o | Child search engine or catalog | This is to search local library holdings. Not a commercial search engine like Ask for kids (was Ask Jeeves for Kids) <http://www.askforkids.com/>. E.g., Innovative Interfaces. Kid online. <http://www.iii.com/mill/webopac.shtml#kidsonline>, Sirsi/Dynix/DRA. School Rooms. <http://www.schoollibraryjournal.com/article/CA6286452.html>. |
| o | Remote placing a hold on library material | E.g., Louisville (CO) Public Library. Look under Library Tools (on left side of home page) <http://www.ci.louisville.co.us/library/#>. |

## D. Library Web Site Resources & Services

| Integrated Library System and Related Services on Library Web Site *To the Checklist* | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Remote access to patron account | Including list of checked out library materials, renewal of overdue materials and list of patron holds. |
| o | E-mail to patrons re. overdue and holds | Send e-mails to patrons regarding overdue items and holds. E.g. Mesa (AZ) Public Library. E-mail notices. <http://www.mesalibrary.org /about_us/forms/email.htm>. |
| o | Online patron reading log | Keep an online list of books patron has read and books you want to read. E.g., Orion Township Public Library. My reading log. <http://myreadinglog.org/>. |
| o | Patron library material purchase request | E.g., Tillamook County (OR) Public Library. Library purchase request form. <http://www.co.tillamook.or.us/gov/Library/request.htm>. |
| o | Remote library meeting room scheduling application | E.g., Madison (WI) Public Library. Meeting room application <http://www.madisonpubliclibrary.org /about/meetingroom.pdf>. |
| o | Remote library workstation reservation | E.g., Las Vegas-Clark County Library District. Remote computer reservation. <http://www.lvccld.org/library/reservations.html> |
| o | Does library offer a remotely obtained library card? | E.g., Burlington County (NJ) Public Library. Get a library card online. <http://www.bcls.lib.nj.us/about/borrowing.shtml>. Anderson (IN) Public library. Apply for a library card online <http://www.and.lib.in.us/cardform.shtml> and in Spanish <http://www.and.lib.in.us/cardform_span.shtml>. Las Vegas-Clark County Library District. Patron self registration. <https://ilsweb.lvccld.org/selfreg~S12>. |
| **General Services on Library Web Site** | | To the Checklist |
| o | Does library participate in region or statewide library card? | Local library card may be used at other libraries and to use other remote services (e.g., State Library's subscription databases). |
| o | Does library provide a library event calendar? | E.g., Lawrence (KS) Public Library. Events calendar. <http://www.lawrence.lib.ks.us/eventscalendar/index.html>. San Diego Public Library. Calendar of events. <http://www.eventkeeper.com/code/events.cfm?curOrg=SANDIEGO>. |

## D. Library Web Site Resources & Services

| Integrated Library System and Related Services on Library Web Site | | |
|---|---|---|
| **General Services on Library Web Site** *To the Checklist* | | |
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Does library identify accessible services? | E.g., Burlington County (NJ) Public Library. Services for persons with disabilities. <http://www.bcls.lib.nj.us/services/disabilities.shtml>. Harris County (Houston, TX) Public Library. Disability information. <http://www.hcpl.lib.tx.us/about/ada_working.pdf>. Fayetteville (AK) Public Library. Assistive technology workstations. <http://www.faylib.org/services/assistive_technologies.asp>. Hennepin County (MN) Public Library. Accessibility at Hennepin County Public Library. <http://www.hclib.org/pub/info/Accessibility.cfm>. Multnomah County (Portland, OR) Public Library. Accessible services. <http://www.multcolib.org/services/accessible.html>. |
| o | How many subscription databases can a library user access from the library? | This may be resources purchased by the library or available from school, regional or state library sources. |
| o | How many subscription databases can a library user access remotely? | This may be resources purchased by the library or available from school, regional or state library sources. |
| o | Can patrons download digital books (e-books and audio books)? | Vendors: NetLibrary <http://www.netlibrary.com/>. E.g., Omaha Public Library. Digital books catalog. <http://ebooks.omahapubliclibrary.org/>. Toledo-Lucas County Public Library. e-books. <http://digitalbooks.toledolibrary.org/195C6A0E-2D1A-4A2C-BD64-1AC691228787/10/112/en/Default.htm>. |
| o | Can patrons download movies? | Denver Public Library. Downloadable movies. <http://www.denver.lib.co.us/news/dplnews/downloadable_movies.html>. |

## D. Library Web Site Resources & Services

| | | |
|---|---|---|
| **Virtual Reference & Readers Advisory** *To the Checklist* | | See: OCLC. Best practices in virtual reference. <http://www.oclc.org/community/topics/virtualreference/bestpractices/default.htm>. |
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Does library provide access to virtual reference via e-mail or form? | Virtual reference may actually be provided by another library or vendor. E.g., Morris County (NJ) Public Library. Ask a librarian (e-mail). <http://www.gti.net/mocolib1/refbox.html>. |
| o | Does library provide access to virtual reference via chat | Virtual reference may actually be provided by another library or vendor. E.g., Homer Township Public Library. Ask A Librarian. <http://www.homerlibrary.org/ask.asp>. Commercial products include: QuestionPoint. <http://www.questionpoint.org/>. See McKiernan, Gerry. LiveRef: A registry of real time digital reference services. <http://www.iastate.edu/~CYBERSTACKS/LiveRef.htm>.Vendors: Sirsi/Docutek. VRLplus. <http://www.docutek.com/products/vrlplus/index.html>. |
| o | Virtual reference via Internet messaging | See: About library success: A best practices wiki: Online reference. <http://www.libsuccess.org/index.php?title=Online_Reference>. E.g., Alexandrian (IN) Public Library. AskAlexandrian. <http://www.apl.lib.in.us/im.html>. Cass (MI) District Library. Ask A Librarian. <http://cass.lib.mi.us/ask.htm>. Homer Township Public Library. Ask A Librarian. <http://www.homerlibrary.org/ask.asp>. |
| o | "My Library" for Reference | E.g., Hennepin County (MN) library. My reference tools. <http://www.hennepin.lib.mn.us/pub/search/myRef/myRefAdd.cfm>. See: University of Leicester. Elite project. <http://www.le.ac.uk/li/distance/eliteproject/index.htm>. |
| o | Remotely request interlibrary loan | E.g., Las Vegas-Clark County Library District. Remote Interlibrary loan request. <http://www.lvccld.org/library/interlibrary.html>. |
| o | Online book and media reviews | E.g., Austin Public Library. Good reads. <http://www.ci.austin.tx.us/library/readroom_index.htm>. Washington-Centerville (OH) Public Library. Good reads. <http://www.wcpl.lib.oh.us/adults/goodreads.html>. |

## D. Library Web Site Resources & Services

| | | |
|---|---|---|
| **Virtual Reference & Readers Advisory** *To the Checklist* | | See: OCLC. Best practices in virtual reference. <http://www.oclc.org/community/topics/virtualreference/bestpractices/default.htm>. |
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Readers advisory service | E.g. Anchorage (AK) Municipal Libraries. Readers advisory service. <http://www.booksite.com/texis/scripts/bookletter?sid=5643> contains lists of book recommendations, BookLetters <http://www.bookletters.com/> (commercial service provides libraries with book recommendations in selected areas and sends monthly newsletters on new books by category to library users), best sellers, and book awards. Bettendorf (IA) Public Library. Teens' Booknews. <http://www.supportlibrary.com/nl/nl_rview.cfm?x=57>. |
| o | Online book, movie discussion clubs | E.g., San Antonio Public Library. Book discussion groups. <http://www.sanantonio.gov/library/fiction/fic_Discuss.asp?res=1 024&ver=true>. –including description, online sign up, meeting dates, blog or listserv, book titles, book recommendations and contact information. |
| o | Organized links and pathfinders with web links | E.g., State Library of Iowa. Pathfinder project <http://www.thepathfinderproject.org/>, Not only contains pathfinders by provides a way to create web based pathfinders. Bloomfield (NJ) Public Library. Internet links. <http://www.bplnj.org/pathfinders/readyreference.html>. |
| **Community Information** | | *To the Checklist* |
| o | Help me through the day information | Canton (MI) Public Library. Help me make it through the day page. <http://www.cantonpl.org/helpmemk.html>. Highlighted on the home page (where time and temperature are also displayed) this page contains airline schedules, weather, traffic conditions, daily crossword, school closings, tax information, news and sports headlines, voting information, consumer information, Wall Street and tourist events and activities. **Why it matters**: If want to be the first place community turns to for information then library must collect frequently needed community information in one place. |

## D. Library Web Site Resources & Services

| Community Information | | To the Checklist |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Local business directory or link | Baltimore County (MD) Public Library. Business Directory (alphabetical and by product) <http://www.bcplonline.org/info/business/busilinks.html>. Skokie (IL) Public Library. Major employers of Skokie. <http://www.skokielibrary.info/s_community/cm_employment/Skokie_employers.html>. |
| o | Aids to local business start up | Baltimore County (MD) Public Library. Resource directory for small business owner in Baltimore County. < http://www.bcplonline.org/info/business/busi_resource.html>. Santa Cruz (CA) Public Library. Starting a Business in Santa Cruz County <http://www.santacruzpl.org/ref/scbus.shtml>. |
| o | Local clubs, churches community organizations | Evansville (IN) Vanderburgh Public Library. Churches. Clubs. <http://www.evpl.org/community-information/communityinformationindex.html> |
| o | Consumer information | Middle Country Public Library. Consumer information. <http://www.mcpl.lib.ny.us/resources_consumer.html>. Richmond (VA) Public Library. Consumer information. <http://www.richmondpubliclibrary.org/links/coninfo.htm>. |
| o | Daily crossword or game | Might link to local newspaper or national newspaper crossword. Washington Post crossword <http://crosswords.washingtonpost.com/wp-srv/style/crosswords/daily/front.htm>. |
| o | Local employment and jobs | E.g., Bay Area Library & Information System (BALIS). JobStar Central <http://jobstar.org/index.php>. |
| o | Local entertainment listings & reviews | Santa Cruz (CA) Public Library. Garfield Public Library. Movie reviews by local teens. <http://www.santacruzpl.org/ref/localstats.shtml>. Jacksonville (FL) Public Library. Entertainment (not local but fun) <http://jpl.coj.net/sites/teen_entertainment.html>. Or consider RSS feed from national source: Edmonton (Canada) Public Library. Movie reviews <http://www.epl.ca/EPLMaster.cfm?id=MOVIEREVIEWS0001> |

