

Status of Technology and Digitization in the Nation's Museums and Libraries

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#### Introduction

The Institute of Museum and Library Services is committed to helping libraries and museums take full advantage of the power of technology. Through grantmaking, research, conferences, and publications the Institute helps to create and share best practices and provide important data for administrators, policy makers, and the public.

As part of its mandate to analyze needs and trends of museum and library services, the Institute is pleased to present the 2004 survey on the use of technology and digitization in the nation's libraries and museums.

The use of technology and particularly digital technology has affected nearly every aspect of library and museum services, from the automation of internal cataloging and management systems to the digitization of physical collections, and from the acquisition of new "born-digital" works of art and library publications to the use of technology to present collections and engage audiences.

Digital technology enables the full range of holdings in our museums, libraries, and archives—audio, video, print, photographs, artworks, artifacts, and other resources—to be cataloged, organized, combined, and made accessible to audiences in new ways. It provides the public with new pathways to access museum and library collections and brings them "face-to-face" electronically with librarians, curators, scientists, artists, and scholars. By using technology, rich scientific, historical, aesthetic, and cultural resources can be presented with contextual information that enhances educational value.

In 2001, the Institute conducted the first-ever study of the status of new technology adoption and digitization in the nation's museums and libraries (see <a href="http://www.imls.gov/publications/TechDig02">http://www.imls.gov/publications/TechDig02</a>). The baseline study identified pockets of digitization activity and planning that were making library and museum collections widely available. While gaps existed between large and small institutions, basic technologies had found their way into a majority of libraries and museums.

This second study seeks to dig deeper and find out more about how and why our cultural institutions use technology and digitize their collections. It explores barriers as well as capacity and planning issues.

The 2004 survey was conducted among five groups: museums, public libraries, academic libraries, archives, and state library administrative agencies. This survey report tells us statistically about the kinds of technology in use, the extent of digitization activities, and the adoption, maintenance, funding of, and staffing for technology and digitization activities at museums and libraries.

After the survey data was analyzed and the draft report prepared, the Institute held facilitated telephone discussions among individuals who represent the five survey groups. They used the survey to explore what's next and identify some high-priority issues that can help the cultural

community continue to move forward. The summary or participants' comments and suggestions can be found in the Afterword.

The Institute of Museum and Library Services will use the survey results to inform staff, shape programs, and raise awareness of stakeholders. We encourage you to read, discuss, and share this survey report. It provides important insights about technology and digitization trends and developments, and the needs of the nation's libraries, museums, archives, and state library administrative agencies.

# The Institute of Museum and Library Services Support for Technology and Digitization

#### Resources

Resources related to digitization activities are also listed in the Digital Corner (<a href="http://www.imls.gov/digitalcorner">http://www.imls.gov/digitalcorner</a>). Essential resources from the Digital Corner include the following:

IMLS Digital Collections Registry: <a href="http://imlsdcc.grainger.uiuc.edu/collections">http://imlsdcc.grainger.uiuc.edu/collections</a>
A registry of all digital collections developed with IMLS support.

#### Framework of Guidance for Building Good Digital Collections:

http://www.niso.org/framework/Framework2.html

The framework identifies principles of good practice and current standards in four areas: collections, digital objects, metadata, and digital projects. The framework was developed with IMLS support and is maintained by the National Information Standards Organization.

#### **Report of the IMLS Digital Library Forum:**

http://www.imls.gov/publications/2001heritage.shtm

In the spring of 2001, IMLS supported a Digital Library Forum to discuss the implementation and management of networked digital libraries, including issues of infrastructure, metadata, thesauri and other vocabularies, and content enrichment such as curriculum materials and teacher guides.

#### **Assessment of End-User Needs in IMLS-Funded Digitization Projects:**

http://www.imls.gov/pdf/userneedsassessment.pdf

IMLS commissioned a study of the needs-assessment practices used in digitization projects.

# Report of the Workshop on Opportunities for Research on the Creation, Management, Preservation and Use of Digital Content: <a href="http://www.imls.gov/pdf/digitalopp.pdf">http://www.imls.gov/pdf/digitalopp.pdf</a> The University of Florida, Florida Center for Library Automation, convened a workshop in March 2003 to assess research needs related to digital cultural content. This report

summarizes the results of the workshop and suggests useful areas for research.

