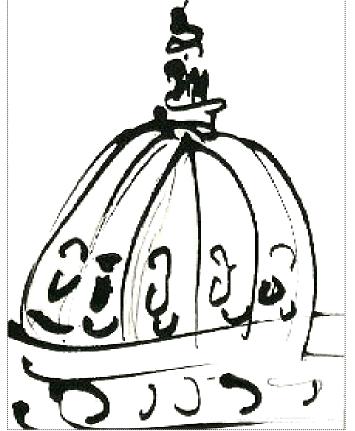Information Use Management and Policy Institute

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Public Libraries and the Internet 2006: Study Results and Findings

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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%)

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

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[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.

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[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.