## D. Library Web Site Resources & Services

| Community Information | | *To the Checklist* |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Community events calendar | Pasadena Central Public Library. Community events calendar (covers library, city government and community at large). <http://webevent.ci.pasadena.ca.us/scripts/publish/webevent.pl>. Hooksett (NH) Public Library. Community events calendar <http://www.hooksett.lib.nh.us/calendar/calendar.htm>. Poplar Creek (IL) Public Library. Community events calendar. <http://www.poplarcreek.lib.il.us/eventcal/calendar.asp?eclid=pc1909il>. |
| o | Exhibitions | New York Public Library. Exhibitions. <http://www.nypl.org/events/exhibitions.cfm>. Johnson City (TN) Public Library. Frankenstein exhibit. <http://www.jcpl.net/frankenstein/splash.asp>. |
| o | Maps & directions | National service like MapQuest <http://www.mapquest.com/> but keyed to local area. |
| o | Local/National/Intl News/sports headlines | From a local source or national or international. |
| o | Schools | Evansville (IN) Vanderburgh Public Library. Schools. <http://www.evpl.org/community-information/communityinformationindex.html> |
| o | School closings | Canton Public Library linked to a local talk radio site. |
| o | Social service providers | Santa Cruz (CA) Public Library. Community information database <http://www.santacruzpl.org/cid/public/>. Evansville (IN) Vanderburgh Public Library. Social service providers. <http://www.evpl.org/community-information/communityinformationindex.html> |
| o | Host community special interest blogs, forums or listservs | Sugar Grove (IL) Public Library. Forums. <http://www.sugargrove.lib.il.us/site/>. |
| o | Local statistics | E.g., look at e-podunk <http://www.epodunk.com/> for you area. Santa Cruz (CA) Public Library. Statistical websites for Santa Cruz County. <http://www.santacruzpl.org /ref/localstats.shtml>. |
| o | Stock prices | Can link to a national site like Yahoo. Finance < http://finance.yahoo.com/>. |
| o | Time | |
| o | Tourist information events and activities | Evansville (IN) Vanderburgh Public Library. Local attractions/ things to do. <http://www.evpl.org/community-information/communityinformationindex.html>. |

## D. Library Web Site Resources & Services

| **Community Information** | | *To the Checklist* |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Traffic conditions | From local AAA or radio/TV station. |
| o | Local transportation information (Local airline, train, bus schedules or links) | |
| o | Local weather | Can link to a local National Weather Service forecast. |
| **Community History** | | *To the Checklist* |
| Items of historical importance are first digitized then indexed or a finding aid is produced then the item is associated with larger collections of related materials using cataloging and other standards. | | |
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | Newspaper | Petersburg (VA) Public Library Newspaper Index. <http://ajax.lva.lib.va.us/F/?func=file&file_name=find-b-clas68&local_base=CLAS68>. Appleton (WI) Public Library. Post-Crescent newspaper. <http://www.apl.org/pcindex/index.asp>.Santa Cruz (CA) Public Library. Newspaper clipping file database. <http://www.santacruzpl.org/history/clippingfile/>. |
| o | Documents | |
| o | Images | Salem (OR) Public Library. Oregon historic photo collection. < http://photos.salemhistory.org/>. Greater Cincinnati Library Consortium (GCLC) Memory Project. <http://memory.gclc-lib.org/>. |
| o | Audio | Boulder (CO) Public Library. Maria Rogers Oral History Program. <http://www.bplcarnegie.org/oralhistory/>. |
| o | Video clips | |
| o | Maps | Delaware Division of Libraries. DelAWARE. Sanborn maps 1867-1970. <http://www.state.lib.de.us/Collection_Development/Electronic_Resources/DelAWARE> |
| o | Objects & other | Appleton (WI) Public Library. Veterans grave registrations. <http://www.apl.org/history/vetgraves/index.asp>. |
| o | Vital records | Wheaton (IL) Public Library. Vital records index. <http://wpl.wheaton.lib.il.us:81/>. |
| o | Are there links to local history organizations? | |
| o | Is there a history of the community? | E.g., Everett (WA) Public Library. A brief history of Everett Washington. <http://www.epls.org/nw/snoh.htm>, |
| **Government Information** | | *To the Checklist* |
| o | Local government | |
| o | State government | |
| o | Federal government | |

## D. Library Web Site Resources & Services

| Library Web Site Services to Special Populations | | |
|---|---|---|
| **Look at again?** | **Suggested Element of a SNPL** | **Definitions and Examples** |
| o | **Adults** | Washington-Centerville (OH) Public Library. Adults. <http://www.wcpl.lib.oh.us/adults/index.htm>. Lansing Public Library. Adults. <http://www.lansing.lib.il.us/Departments/Adult_Services.htm>. |
| o | **Business** | Washington-Centerville (OH) Public Library. Business. <http://www.wcpl.lib.oh.us/business/index.htm>. |
| o | **Investing** | Tucson-Pima (AZ) Public Library. Investing. <http://www.lib.ci.tucson.az.us/business/investin.htm> |
| o | **Research** | Milwaukee Public Library. Business resources. <http://www.mpl.org/FILE/business_index.htm>. |
| o | **Small business** | Providence (RI) Public Library. Small business start up. <http://www.provlib.org/econadv/business/smallbusstart/busstart.htm >. |
| o | **Disabled** | |
| o | Does library identify accessible services? | Burlington County (NJ) Public Library. Services for persons with disabilities. <http://www.bcls.lib.nj.us/services/disabilities.shtml>. Harris County (Houston, TX) Public Library. Disability information. <http://www.hcpl.lib.tx.us/about/ada_working.pdf>. Fayetteville (AK) Public Library. Assistive technology workstations. <http://www.faylib.org/services/assistive_technologies.asp>. Hennepin County (MN) Public Library. Accessibility at Hennepin County Public Library. <http://www.hclib.org/pub/info/Accessibility.cfm>. Multnomah County (Portland, OR) Public Library. Accessible services. <http://www.multcolib.org/services/accessible.html>. |
| o | **Homeschoolers** | Waterboro (ME) Public Library. Homeschoolers. <http://www.waterborolibrary.org/homeschool/>. Johnsburg (IL) Public Library. Homeschool resource center. <http://www.johnsburglibrary.org/hrc.htm>. Beufort County (SC) Public Library. Homeschooling <http://www.co.beaufort.sc.us/bftlib/homeschool.htm>. St. Louis (MO) Public Library. Home schooling resources. <http://www.slpl.lib.mo.us/netsrc/ee-home.htm>. Lexington (KY) Public Library. Resources for homeschoolers. <http://jacksonville-al.org/home_school.shtml>. |
| o | **Kids** | Mesa (AZ) Public Library. Kids. <http://www.mesalibrary.org/kids/default.asp>. |
| o | Kids search engines | Ask Jeeves for Kids <http://www.askforkids.com/> or Yahooligans <http://yahooligans.yahoo.com/> and databases designed for kids (EBSCOhost Searchasaurus <http://www.epnet.com/thisTopic.php?marketID=9&topicID=15> |
| o | Homework help | Tucson-Pima County Public Library. Homework help. <http://www.lib.ci.tucson.az.us/homeworkhelp/>. |
| o | Availability of games | Levine, Jenny. (2006). Video games and libraries. <http://www.mls.lib.il.us/cats.cfm?catid=172>. |
| o | Reading lists | Mesa (AZ) Public Library. Reading lists. <http://www.mesalibrary.org/kids/books.asp>. |
| o | Fun & Games | Mesa (AZ) Public Library. Fun & games. <http://www.mesalibrary.org/kids/sites.asp> |
| o | **Teens** | |
| o | Social networking | See e.g., MySpace <http://www.myspace.com/>, Facebook <http://www.facebook.com>. |

## D. Library Web Site Resources & Services

| Library Web Site Services to Special Populations | | |
|---|---|---|
| **Look at again?** | **Special Populations** | **Examples** |
| o | **Parents & Teachers** | Mesa (AZ) Public Library. Parents. <http://www.mesalibrary.org/kids/parents.asp>, teachers <http://www.mesalibrary.org/kids/teachers.asp>. |
| o | **Preschoolers** | Mesa (AZ) Public Library. Preschoolers. <http://www.mesalibrary.org/kids/preschoolers.asp>. |
| o | **Seniors** | Wired seniors < http://www.wiredseniors.com/>. Montgomery County (MD) Public Library. Senior Site. <http://www.montgomerycountymd.gov/lsetmpl.asp?url=/content/libraries/seniors/seniorsite.asp>. Columbus (OH) Metropolitan Library. <http://www.cml.lib.oh.us/ebranch/resourcecenters/seniors/index.cfm?rcat_id=486&folder_name=seniors>. Dallas Public Library. Growing on. <http://dallaslibrary.org/ss/seniors.htm>. |
| o | Library materials | Brooklyn Public Library. Seniors. Reading lists <ttp://www.brooklynpubliclibrary.org/readinglists.do?dispatch=detail&readinglistpageid=1564>. Fresno County. Senior resource center. Large print books. <>. |
| o | Health | Cuyahoga County (OH) Library. Seniors. Health. <http://www.cuyahogalibrary.org/researchinfo/specialists/SENIORS/HEALTH.htm>. |
| o | Retirement | Morton Grove (IL) Public Library. Senior Center. Retirement. <http://www.webrary.org/senior/srretirement.html>. |
| o | Travel | Cuyahoga County (OH) Library.Seniors. Travel. <http://www.cuyahogalibrary.org/researchinfo/specialists/SENIORS/TRAVEL.htm> |
| o | Government services | FirstGov for seniors. <http://www.firstgov.gov/Topics/Seniors.shtml>. Fresno County. Senior resource center. Free Library Services to Seniors and Caregivers. <http://www.fresnolibrary.org/seniors/service.html>. Cuyahoga County (OH) Library. Seniors. Helpful agencies. <http://www.cuyahogalibrary.org/researchinfo/specialists/SENIORS/AGENCIES.htm>. |
| o | Fun & games | East Baton Rouge (LA) Public Library. Senior connection. Hobbies and crafts. <http://www.ebr.lib.la.us/reference/seniors/seniorhobbies.htm>. |
| o | Volunteering | East Baton Rouge (LA) Public Library. Senior connection. Volunteer connection. <http://www.ebr.lib.la.us/reference/seniors/seniorvolunteer.htm>. |