# **2002 Status of Technology and Digitization in the Nation's Museums and Libraries:** <a href="http://www.imls.gov/publications/TechDig02">http://www.imls.gov/publications/TechDig02</a>

This is a study of the use of technology and digitization activities in libraries and museums nationwide.

# Digital Resources for Cultural Heritage: A Strategic Assessment Workshop on Current Status and Future Needs: <a href="http://www.imls.gov/pdf/LibraryBrochure.pdf">http://www.imls.gov/pdf/LibraryBrochure.pdf</a>

This report and recommendations stem from an Institute-sponsored workshop of 63 specialists from 26 states representing libraries, museums, archives, higher education institutions, public broadcasting, research consortia, public and private funding organizations, and service

providers. The report assesses progress and plans for the development and use of digital cultural resources.

#### **Conferences**

WebWise is a signature initiative of the Institute of Museum and Library Services. Each year it brings together representatives and thought leaders from museums, libraries, archives, systems science, and other fields interested in the future of high-quality online content for inquiry and education. The focus of each annual conference is on sharing the latest research and innovations in digital technology, exploring their potential impacts on library and museum services, and promoting effective museum and library collaborations in the digital environment. The conference also provides IMLS grant recipients the opportunity to showcase exemplary projects.

- WebWise 2006 Inspiring Discover, Unlocking Collections. February 2006
- WebWise 2005 Teaching and Learning with Digital Resources. February 2005
- WebWise 2004 Sharing Digital Resources. March 2004
- WebWise 2003 Sustaining Digital Resources. February 2003
- WebWise 2002 Building Digital Communities. March 2002
- WebWise 2001 The Digital Divide: A Conference on Libraries and Museums in the Digital World. February 2001
- WebWise 2000 A conference on libraries and museums in the digital world.
   February 2000

IMLS grant programs that fund technology and digitization projects

- National Leadership Grants
- Museums for America
- Native American Library Services: Enhancement Grants
- Native Hawaiian Library Services
- Native American/Native Hawaiian Museum Services Program
- Grants to State Library Administrative Agencies

For complete information on all of IMLS's grant programs, visit the Applicants section of the IMLS Web site.

To read about some successful IMLS-funded projects that involve technology or digitization activities, visit the Project Profiles section of the IMLS Web site.

In order to properly merge and articulate these core assets, an acquisition statement outlining the information architecture, leading to a racheting up of convergence across the organic platform is an opportunity without precedent in current applicability transactional modeling. Implementing these goals requires a careful examination to encompass an increasing complex out sourcing disbursement to ensure the extant parameters are not exceeded while focusing on infrastructure cohesion.

## **Key Findings**

### Technology Use

Small museums and public libraries have made dramatic progress, although they still lag behind their larger counterparts.

The extent of implementation and use of technologies in museums, public libraries, academic libraries, and all state library administrative agencies increased from the 2001 survey to the one conducted in 2004. The most dramatic increases are in small museums and public libraries, more of which have implemented basic office technologies and Web sites. Archives, which were not surveyed in 2001, report high percentages of basic and some advanced technologies in use.

- The use of essential office technologies (e-mail, office productivity software, and desktop computers) is pervasive among state library administrative agencies, large archives, museums, public libraries, and academic libraries. Small museums and public libraries have expanded their use of basic technologies since the 2001 survey, but still lag behind the larger institutions.
- Internet connectivity is pervasive among all groups, with broadband connections predominant over modem connections, except among smaller institutions. Institutional Web sites are prevalent among institutions in all groups. Use of institutional Web sites has increased in small museums and public libraries since the 2001 survey, but these institutions still lag behind medium and large institutions.

# Libraries and museums are putting services and activities online to manage their institutions and provide enhanced public service.

Newer technologies that use Internet-based and other kinds of online services and activities are being widely implemented among all groups.

New technologies include broadband Internet connections, which are easing out
modem Internet connections; online catalogs of collections and holdings; local area
networks (LANs); intranets; wireless networks; meta- or federated searching in online
collections and catalogs; and software to manage public access computers and
printing.