## D. Library Web Site Resources & Services

| Library Web Site Services to Special Populations | | |
|---|---|---|
| **Look at again?** | **Special Populations** | **Examples** |
| o | **Teens** | Multnomah County (OR) Public Library. Teens. <http://www.multcolib.org/teens/> |
| o | Homework help | Seattle Public Library. Homework help. <http://www.spl.org/default.asp?pageID=audience_teens_homework>. |
| o | Journals, Blogs | Multnomah County (OR) Public Library. Teens. Blogs. <http://www.multcolib.org/teens/blogs.html>. |
| o | Teen virtual lounges | You can fret about where teens go or you can set up attractive, safe, places for them to visit. Multnomah County (OR) Public Library. Teen lounges. <http://www.multcolib.org/teens/lounges.html>. |
| o | Library materials | TeensConnect.com <http://www.teens-connect.com/> includes: great reads, teen writers corner and web links. Lansing (MI) Public Library. Book blog. <http://www.lansing.lib.il.us/teen_scene.htm#Book%20Blog!>. |
| o | Real life | Multnomah County (OR) Public Library. Teens. Health, sex, your body. <http://www.multcolib.org/teens/healthsex.html>. |
| o | Fun & games | Multnomah County (OR) Public Library. Teens. Games, e-mail, wifi and more. <http://www.multcolib.org/teens/gamestech.html> |
| o | College advice | Boston Public Library. College advice. <http://www.bpl.org/teens/collegeadvice.htm>. |
| o | Teen student assistant jobs | Seattle Public Library. Teen student assistant jobs. <http://www.spl.org/default.asp?pageID=audience_teens_studentjobs>. |

## APPENDIX 4-C: SUMMARY OF PUBLIC LIBRARY IT & NETWORK SERVICES

## Introduction

Almost every library information technology manager visited as part of the *2006 Becoming Successfully Networked Public Libraries* case studies noted the need for a short summary of a public library's information technology and networked services. This *Summary* would be useful to:

- Library information technology managers administering several branches,
- Systems or State Library staff consulting on a library's IT,
- Vendors servicing technology, and,
- Anyone needing a quick overview of a library's IT and networked services.

The inspiration for this *Summary* is Dan Lhotka, Technology Specialist with State Library and Archives of Florida who developed his 2005 *Florida Technology Assessment* form to help his team assist rural Florida public libraries with their IT and networked services planning and maintenance.

## Method

This Summary was prepared by listening to state and local library information technology managers, examining Dan Lhotka's 2005 *Florida Technology Assessment* and various publications of TechSoup <http://www.techsoup.org/>. Then the Summary was sent back out for review by the library IT managers visited.

| 2006 Summary Sheet of Public Library IT and Network Services | | | | | |
|---|---|---|---|---|---|
| **Basic Facts** | | Fiscal year: | | Date: | |
| Library Name | | | Contact phone | | |
| FSCS ID | | | Service location: | | |
| Contact name | | | Pop. of serv. area | | |
| Contact e-mail | | | Total circulation | | |
| # IT staff | | | IT plan (Yes No) | | |
| Address | | | | | |
| **Connections** | | | | | |
| POTS (Quantity) | | | 1.54 Mb (T1) | | |
| Centrex/PBX | | | 10 Mb | | |
| 56 Kb | | | 45 Mb (T3) | | |
| Fractional T1 | | | Other | | |
| Max. speed of public access Internet service: | | | | | |
| **Networks** | | | | | |
| **Operating system type** | | | | | |
| Firewall type: | | | | | |
| Other: | | | | | |
| Network performance management software? | | | Brand: | | |
| **Network services** | Yes No | | | | |
| File server | | | Video | Yes No | |
| E-mail | | | ILS | | |
| DNS | | | Proxy | | |
| Web | | | Firewall | | |
| Other | | | | | |
| **# LANS** | | | | | |
| Library LANS: (Check one which best describes) | | | __ All on one LAN __ Public, staff separate LANS __Public LAN (only) __Staff LAN (only) __ No LAN | | |
| LAN 1 | | | LAN 2 | | |
| # Workstations on LAN | | | # Workstations on LAN | | |
| # Network printers | | | # Network printers | | |
| Cabling type | | | Cabling type | | |
| Fiber | | | Fiber | | |
| # Network drops | | | # Network drops | | |
| Wireless access points | | | Wireless access points | | |
| **Server 1** | | | **Server 2** | | |
| Server name | | | Server name | | |
| Server location | | | Server location | | |
| Server purpose | | | Server purpose | | |
| Brand | | | Brand | | |
| Model | | | Model | | |
| Processor | | | Processor | | |
| Speed | | | Speed | | |
| RAM | | | RAM | | |
| Hard drive | | | Hard drive | | |
| Data backup system | | | Data backup system | | |
| Type of network | | | Type of network | | |
| Connection | | | Connection | | |

| 2006 Summary Sheet of Public Library IT and Network Services | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Equipment** | | | | | | | |
| **Workstations** | | | | Total # workstations | | | |
| # public workstations | | | | # staff workstations | | | |
| # public Internet workstations | | | | # staff Internet workstations | | | |
| # public workstations connected to LAN | | | | # staff workstations connected to LAN | | | |
| # public workstations w/basic software (see below) | | | | # staff workstations w/basic software (see below) | | | |
| # public terminals | | | | # staff terminals | | | |
| # public printers | | | | # staff printers | | | |
| Replacement plan? | | | | Replacement plan? | | | |
| **Routers** | Brand/Quantity: | | | Brand/Quantity: | | | |
| **Hubs** | Brand/Quantity: | | | Brand/Quantity: | | | |
| **Phone system** | Type: | | | Phone sets quantity | | | |
| **Fax Quantity** | | | | **Scanner** Brand/Quantity | | | |
| **VCR** Brand/Quantity | | | | **DVD player** Brand/Quan. | | | |
| **Self check outs** | | | | Other: | | | |
| **Basic software on net** | Yes No | | | Browser | | | |
| Word processor | | | | Spreadsheet | | | |
| Presentation | | | | ILS | | | |
| OPAC | | | | Other | | | |
| **Physical security** | Yes No | | | Electronics Rack | | | |
| UPS | | | | Locked Cabinet | | | |
| Locked Space | | | | Fire Alarm | | | |
| Dry & well ventilated: | | | | Other: | | | |
| **Security** | Yes/Brand No | | | Adware/spyware block | | | |
| Browser front end | | | | Filtering software | | | |
| Firewall software | | | | Malicious software block | | | |
| Virus block | | | | | | | |
| **Records** | Yes No | | | Attach inventories if available | | | |
| Hardware inventory | | | | Software inventory | | | |
| Track licensing require. | | | | Maintain original IT doc. | | | |
| **Estimated IT Budget** | $ | | | Total operating revenue | | | |
| Staff | $ | | | ILS purchase | $ | | |
| Telecommunications | $ | | | ILS maintenance | $ | | |
| Voice (incl. long dist.) | $ | | | Software | $ | | |
| Data | $ | | | Maintenance | $ | | |
| Cellular | $ | | | LAN | $ | | |
| ISP | $ | | | WAN | $ | | |
| Equipment | $ | | | File Servers | $ | | |
| Server(s) | $ | | | Workstations | $ | | |
| PC Workstations | $ | | | Cabling & Electrical | $ | | |
| Printers | $ | | | Cable Drops | $ | | |
| Hubs | $ | | | Electrical outlets | $ | | |
| Routers | $ | | | Breaker Box | $ | | |
| Other | $ | | | Transformer | $ | | |
| Subscription Databases | $ | | | Training | $ | | |

# APPENDIX 5: TYPES OF WITHIN LIBRARY USE NETWORK SERVICES

| Appendix 5: Types of Within Library Use of Network Services | |
|---|---|
| **Network Service** | **Comment** |
| E-mail | Easily the most frequently used service. |
| Surfing the Internet | Use of the Internet for a wide range of topics (not specified). Several commented that teens seem to "surf" more than other groups. |
| Word processing | Done by all ages for a range of purposes. |
| Chat | Not allowed at all libraries. |
| Social networking: MySpace.com, personal contacts, dating services | Pre-teen/Teen use of MySpace.com was almost overwhelming afternoon use in suburban libraries. Finding personal contacts--online phone books, old classmates – was popular. |
| Printing | Printer used because do not have one at home, its broken, can't afford replacement cartridges or want a color or specialized (large bed) printer. |
| Downloading forms, helping users fill them out | E.g., immigration forms or tax forms, FEMA forms after the hurricane, college financial aid. |
| Computer training (formal & informal) | All libraries polled offered formal (classes) and informal (via the reference desk) computer training using library workstations. |
| DVD watching | E.g., music videos and using games. |
| Music downloading | MP3 and iPod downloads |
| Games, gaming, gambling | Used from pre-school to adult. Adults also enter sweepstake-type games. |
| Shopping | |
| Consumer research | e.g., comparing products |
| Travel planning and booking | |
| Homework | |
| Distance education | Including tasks like paper writing, contact with education provider, classmates. |
| Home schooling | Often using own curriculum software |
| MS Office | Used by pre-teen to adult. |
| Adults conducting "personal business" | E.g., typing up a will, getting official copies of birth certificates from other countries. |
| Self-employed people | Conducting and running their business |
| Real estate search | Searching for real estate online |
| Volunteer projects | Local volunteers carrying out local projects. |
| Integrated Library System/online catalog use | Locating library materials |
| Genealogy research | Adults |
| Health information | |
| Old periodicals | Via database searches |
| Library subscription database searches | Popular topics include: genealogy, auto repair, health information, homework. |
| Newspapers | Including local, out of town and out of country |
| Employment | E.g., Job seekers (locating jobs, resume writing), Job reskilling (learning various software, completing learning skills packages). |
| Test taking | Taking tests online. |
| Publishing | Including flyers, etc. for clubs, events - all ages. |
| Excel | Various projects, use was recurring and ongoing |
| Photography | Transmitting digital photos to family and friends |

# APPENDIX 6: STATE LIBRARY SUPPORTED ELECTRONIC LIBRARIES

| Appendix 6: State Library Supported Electronic Libraries | |
|---|---|
| **State Library Virtual Library** | **URL** |
| Alabama Virtual Library | <http://www.avl.lib.al.us/> |
| Alaska's databases for Alaskans | <http://www.library.state.ak.us/databases/home.html> |
| Arkansas Traveler | <http://www.asl.lib.ar.us/traveler/> |
| California | <http://www.library.ca.gov> |
| Colorado Virtual Library | <http://www.coloradovirtuallibrary.org> CVL offers a statewide catalog, ILL, digital collections but not subscription databases. |
| Connecticut Digital Library (iCONN) | <http://www.iconn.org/> |
| DelAWARE | http://www.state.lib.de.us/Collection_Development/Electronic_Resources/DelAWARE/ |
| Florida Electronic Library | <http://www.flelibrary.org/> |
| Georgia (GALILEO) | <http://www.usg.edu/galileo/about/> |
| Hawaii Information Institute | Databases <http://www.state.hi.us/libraries/hsl/databases.html> e-books <http://hawaInformation Institute.lib.overdrive.com/> |
| Idaho LiLI | <http://www.lili.org/> |
| CyberDriveIllinois | <http://www.cyberdriveillinois.com/> |
| Indiana's Inspire | <http://www.inspire.net/index.html> |
| Iowa SILO | <http://www.silo.lib.ia.us/for-ia-libraries/databases/index.html> |
| Kansas Blue Skyways | <http://skyways.lib.ks.us/> |
| Kentucky Virtual Library (KYVL) | <http://www.kyvl.org/> |
| Louisiana Library Connection | <http://lalibcon.state.lib.la.us/> |
| MARVEL! Maine's Virtual Library | <http://libraries.maine.edu/mainedatabases/> |
| Maryland Sailor | <http://www.sailor.lib.md.us/> |
| Massachusetts catalog & databases | <http://mblc.state.ma.us/> |
| Michigan eLibrary | <http://www.mel.org/> |
| Electronic Library for Minnesota (ELM) | <http://www.elm4you.org/> |
| Mississippi MAGNOLIA | <http://nt.library.msstate.edu/magnolia/> |
| Montana Library Network | <http://montanalibraries.org/> |
| Nebraska Access | <http://www.nlc.state.ne.us/nebraskaccess/index.html> |
| Nevada | InfoNeveda <http://dmla.clan.lib.nv.us/docs/infonevada/> |
| NHewLINK | <http://www.nhewlink.state.nh.us/> |
| NJKI: Electronic resources | <http://www.njstatelib.org/Electronic_Resources/> |
| NY NOVEL | <http://unix2.nysed.gov/gate/esubject.htm#NOVEL> |
| NC Live | <http://www.nclive.org/authhome.phtml> |
| North Dakota online resources | <http://ndsl.lib.state.nd.us/ElectronicResources.html> |
| Ohio | INFOhio <http://www.infohio.org/>, Ohio Public Library Information Network (OPLIN) <http://www.oplin.lib.oh.us/home.php?a=&msg=>, Ohio Library and Information Network (OhioLINK) <http://www.ohiolink.edu/> |
| Oklahoma Digital Prairie | <http://www.odl.state.ok.us/prairie/index.htm> |
| Oregon subscription licensing only | <http://www.osl.state.or.us/home/libdev/osdlp/index.html> |
| Pennsylvania | <www.PowerLibrary.net> |
| South Carolina DISCUS | <http://www.state.sc.us/scsl/discus/school.html> |
| South Dakota electronic library | http://www.sdstatelibrary.com/index.htm |
| Tennessee Electronic Library (TEL) | <http://access.gale.com/tel2/> |
| Texas TexShare | <http://www.texshare.edu/> |
| Utah Public Pioneer | <http://pioneer.utah.gov/> |
| Find It Virginia | <http://www.finditva.com/cgi-bin/main.cgi> |
| West Virginia | <http://librarycommission.lib.wv.us/statewide_db.htm> |
| Wisconsin Badgerlink | <http://www.badgerlink.net/> |
| Wyoming GoWYLD.net | <http://gowyld.net/index.html> |

# APPENDIX 7: STATE LIBRARY SUPPORTED VIRTUAL REFERENCE SERVICES

| Appendix 7: State Library Supported Virtual Reference Services. | | | |
|---|---|---|---|
| **State** | **Service Name** | **Type** | **URL** |
| Alaska | Ask a Librarian | Chat, e-mail | <http://www.lib.uaa.alaska.edu/vrs/aklive.html> |
| Colorado | AskColorado | Chat | <http://www.askcolorado.org/> |
| Connecticut | E-mail a refer. question | E-mail | <http://www.cslib.org/asklib.htm> |
| Delaware | AnserONline | Chat | <http://www.answerline.lib.de.us/patron.html> |
| Florida | Ask a Librarian | Chat | <http://www.askalibrarian.org/aal.asp> |
| Idaho | Answerxpress | Chat | <http://www.answerxpress.com/> |
| Illinois | MyWebLibrarian | Chat | <http://www.myweblibrarian.com/> |
| Indiana | Ask a Librarian | Chat | **<http://www.statelib.lib.in.us/www/isl/ask/ask_a_librarian.htm>** |
| Iowa | Ask a Librarian | E-mail | <http://www.silo.lib.ia.us/misc/contacts.html> |
| Kansas | KanAnswer | Chat | **<http://skyways.lib.ks.us/KSL/KLNB/KANAnswerWeb/index.htm>** |
| Kentucky | Kentucky virtual library | E-mail | <http://www.kyvl.org/html/ref/ref.shtml> |
| Louisiana | Ask a Librarian | E-mail | http://www.state.lib.la.us/la_dyn_templ.cfm?doc_id=304 |
| Maine | Ask a Librarian | Chat, e-mail | <http://maine.cb.docutek.com/admin/vrl_entry.asp> |
| Maryland | AskUsNow! | Chat | <http://www.askusnow.info/> |
| Massachusetts | MassAnswers | Chat | <http://www.massanswers.org/> |
| Michigan | Ask a Librarian | Chat, e-mail | <http://www.michigan.gov/hal/0,1607,7-160-17449_18640_18659---,00.html> |
| Minnesota | NorthStar: Ask a librarian | E-mail | <http://www.state.mn.us/portal/mn/jsp/content.do?programid=536905256&agency=NorthStar> |
| Montana | Ask a Montana Librarian | Chat, e-mail | <http://161.7.9.20:81/AskA/AskA.asp> |
| Nebraska | Ask a librarian | E-mail | <http://www.nlc.state.ne.us/ref/askalibrarian.html> |
| Nevada | Ask a librarian | Chat, e-mail | <http://vrlplus.cb.docutek.com/lvccld/vrl_entry.asp> |
| New Hampshire | Ask a NH Librarian | Chat, e-mail | <http://www.nh.gov/ask/index.html> |
| New Jersey | Q&andANJ | Chat | <http://www.qandanj.org/> |
| New Mexico | Ask a librarian | E-mail | <http://www.stlib.state.nm.us/reference.htm> |
| New York | Ask Us 24/7 | Chat | <http://www.wnylrc.org/vreferen/index.htm> |
| North Carolina | NCKnows | Chat | <http://www.ncknows.org/> |
| North Carolina | E-mail ref. | E-mail | <http://statelibrary.dcr.state.nc.us/forms/email_ref.htm> |
| Ohio | KnowItNow | Chat | <http://www.knowitnow.org/> |
| Oklahoma | Ask a librarian | Chat, e-mail | <http://catalog.odl.state.ok.us/ask.htm> |
| Oregon | L-Net | Chat, e-mail | <http://oregonlibraries.net> |
| Pennsylvania | Virtual Ref. Lib. | Chat, e-mail | <http://ship.cb.docutek.com/vrlplus/vrl_entry.asp> |
| Pennsylvania | State Library Reference | e-mail | **<http://www.statelibrary.state.pa.us/libraries/webforms/survey.asp?s=C9CDCB83CECAC9&d=C8C7C983CEC9CA>** |
| S. Carolina | Ask A librarian | Chat, e-mail | <http://www.state.sc.us/scsl/virtualref.htm> |
| S. Dakota | Research this for me | Chat, e-mail | <http://www.sdstatelibrary.com/sdsl/research.htm> |
| Virginia | Live help | Chat, e-mail | <http://www.lva.lib.va.us/chat/index.htm> |
| Washington | AskUs 24/7 | Chat, e-mail | <http://www.scc.spokane.edu/lrc/library/askus24-7.htm> |
| Wisconsin | Ask Away | Chat | <http://www.askaway.info/> |
| Wisconsin | AskWisconsin | Chat, e-mail | <http://lepton.wils.wisc.edu/askwisconsin/> |