#### Insufficient funding and staff time are barriers to implementing technology.

Lack of sufficient funding and staff time limit the ability of institutions in all groups to implement technologies that will enable them to fully meet their missions.

• Technology funds were available to at least a majority of the members of each group over the last 12 months. When asked about the percentage of technology needs that are met by current technology funding, at least a majority of archives, academic libraries,

- public libraries, and state library administrative agencies report that they have adequate funding. However, almost two-thirds of museums, 31 percent of archives, 50 percent of large academic libraries, and the majority of small public libraries say their technology is less than adequately funded.
- Institutions among all groups report that they can maintain technologies currently in use, but they have less confidence in their ability to add new technologies to meet evolving needs.
- Technology capacity (equipment, software, connectivity, skills and expertise) to meet institutional missions is more prevalent among state library administrative agencies, public libraries, and academic libraries. The majority of museums and archives report that they have the technology capacity to meet or almost meet their mission. However, more than two-thirds of institutions among all the groups reported that they do not have enough skilled staff to accomplish their technology objectives.

# Assessment of user and visitor needs is strongest among academic libraries and state library administrative agencies and weak among other groups.

- Almost half of academic libraries and state library administrative agencies conduct assessments of user and visitor needs.
- The percentage of public libraries, archives, and museums that conduct them is 25 percent or less.

#### **Digitization Activities**

# Digitization activities have increased for all groups, with state library administrative agencies and archives leading the way.

Between 2001 and 2004, digitization activities increased in museums, academic libraries, state library administrative agencies, and public libraries. State library administrative agencies and archives reported more digitization activity in 2004 than other groups.

• Institutions in all of the groups are digitizing materials and objects, though some groups are more active than others. When asked about materials and images digitized over the past 12 months, archives were the most active in terms of the percentage that digitized. Large numbers of museums and state library administrative agencies also digitized materials during that period. Nearly half of academic libraries were engaged in digitization, as were about one-third of large public libraries. No digitization activities took place in one-fifth of state library administrative agencies and museums, more than one-third of academic libraries, and more than three-quarters of small and medium public libraries.

While more institutions have digitization policies in place than was the case in 2001, many institutions that are digitizing do not have digitization policies.

The extent of digitization policies in place has increased since the first survey. However, while many institutions are digitizing items and materials, most do not have policies in place for digitization activities.

- More that three-quarters of state library administrative agencies and archives, the
  majority of museums and large academic libraries, and one-third of large public
  libraries make their digital images available to the public. Lower percentages of small
  and medium academic and public libraries make their images public. Access to digital
  images via the Web is the predominant method, though many institutions also provide
  on-site access via LANs.
- The extent of digitization policies in place or in development among museums, state library administrative agencies, public libraries, and academic libraries has increased since the 2001 survey. However, the 2004 survey shows that digitization policies are in place in fewer than half of archives and state library administrative agencies, with the other groups reporting lower numbers of policies in place. The survey showed that digitization activities have increased among all groups, but the use of policies on all aspects of digitization is not strong.

# With a substantial number of materials left to digitize, institutions are held back by lack of funding, lack of staff time, and other pressing priorities.

More than half of the archives and state library administrative agencies said they have 25,000 or more items still to be digitized, as do some museums, academic libraries, and large public libraries. At the other end of the digitization spectrum, there are institutions among every group that have no items to digitize, including almost half of public libraries and a fourth of academic libraries.

#### Key digitization findings:

- Almost three-quarters of state library administrative agencies and more than half of archives had funds for digitization over the past 12 months. The majority of large museums had funds, as did more than one-fourth of academic libraries. However, the majority of museums, academic libraries, and public libraries did not have funds for digitization during that period.
- To undertake digitization activities, all groups reported that training current staff to
  perform digitization activities is the predominant solution. Volunteers are also heavily
  used, particularly in museums and archives. Some institutions use outsourcing
  solutions, including contractual staff, off-site vendors, and digitization centers at other
  institutions.
- When asked about their capability for digitization activities, larger institutions rated themselves more strongly than small ones. All groups rated themselves most capable in the areas of staff skills and expertise, and equipment and software. Across institutions, funding was the weakest capability area.
- Among museums, academic libraries, state library administrative agencies, and archives, the three top hindrances to their digitization activities are lack of staff time, lack of funds, and other projects that have higher priorities. Public libraries also

included lack of staff skills and expertise, lack of sufficient equipment and/or software, and lack of an established digitization plan as top hindrances. One hindrance that was rated low among all groups was "not having collections worth digitizing."