# APPENDIX 8: STATE LIBRARY & SYSTEM ROLE IN SNPL DEVELOPMENT

| Appendix 8: State Library & System Role in SNPL Development | | |
|---|---|---|
| **Role** | **Description** | **Examples** |
| **1. Funder** | State Libraries offer direct state aid to public libraries, administer grants (i.e., LSTA) that benefit public libraries, negotiate and offer discounted group procurement rates, assist public libraries in applying for grants (e.g., e-rate) and alert public libraries to funding opportunities. | |
| Direct aid | | Iowa. Direct state aid. <http://www.statelibraryofiowa.org/ld/Direct-state-aid>. NJ. Per capita state aid. <http://www.njstatelib.org/LDB/State_Aid/>. FL. State aid. <http://dlis.dos.state.fl.us/bld/grants/StateAid/StateAid.html>. |
| Competitive grants | | Oregon. LSTA competitive grants <http://oregon.gov/OSL/LD/lsta.shtml> |
| Targeted grants | | Oregon. Ready to read grants. <http://oregon.gov/OSL/LD/aboutready.shtml>. |
| Library construction | | FL. Public library construction. <http://dlis.dos.state.fl.us/bld/grants/Construction/Construction.html>. Iowa. Library buildings. <http://www.statelibraryofiowa.org/ld/lib-build>. |
| Group/Discounts procurement | | See Appendix 7a |
| Funding opportunity scanning | | NJ. Library grant information. <http://www.njstatelib.org/LDB/Grants/> |
| Grant application assistance | | NJ. Preparing grant applications. <http://www.njstatelib.org/LDB/Grants/#applics>. Oregon e-rate page <http://www.ode.state.or.us/search/results/?id=165>. FL. E-rate assistance. <http://dlis.dos.state.fl.us/bld/Library_Tech/BLD_libtech.html>. |

| Appendix 8: State Library & System Role in SNPL Development | | |
|---|---|---|
| **Role** | **Description** | **Examples** |
| **2. Network services provider** | | |
| Union catalog | | See Appendix 7b |
| Interlibrary loan | | See Appendix 7c |
| Federated searching | A single search request searches multiple databases. | See Appendix 7d |
| ISP | State Libraries engage in a number of activities to ensure that public libraries can obtain Internet connections. This may include being a statewide public library Internet Service Provider (ISP), advocating for public libraries at government and industry forums, and providing technical support and training. | See Appendix 8 for Iowa and New Jersey's experience serving as an ISP. |
| Electronic Library | An electronic library model provides: a model for how local virtual libraries should be developed; access to core electronic resources and services: poorer public libraries would otherwise not be able to offer; richer libraries can redirect resources to more specialized electronic services; an incentive for local libraries to establish an Internet presence so that they can offer access to State Library provided resources; electronic resources and services that supplement or back up those offered by local public libraries. | See Appendix 5 |
| Digital collections | | See Appendix 7e |
| Virtual reference | State Library provides, coordinates or supports this network based reference service | See Appendix 6 |

| Appendix 8: State Library & System Role in SNPL Development | | |
|---|---|---|
| **Role** | **Description** | **Examples** |
| **2. Network services provider** | | |
| Videoconferencing | | Iowa. ICN. <http://www.statelibraryofiowa.org/ld/ICN>. Texas. Texas Library Videoconferencing Network (TXLIBVID) <http://www.tsl.state.tx.us/distancelearning/videoconferencing/txlibvid.html>. |
| Remote web site hosting | The State Library will offer to host local public library web pages. The web sites are pre structured. Local libraries fill in the content. | E.g., Oregon's Plinket <http://www.plinkit.org/> or Iowa's Plow (Putting Libraries on the Web) <http://www.statelibraryofiowa.org/ld/gatesgrants/stay/sc-index>. |
| Organized access to state government information | This service and a related service devoted to information for state employees can pay dividends at appropriations time. | See Appendix 7f.<br>Oregon. Employee information center. <http://library.state.or.us/>, see also State Library eClips. <http://library.state.or.us/services/awareness/eclips/>. |
| **3. Model** | | |
| Virtual library | State libraries web sites (both agency and library) are themselves models that public libraries use when developing their web sites. | |
| Demonstration models | States will fund the development of new network service demonstration models to allow local libraries to gain first hand exposure to the new technology. | The State Library of New Jersey funds several interesting demonstration projects through its regional libraries: South Jersey Regional Library Council. Mobile services initiative <http://www.sjrlc.org/onthego/>, Overview of mobile services <http://www.sjrlc.org/onthego/library_services_mobile_table_pb.pdf> and handout <http://www.sjrlc.org/onthego/mobile_services_screenshots_rev.pdf>. See also Southeastern Louisiana University Library. Text a Librarian <http://www2.selu.edu/Library/ServicesDept/referenc/textalibrarian.html>. Wireless hot spot <http://www.sjrlc.org/hotspot/>, marketing materials <http://www.njstatelib.org/LDB/NJWireless/>. Trading spaces (Library in a retail setting) <http://www.sjrlc.org/tradingspaces/>. Get a Library Card Online (GALCO) <http://www.sjrlc.org/GALCO/> pilot to test offer library card online and offer immediate access to resources via NJ Clicks. |

| Appendix 8: State Library & System Role in SNPL Development | | |
|---|---|---|
| **Role** | **Description** | **Examples** |
| **4. Innovation champion** | State Libraries scan the environment for new ideas (e.g., technology, software, management practices, etc.) that might be appropriate for public library use and alert public library managers to these ideas (via professional reading lists and conferences) and coordinate and house (often along with state library associations and systems) various library listservs, blogs, meetings etc. Other innovation champion roles include: funding of demonstration models, providing continuing education and training on innovative practices and techniques and providing targeted funding as a diffusion catalyst. | |
| Environmental scanning | Often reported in newsletters. | Oregon Library Association. Vision 2010. <http://www.olaweb.org/v2010/#Scans>. |
| Communication coordination | State libraries provide library directories, newsletters, listservs and blogs to enable easy, efficient and rapid communication among public library staff. | Oregon. Library directories. <http://oregon.gov/OSL/LD/directories.shtml>. Oregon. Services to libraries. <http://www.osl.state.or.us/home/libdev/svcstolibs .html>. NJSL. NJSL listservs. <http://www.njstatelib.org/LDB/listservs.php>. |
| Professional reading scanning | | Utah. Professional reading. <http://library.utah.gov/library_services/continuing _education/professional_reading.html>. Texas. Library science collection <http://www.tsl.state.tx.us/ld/lsc/index.html>. |
| **5. Library consultants & IT Technical support** | State Libraries offer professional library consultants to directly assist libraries in problem solving and new service introductions. | Texas. Consulting services. <http://www.tsl.state.tx.us/ld/consulting/index.html>. |

| Appendix 8: State Library & System Role in SNPL Development | | |
|---|---|---|
| **Role** | **Description** | **Examples** |
| **6. Continuing ed. & training** | State Libraries, systems, consortia and association have played a central role in providing continuing education and training that enables public library staff to introduce the changes necessary to become successfully networked. | Iowa. CE catalog. <http://www.statelibraryofiowa.org/cgi-bin/cecat/>. Texas. Continuing education. <http://www.tsl.state.tx.us/ld/workshops/index.html> and its Small library management training program. <http://www.tsl.state.tx.us/ld/projects/slmtp/index.html>. |
| **7. Evaluation** | State Libraries collect annual statistics and evaluations that assist in SNPL management, valuing and policy making. | Oregon. Library statistics. <http://oregon.gov/OSL/LD/statsmain.shtml>. FL. Planning, evaluation and statistics. <http://dlis.dos.state.fl.us/bld/Research_Office/evaluation.html> |
| Annual survey | | FL. Annual statistical report for public libraries. <http://dlis.dos.state.fl.us/bld/Research_Office/datacoordinator.html> . |
| Targeted surveys | | FL. 2005 Internet policies & filtering in FL's public libraries. <http://dlis.dos.state.fl.us/bld/Research_Office/surveys.html>. |
| **8. Regulation, standards, certification & policies** | Develop and apply regulations, standards and policies related to SNPLs. These, in turn, may be linked to evaluation and funding. | NJ. Library law. <http://www.njstatelib.org/LDB/Library_Law/>. Oregon. Library laws of Oregon. <http://oregon.gov/OSL/LD/laws/>, Administrative rules <http://www.oregon.gov/OSL/adminrules.shtml>. Iowa. Certification. <http://www.statelibraryofiowa.org/ld/cert>. |
| **9. Advocacy** | | |
| Negotiator | State Libraries often negotiate with external partners favorable contracts and allocation of funds and often broker agreement among the state's libraries. | |
| With governments | | E.g., on the State Library's budget and advise on policy issues. |
| Local funders | Advise on local funding and other issues | Iowa. Telling the library story. <http://www.statelibraryofiowa.org/ld/tell-library-story>. |
| Policy | Advise government and libraries on various library policy issues | Oregon. Intellectual freedom clearinghouse. <http://oregon.gov/OSL/LD/overview.shtml>. NJ. Filtering legislation < http://www.njstatelib.org/LDB/E-Rate/ufilter.php>. |
| "Marketing/Promotion" | | NJ. Media room. <http://www.njstatelib.org/LDB/marketing/>. |

# APPENDIX 8-A: EXAMPLES OF STATE LIBRARY DISCOUNTED TECHNOLOGY PROCUREMENT INITIATIVES

| Appendix 8-A: Examples of State Library Discounted Technology Procurement Initiatives | |
|---|---|
| **State** | Example |
| Florida | Provides advice and some technical support on procurement/installation. See Technology procurement <http://dlis.dos.state.fl.us/bld/Library_Tech/BLD_Tech_Procurement.html> for information on e-rate <http://dlis.dos.state.fl.us/bld/Library_Tech/BLD_libtech.html>, state contract participation, network procurement and library automation, |
| Iowa | Discounts for libraries <http://www.silo.lib.ia.us/for-ia-libraries/Discounts/index.html>, e-rate <http://www.silo.lib.ia.us/for-ia-libraries/e-rate/index.html>, negotiated Discounts for Iowa Libraries <http://www.silo.lib.ia.us/for-ia-libraries/Discounts/contracts.html#2k2_contracts> |
| New Jersey | New Jersey has served as an ISP to the state's public libraries for 8 years via the Hub <http://www.njstatelib.org/LDB/Technology/hbfaq.php>, e-rate <http://www.njstatelib.org/LDB/E-Rate/index.php> |
| Oregon | Oregon Statewide Database Licensing Program <http://oregon.gov/OSL/LD/technology/sdlp/index.shtml> |
| Texas | State of Texas Department of Information Resources DIR store <http://www.dir.state.tx.us/servlet/products> buying IT through state government, e-rate guidance <http://www.tsl.state.tx.us/ld/funding/index.html#erate> Vendor/Service Provider Lists: bibliographic utilities <http://www.tsl.state.tx.us/ld/pubs/bibutilvendors/index.html>, data conversion <http://www.tsl.state.tx.us/ld/pubs/conversion/index.html>, filtering <http://www.tsl.state.tx.us/ld/pubs/filters/index.html>, library automation consultants <http://www.tsl.state.tx.us/ld/pubs/techcons/index.html>, library automation systems <http://www.tsl.state.tx.us/ld/pubs/automationvendors/index.html>, network security product guide <http://www.tsl.state.tx.us/ld/pubs/security/index.html>, State contracts <http://www.tsl.state.tx.us/ld/funding/index.html>. |

## APPENDIX 8-B: EXAMPLES OF STATE LIBRARY UNION CATALOGS & ILL SERVICES

| Appendix 8-B: Examples of State Library Union Catalog and ILL Services | |
|---|---|
| **State Library** | **Example** |
| Florida | iBistro <http://ibistro.dos.state.fl.us/> under development, Florida Cat: Florida group catalog <http://newfirstsearch.oclc.org/WebZ/FSPrefs?entityjsdetect=:javascript=true:screensize=large:sessionid=fsapp1-59428-ek1tl14x-shgt7y:entitypagenum=1:0> via OCLC FirstSearch, a comprehensive online catalog of all of Florida's library holdings. |
| Iowa | The Locator <http://www.silo.lib.ia.us/for-ia-libraries/SILO/locator/index.html> Iowa union catalog Z39.50 catalog <http://www.silo.lib.ia.us/for-ia-libraries/SILO/online-resources/catalogs.html> Z39.50 server profile information <http://www.silo.lib.ia.us/for-ia-libraries/SILO/online-resources/z39-50.htm> |
| New Jersey | Jersey Cat <http://www.jerseycat.org/> "JerseyCat is New Jersey's statewide virtual catalog and interlibrary loan system. It is provided to all libraries within the State of New Jersey by the New Jersey State Library and the Regional Library Cooperatives. There is no charge to the local library for the service. It provides all New Jersey residents and library staff with real-time searching capabilities for New Jersey's Z39.50 compliant library catalogs. It also includes a union catalog of holdings from the small to medium libraries that are under 100,000 volumes. Periodical titles can be searched for in the NJ Union List of Serials. It also provides New Jersey residents and library staff with an interlibrary loan system that they can use from their home, school, or office via the World Wide Web. Over 700 libraries have signed participating agreements. Over 4 million library holdings are part of the union catalog. In addition to the union catalog holdings, more than 50 Z39.50 catalogs are available for searching. More than 100,000 items were requested during 2004. Over 1,300 interlibrary loan staff members have attended basic training sessions." |
| Oregon | Oregon State Library catalog (only OSL not statewide) <http://catalog.willamette.edu/screens/opacmenu_s2.html>. **ORULS** (Oregon Regional Union List of Serials) <http://oregon.gov/OSL/GRES/ORULS.shtml> is a union list of periodical and other serial holdings of 160 Oregon (and Washington) libraries. The database contains approximately 250,000 holdings of 100,000 titles. |
| Texas | Library of Texas federated searching <http://www.libraryoftexas.org/> using Index Data open source software <http://www.indexdata.dk/> searches through the catalogs of almost 140 public and academic libraries, and nearly 20 TexShare commercial databases |

## APPENDIX 8-C: EXAMPLES OF STATE LIBRARY STATEWIDE INTERLIBRARY LOAN

| Appendix 8-C: Examples of State Library Statewide Interlibrary Loan | |
|---|---|
| **State** | **Example** |
| Florida | Florida Library Information Network <http://dlis.dos.state.fl.us/flin/flinman.cfm> |
| Iowa | Open access <http://www.silo.lib.ia.us/for-ia-libraries/enrich-ia/open-access/index.htm> enables users from a participating library to check out materials at other over 600 participating Iowa libraries. SILO Interlibrary loan <http://www.silo.lib.ia.us/for-ia-libraries/SILO/interlibrary-loan/index.html> |
| New Jersey | Jersey Cat <http://www.jerseycat.org/> "JerseyCat is New Jersey's statewide virtual catalog and interlibrary loan system. It is provided to all libraries within the State of New Jersey by the New Jersey State Library and the Regional Library Cooperatives. There is no charge to the local library for the service. It provides all New Jersey residents and library staff with real-time searching capabilities for New Jersey's Z39.50 compliant library catalogs. It also includes a union catalog of holdings from the small to medium libraries that are under 100,00 volumes. Periodical titles can be searched for in the NJ Union List of Serials. It also provides New Jersey residents and library staff with an interlibrary loan system that they can use from their home, school, or office via the World Wide Web. Over 700 libraries have signed participating agreements. Over 4 million library holdings are part of the union catalog. In addition to the union catalog holdings, more than 50 Z39.50 catalogs are available for searching. More than 100,000 items were requested during 2004. Over 1,300 interlibrary loan staff members have attended basic training sessions." Statewide ILL Lender Reimbursement Program Guidelines <http://www.njstatelib.org/LDB/ILL/netlendr.php> |
| Oregon | Oregon LINK ILL net lender program <http://www.osl.state.or.us/home/libdev/grants.html> |
| Texas | TexNet <http://www.tsl.state.tx.us/ill/index.html>, ILLiad <http://illiadtsl.tsl.state.tx.us/IKM/logon.html> (for patrons of the Texas State Library and Archives Commission), TexShare ILL <http://www.texshare.edu/programs/ill/>. TExpress courier service <http://www.texshare.edu/programs/courier/> provides five day-a-week pickup and delivery service to participating libraries, with deliveries of library books and other materials around Texas in two days. The goal is to provide faster, more cost effective delivery of interlibrary loan materials in Texas. An added benefit is an easier mailing process for staff. The TExpress service helps standardize delivery times and mailing processes for participating libraries. In addition, the TExpress service interfaces with Amigos' Trans-Amigos Express courier service. TExpress participants may send materials to Trans-Amigos Express members at no additional charge. The annual full rate for TExpress courier service for FY06 (July, 2005 - August, 2006) will be $3,200. The Texas State Library and Archives Commission subsidy is $835 annually; thus the billable amount to subsidized libraries will be $2,365. |

## APPENDIX 8-D: EXAMPLES OF STATE LIBRARY FEDERATED SEARCH SITES

| Appendix 8-D: Examples of State Library Federated Search Sites | |
|---|---|
| **State** | **Example** |
| Florida | Uses MetaLib® library portal from Ex Libris <http://www.flelibrary.org/resources/search.cfm>. |
| Iowa | None |
| New Jersey | NJ Clicks <http://www.jerseyclicks.org/> (AutoGraphics AGent Portal <http://www4.auto-graphics.com/agentportal_federatedsearch.htm>) |
| Oregon | Available for government employees using Webfeet. |
| Texas | Library of Texas federated searching <http://www.libraryoftexas.org/> using Index Data open source software <http://www.indexdata.dk/> permits searching of 65 public libraries and 25 research libraries catalogs as well as 40 paid databases. |

## APPENDIX 8-E: EXAMPLES OF STATE LIBRARY DIGITAL COLLECTIONS

| Appendix 8-E: Examples of State Library Digital Collections | |
|---|---|
| **State** | **Example** |
| Florida | Florida Memory Project <http://www.floridamemory.com/> provides access to Florida history via photography collection, timeline, archival collections, an online classroom and highlights of Florida history. Florida on Florida <http://bibt10f-8.fcla.edu/cgi/b/bib/bib-idx> is a catalog of digital materials related to Florida. It includes all sorts of items including maps, photographs, postcards, books, and manuscripts. The materials in Florida On Florida come from digital collections held by libraries, archives, museums and historical societies throughout Florida. |
| Iowa | Iowa Heritage Project <http://iowaheritage.lib.uiowa.edu/>. |
| New Jersey | NJ information <http://www.njstatelib.org/NJ_Information/>, Selected NJ historical documents <http://www.njstatelib.org/Research_Guides/Historical_Documents/> NJ digital highway <http://www.njdigitalhighway.org/> |
| Oregon | The Oregon Index <http://www.osl.state.or.us/home/orind/> is a selective index to Oregon newspapers. Oregon document depository program <http://oregon.gov/OSL/GRES/OrDocs.shtml>. |
| Texas | TexTreasures <http://www.texshare.edu/programs/textreasures/> TexTreasures is an annual grant program designed to help member libraries make their special collections more accessible to researchers across Texas and beyond. Projects may include such activities as cataloging, indexing, and digitizing materials. It awards $100,000 per year (maximum of $20,000 per grant) in a competitive process. About Texas (Texas FAQs) <http://www.tsl.state.tx.us/ref/abouttx/index.html>, and Doing a report on Texas <http://www.tsl.state.tx.us/ref/abouttx/index.html>, IMLS funded Texas heritage digitalization initiative <http://www.tsl.state.tx.us/news/2005news.html#0928>. |

## APPENDIX 8-F: EXAMPLES OF STATE LIBRARY STATE GOVERNMENT INFORMATION SITES

| Appendix 8F: Examples of State Library State Government Information Sites | |
|---|---|
| **State** | **Example** |
| Florida | Florida Government Information Locator Service <http://dlis.dos.state.fl.us/fgils/> Florida Government Electronic Rulemaking system <http://www.flrules.com/> |
| Iowa | State Documents Center <http://www.silo.lib.ia.us/for-state-govt/state-documents-center/index.html>.Iowa publications online <http://publications.iowa.gov/>. |
| New Jersey | NJ government publications on the web <http://www.njstatelib.org/NJ_Information/links/index.php>,N.J. legislative histories <http://www.njstatelib.org/NJLH/>. |
| Oregon | Oregon provides an extensive intranet to state library employees. Government research and electronic services <http://www.oregon.gov/OSL/GRES/index.shtml> Oregon document depository program <http://oregon.gov/OSL/GRES/OrDocs.shtml>. |
| Texas | TRAIL: Texas Record and Information Locator <http://www2.tsl.state.tx.us/trail/index.jsp> a database of Texas government publications available on the Internet. Library catalog of Texas state agencies <http://star.tsl.state.tx.us/uhtbin/cgisirsi/s2mwFTGTkW/TSLAC/182470009/60/1180/X> |

# APPENDIX 9: STATE LIBRARY ROLES

## Internet Service Provider (ISP): Iowa and New Jersey State Libraries

**By**

**Alan Schmitz <aschmitz@silo.lib.ia.us>**
**SILO Program Coordinator,**
**Rob Zangara <rzangara@njstatelib.org>**
**IT Director, New Jersey State Library**
**and**

**Joe Ryan**

Two of the State Libraries visited found it important to assume the role of Internet Service Provider (ISP) early in the process of getting public libraries connected to the Internet. The State Library of Iowa was faced with hundreds of small telecommunication providers who were either unable or unwilling to provide broadband connections. But today, Iowa no longer serves as ISP to the state's public libraries now that there are commercial providers offering broadband connections throughout the state. The New Jersey State Library (NJSL) has successfully played the ISP role via 14 separate networks geographically dispersed throughout the state for over six years. NJSL recently decided to continue and expand this role. There has always been Internet access commercially available throughout New Jersey. But New Jersey libraries continue to want the low price, high quality and responsive technical support that NJSL has been able to offer.

### Iowa's Experience

#### *History*

Iowa's telecommunication situation is quite different from New Jersey's. Iowa has roughly 10 traditional telecommunications companies and hundreds of independents. New Jersey has two: Sprint and Verizon.

The State of Iowa Libraries Online (SILO)[54] <http://www.silo.lib.ia.us/for-ia-libraries/SILO/index.html> "was established in 1995 through an HEA (Health Education Act) Title II-B grant from the U.S. Department of Education. The State Library of Iowa <http://www.silo.lib.ia.us/>, in partnership with the Iowa State University (ISU) Library <

[54] "SILO offers other services as well (from the SILO web site): "SILO Project staff created a statewide union catalog known as the Locator that currently includes holdings from 699 libraries. They also developed a web-based interlibrary loan application that is currently used by 712 Iowa libraries of all types. Approximately 25 libraries participated in a pilot project that supported searching remote catalogs via the Z39.50 protocol. The SILO program continues to support the Locator and interlibrary loan program, work with Iowa public libraries to facilitate high speed Internet access, and provide statewide access to electronic databases, including OCLC's FirstSearch and EBSCOhost."

http://www.lib.iastate.edu/>, was awarded a $2.5 million grant over two years to provide resource sharing services, access to electronic databases, and telecommunications technical support to Iowa's 543 libraries. The grant was to pay particular attention to better serving Iowa's rural residents. In 1997, the grant was extended for two years. The State Library provided management oversight, library consulting, and training for the grant's projects. The ISU Library provided office space, support staff, and automation system technical support. The State Library contracted with the university's computation center for server maintenance and telecommunications support.

Since the grant ended in July 1999, the State Library has continued SILO as a sponsored program through ISU. The program was most recently renewed in a three-year contract signed in 2004. The State Library has sustained the program with LSTA and state funds, and ISU regards its participation in the program as a significant outreach opportunity"[55]

**History of ISP Role[56]**

SILO got into the ISP business as part of its original U.S. Department of Education HEA Title II-B grant. The grant included a small, pilot project to provide high-speed Internet service to the State Library, Library Service Areas (LSA were regional libraries), and a small number of public libraries. The Iowa Communications Network (ICN) <http://www.icn.state.ia.us/> was just coming online, when the pilot project started in early 1997. SILO acted as an aggregation point for public libraries that wanted to connect to the Internet through the ICN. Libraries purchased 56K and T1 data circuits to SILO, and SILO routed their network traffic onto the Internet. During the grant period, 1997 through 1999, SILO provided on-site installation and 8x5 technical support. After 1999, SILO continued to provide 8x5 technical support, but libraries had to hire their own contractor to install and configure their router.

The ICN originated all of the frame-relay connections for SILO, but very few public libraries and none of the LSAs were directly connected to the state-wide fiber optic network. There were only around 60 public libraries that had direct access to the ICN. Less than 40 of those have ever used the ICN and SILO for Internet access. Connecting through the ICN and SILO was expensive, because services usually had to be provisioned from the ICN and a local carrier. A 56K frame-relay circuit typically ran from $150 to $300 per month. A 56K frame-relay circuit typically ran from $150 to $300 per month. A T1 frame-relay circuit typically ran from $1200 to $2000 per month. The circuit costs only included what the public libraries were charged for their end of the connection. The State Library still had to subsidize the network by covering the Internet port charges for everyone.

With hundreds of potential public library ISPs including telecommunications companies, cable and DSL providers SILO developed what became known as SILO's High-speed ISP Database to track local public library broadband ISP options. SILO was regularly asked by local

[55] The extended quote is from the SILO web site, about SILO section: <http://www.silo.lib.ia.us/for-ia-libraries/SILO/about/index.html>.
[56] The following section is based on a February 22, 2006 e-mail interview with Alan Schmitz, SILO Program Coordinator.

public libraries to help them make sense of their connectivity options. Initially, Alan Schmitz developed the database to determine the extent of broadband coverage in Iowa. "I wanted to know if there were any patterns to the coverage. I also wanted to know if libraries would have better luck asking their local telco, cable companies, or wireless providers for connectivity. After I loaded the first batch of data, I was able to make a few observations that I could pass on to State Library and LSA staff. 60% of libraries had some kind of broadband option available, so it was certainly worth asking local providers about access. Most small towns, especially those with populations of between 500 and 2500, had better broadband options than those in larger communities. One traditional phone company (Iowa Telecom) was far behind everyone else, but they were starting to roll out broadband in specific parts of the state."

"We used the database to track the progress of companies like Iowa Telecom and Mediacom as they rolled out broadband coverage state-wide. We also used the database to tell libraries who they should contact, if they were interested in broadband service."

"Mary Wegner, the Iowa State Librarian, regularly reported numbers from the database at the Iowa Telecommunications Alliance meetings. She focused on three numbers: libraries that were using broadband, libraries that had a broadband option but didn't have broadband in the library, and libraries that didn't have a broadband option available. Eventually the data and repetition at the Iowa Telecommunications Alliance meetings paid off. Mediacom offered broadband access for all public libraries in communities they serve at one of these Alliance meetings. Other telcos followed, making their own offers of broadband access to libraries."

"Currently we're using the database to focus on those libraries that don't have broadband installed yet. We don't use it for one on one consulting much any more, but it does help us keep track of the last 20% of libraries that don't have broadband yet."

***Today***

When SILO got into the ISP business, it was really was the only viable alternative to dial-up. The only other public libraries with dedicated connections connected directly to the ICN and paid their own Internet port charges. When DSL and cable services became widely available in Iowa, it became clear that libraries would be able to get faster and less expensive service through local service providers. Why should a library pay $150 per month for 56K service, and the State Library subsidize the service, when the libraries could get a 256K connection from their local phone company for $40 per month? The State Library decided to start shutting down SILO's frame-relay network in July of 2004. The shutdown was essentially complete in July of 2005. Eight public libraries continue to use the frame-relay network, but six of those have plans to move to DSL or cable service from local providers. Alan Schmitz notes, "We didn't want to continue to subsidize Internet connectivity for a small number of libraries. We also didn't want to promote expensive 56K service when faster, less expensive options were available locally."

SILO has provided e-mail hosting service for libraries from the beginning of the Title II-B grant to the present. The service was limited to libraries that connected to the Internet through

SILO. As part of the Gates Staying Connected grant,[57] SILO will be opening its e-mail hosting service to any library with a high-speed connection. SILO will also be offering web hosting services. From the start, SILO offered Iowa public libraries extensive technical support and advice.

## New Jersey's Experience[58]

### *History*

The New Jersey State Library (NJSL) has maintained the Hub program for about eight years with 340 libraries participating.[59] The Hub consists of 14 separate networks geographically dispersed throughout the state offering frame relay 76kbs to T1 connections and e-mail. The 14 networks were created more for political rather than technical reasons. Use of the hub services is free to local libraries but they must pay for the local loop connection between library and the nearest hub network. There are only two principal providers in New Jersey: Sprint[60] and Verizon, unlike Iowa where there are hundreds. Each New Jersey public library connects to one of the 14 networks via Verizon Access NJ <http://www.accessnewjersey.net/anj/> using a three year renewable contract at an average rate of between $100 and $300 per month. To purchase a T1 Hub equivalent service would cost on average $1800 per month.

Currently NJSL spends $800,000 to maintain the existing hub annually. Internet access was available to all New Jersey public libraries from the start. From the start, NJSL's ISP role was based on public library demand for the service from NJSL. Public libraries participated in the program largely due to lower cost, familiarity and trust, and extensive, quality, technical support (not offered by commercial providers).

### *Today*

NJSL found that, while the existing configuration was effective in delivering core services, it did not do so in the most stable, practical or cost effective manner.[61] Further, the existing Hub did position NJSL and associated public libraries for future growth or to strategically take advantage of current opportunities or emerging technologies. Commercial

[57] See: Iowa Public Libraries and the Gates Staying Connected Grant <http://www.silo.lib.ia.us/news/news/News-2005/gates-staying-connected-grants.htm>.

[58] The following is based on a February 22, 2006 telephone interview with Rob Zangara <rzangara@njstatelib.org> IT Director, New Jersey State Library.

[59] Technically New Jersey in not an Internet Service Provider but a provider of continuation of service. A commercial telco, most often Verizon, provides a connection form the library to the nearest hub. NJSL then provides the connection to other New Jersey libraries, NJSL and to the Internet beyond.

[60] Sprint's participation in this market lags due to the Sprint/Nextel merger. Discounted rates for public libraries have been announced but are presently unavailable.

[61] Rob Zangara noted that there was no one network, no redundancy, may points of potential failure, duplication of effort, no vender leverage, no uniformity of service, no mechanism for measuring quality of service.

alternatives exist. For example, Verizon Access NJ offered deeply discounted rates[62] to libraries and schools until 2014 for connections ranging from 56k to OC12-48 plus free equipment (routers and switches) and services (videoconferencing). It was a good time to revisit NJSL's ISP role. Should NJSL continue on as an ISP or drop this service? If the ISP role should continue, what infrastructure should be created and what services should be offered to local public libraries?

NJSL brought New Jersey library leaders and Hub participants together in September 2004[63] to explain the situation and pose two options, either:

- Now that the goal of access had been achieved set new goals related to networks services, stability and efficiency. Thus, continue NJSL's ISP role with more efficient and effective network infrastructure; or,
- End the Hub program and rely on commercially available services. Adopting the no NYSL ISP role option would mean that NJSL would send each public library a check and the library would purchase its broadband connection from a commercial provider (Sprint, Verizon, or a cable or DSL Internet connection from various providers).

The public library managers were assured that whatever option was chosen each public library's existing Hub service would be continued until any changes were made and complete. NJSL's position was neutral. Rob Zangara, NJSL IT Director commented, "There were good reasons pro and con for both options." The group strongly advised NJSL to continue its ISP role.

NJSL has not become over confident. Was the endorsement of NJSL's ISP role simply to go with the familiar? The cost savings is arguable. Did the local libraries want to avoid having to go to the Freeholders to ask for the change to a commercial provider? The sense was that a key persuader was that local libraries did not want to lose the extensive technical support and hand holding that NJSL provides (and commercial providers would not provide).

**New Infrastructure**

The new IT infrastructure set as a goal a stable, scalable infrastructure from which to deliver and expand technology services to libraries. The new design includes three points of presence (POPs), one POP in each of the three NJ local access transport areas (LATAs), redundant connections between POPs, three different ISP backbones to the internet with close to 100% expected network uptime. Core services included: Internet access, web site hosting,[64] e-

[62] See <http://www.accessnewjersey.net/anj/anj_rates.asp> for Verizon rate structure.
[63] For (2004, September 23) PowerPoint presentation used see <http://www.njstatelib.org/LDB/Technology/NPL_Hub_Mtg_9-23.ppt>.
[64] Domain choice: library can register/keep its own or use njlibraries.org domain for e-mail/web; web hosting on Red Hat Linux servers with MySQL databases supported, 1 GB size limit; Windows web hosting option will be available; complete web site access via FTP; with each library receiving an initial 8 public IP addresses.

mail hosting,[65] anti-virus protection and technical support. Expanded core services include: anti-spam protection, domain name services, router maintenance/insurance and firewall/Intrusion protection. Planned optional services (offered at subsidized rates) include:[66] help desk, network management and reporting, domain registration, dial-up access, data storage and backup, disaster recovery, technology consulting and project management.[67] Rob Zangara stressed the scalability of the new infrastructure – in both directions. The new infrastructure can be expanded if demand for service increases. The new infrastructure can also be reduced if interest in these services decline.

Libraries will have a menu of services from which they may choose. Most of these services will not be interdependent and a direct connection to the POP is not necessary for most services. For example, a public library can get free cable internet access cheaper and faster than connecting through the new Hub. If the library decides to connect via a third-party provider (because it is free) instead of directly to the new Hub, the library may still take advantage of most of the new Hub's service offerings, such as email and web site hosting, anti-virus and anti-spam protection, and paid services like technology consulting. A local public library may choose what works best for the particular library. "We expect the new network to be in place in the first quarter of 2006. At that time we will begin to migrate libraries that choose to take advantage of the new service offerings." The upgrade to a new infrastructure was aided by a $1.75 million grant from the Verizon Access New Jersey program announced June 20, 2005.

The new Hub has a mission subtly, but profoundly different from the old – ensuring connectivity is not enough. The new hub creates a statewide library network remarkably like one that might exist at a well run statewide corporation. The new hub will provide a platform to launch new statewide electronic resources and services be they initiated by the state library, the regional libraries or an individual library. The new hub will provide the underpinning for the introduction of new content and services to better serve New Jersey.

## Conclusion

Iowa and New Jersey's experience illustrate a couple of key points related to State Libraries' roles in assisting local libraries to become successfully networked:

[65] E-mail accounts for staff with up to 10 generic aliases, 100MB mailbox size. Choice of managed or unmanaged e-mail administration. Anti-spam and anti-virus protection on all e-mail accounts.

[66] 24/7 monitoring for device and circuit faults; intrusion protection system will block malicious traffic, hacking, attacks on network; network management modules can isolate network problems to the device level; bandwidth utilization reports can be provided for library's circuit; alerts can be provided via e-mail when a router or circuit is down; and discounted server hosting available by arrangement.

[67] Taken from (2004, September 23) PowerPoint presentation used see <http://www.njstatelib.org/LDB/Technology/NPL_Hub_Mtg_9-23.ppt>.

- There is no one right way for State Libraries or external state or national level funders to assist local public libraries to become successfully networked. What is "right" in Iowa may not be right in New Jersey. Flexibility and attention to local needs matter.
- Yet all successfully networked public libraries must address two inter-related issues: How to obtain a safe, reliable, redundant, broadband Internet connection at an affordable price? How to solve the IT staffing needs, in this case does the local library solve IT staffing locally, rely on a commercial provider, rely on a State Library solution? The goal of the New Jersey solution is to remove resolution of Internet connection and LAN troubleshooting and repair from a local library's concern. Thus also, reducing the need for local IT staff as well.
- Most public libraries have not solved the local IT support issue. They need and value state level IT assistance and "hand holding." Iowa's commercial solution would not work as well as it has if the State Library of Iowa had not continued to supply good regional level technical support to local public libraries when it stopped providing Internet service.
- Clearly articulating options to local library managers and then,
- Listening to customer demand, in this case from local libraries within a state, is essential;
- Having an exit strategy, having a scalable infrastructure, when providing an Internet service to local libraries may be as important as how a new service is introduced. The newly adopted New Jersey ISP model features a scalable design that can expand with local library demand or shrink should local libraries migrate to commercial services.
- Public and private partnerships make Internet service provision. As well as other Internet services provision, work. Iowa worked closely with the Iowa Communications Network (another state agency), the Iowa State University Library and a number of local telecommunications providers to enable public library Internet connections throughout the state. New Jersey works closely with Verizon, Sprint and cable and DSL service providers to ensure that local libraries have the most appropriate, cost effective and reliable Internet connections available.

A reliable way to gain entrée into the library market and in to the best ways to assist a state's local public libraries is to start with the State Librarian and library development team.

# APPENDIX 10: ALTERNATIVE MEASURES FOR ASSESSING SNPL VALUE

### A. How can the library help?

This section asks local elected officials, local agency officials, community group leaders and local business associations for ways the library might contribute to the success of planned initiatives over the next year.

| How can the library help? | |
|---|---|
| **What major initiatives, projects or programs do you plan over the next 6 months to a year (name brief description)?** | **Are there ways that the library might contribute to the success of these initiatives?** |
| 1. | |
| 2. | |
| 3. | |
| | |
| | |
| | |
| | |

### B. Library walk around

Library walkarounds are a relatively quick, but effective ways that library managers use to get a sense of what might need improvement. Government and community leaders' views might provide important insights and get them engaged in supporting solutions to problems they have identified. Walkarounds can be informal or systematic. For additional discussion see: Consulting Librarians Group. Community Analysis Methods and Evaluative Options (CAMEO) handbook: Chapter 6: Looking-around-inside-the-library. <http://skyways.lib.ks.us/pathway/cameo/chap6.htm>. In particular, Library WalkAround Work Sheet 7A <http://skyways.lib.ks.us/pathway/cameo/wks7a.htm>, 7B <http://skyways.lib.ks.us/pathway/cameo/wks7b.htm>, and 7C <http://skyways.lib.ks.us/pathway/cameo/wks7c.htm>. A keep it simple worksheet follows.

| Library Walk around Findings | | | |
|---|---|---|---|
| **Major finding/problem** | **Priority** | **Why matters to you** | **Possible lfixit support** |
| 1. | | | |
| 2. | | | |
| 3. | | | |

## C. Assessing Library's Engagement with Community Leaders

This section provides a draft checklist for library directors to begin to assess their level of local advocacy involvement.

| **Assessing Library's Engagement with Community Leaders** | | | |
|---|---|---|---|
| | **Last 6 mos.** | **Prev. 6 mos.** | **%**[68] |
| **Local government** | | | |
| # times librarian attended local council/commissioner meetings | | | |
| # times librarian visited another local government agency on library-agency business | | | |
| # times library asked officials/agencies how library might help (see 9a) | | | |
| # local government reference questions asked (based on 1 week sample) | | | |
| # (non library) local gov. staff trained in information seeking or management | | | |
| # media releases thanked local government or government official for support (if appropriate) | | | |
| # times library contacted local government because of potential partnership or local government opportunity | | | |
| # library staff participated local government offered training | | | |
| # times library invited local government agencies to meet at the library | | | |
| # times (non library) local government meeting held in library where librarian was present | | | |
| # times library invited government leader to do a library walk around (see 9b) | | | |
| **Library-Government Joint Contracts or Partnerships** | Yes, Have | No | Maybe |
| Building maintenance | | | |
| Supplies & equipment purchase | | | |
| Security | | | |
| IT staffing & shared equipment | | | |
| Human resources (job descriptions, policies, training, benefits) | | | |
| **Community groups & local business organizations** | **Last 6 mos.** | **Prev. 6 mos.** | **%** |
| # times librarian attended a community group meeting | | | |
| # times librarian did presentation about library at community group meeting business | | | |
| # times library invited local business & community groups to meet at library | | | |
| # times library asked how library might help these organization (see 9a) | | | |
| # times library invited community leader to do a library walk around (see 9b) | | | |

[68] ((Last 6 months – Previous 6 months)/Last six months) * 100