#### While collaborative digitization efforts are underway, they are not yet widespread.

- All of the groups reported collaboration in digitization projects with other institutions, although the overall percentages of those collaborate is not high.
- The majority of state library administrative agencies provide funding or services to other institutions, including supporting cooperative digitization projects and supporting statewide digitization projects.

# Only a small portion of museums and libraries assess user and visitor needs for digitized collections and services.

• Three-quarters or more of institutions in all groups do not conduct assessments of user or visitor needs for digitized materials and images in their institutions. Almost one-fourth of state library administrative agencies do assessments, which is the highest level among all the groups.

## **Background and Methodology**

#### **Background to the Study**

In 2001, the Institute of Museum and Library Services (IMLS) undertook a survey of the use and practice of technology and digitization in museums and libraries across the country. The report was published as *Status of Technology and Digitization in the Nation's Museums and Libraries 2002 Report* (<a href="http://www.imls.gov/publications/TechDig02">http://www.imls.gov/publications/TechDig02</a>). The purpose of the report was to gather information to support technology adoption in libraries and museums. In addition to key findings about technology use and digitization activities among museums and libraries, the report included a number of action recommendations, one of which was that the survey be repeated in 2004. The survey was conducted a second time with some modifications in 2004. This is the report of that survey.

IMLS was created in 1996 when Congress passed the Museum and Library Services Act. When it was reauthorized in 2003, the act gave IMLS the additional authority to undertake analyses identifying needs and trends of museum and library services and to report on the impact and effectiveness of programs conducted with IMLS funds. This additional authority reaffirms the Institute's commitment to better understand, and respond to, technology needs and trends in the nation's museums and libraries.

Subtitles of the 1996 and 2003 legislation support funding for museums, libraries, and state library administrative agencies (SLAAs). Funding from these grant programs supports a wide range of technology and digitization services. The results of the 2001 and 2004 surveys are of interest to the following groups:

- Museums and libraries, who can plan their technology development by looking at the status and experience of their peers;
- IMLS, who will use the data to inform grant administration, focus research and related activities, and strengthen service to our communities;
- The public, who makes use of technology and digitization services at museums and libraries; and
- Policy makers, researchers, and funders, who can examine trends in technology and digitization activities, content, needs, and services at museums and libraries.

### **Purpose of the Survey and Survey Development**

The purpose of this survey was to gather information on the nature and extent of technology and digitization use and related plans and policies in the nation's museums and libraries and to compare these data with the data collected in 2001. The current survey was developed using the 2001 survey as a foundation, updating the initial baseline, and expanding the scope both in terms of context and the level of detail collected about digitization and technology in museums and libraries. Determining the status of digitization and technology in libraries and museums is an important step toward ensuring continued development of these institutions.

To develop the 2004 survey, IMLS staff representing libraries, museums, archives, and SLAAs were consulted concerning their goals for the 2004 survey. The 2001 survey was also reviewed for potential changes. The 2004 survey appears in Appendix A.

The 2001 survey contained four sections:

- 1. Demographics (type, size, location)
- 2. Technology (current and planned use, funding sources, use of technology in programming)
- 3. Digitization (plans, practices, policies, hindrances, goals)
- 4. IMLS's role

While the general outline remained the same for the 2004 survey, the following changes were made:

- 1. The 2001 survey collected data for four institution types: museums, public libraries, academic libraries, and SLAAs. The 2004 survey added archives as an institution type because this is an important constituent group about which IMLS has insufficient data.
- 2. The technology section from the 2001 survey contained 8 questions; the 2004 survey kept 5 of those and added 10 new questions, for a total of 15.
- 3. The digitization section of the 2001 survey contained 21 questions. The 2004 survey repeated 13 questions from the 2001 survey and added 13 new ones, for a total of 26 questions.
- 4. The section on IMLS's role retained two questions from the 2001 survey.

### **Sampling Methods**

The potential respondent universe was composed of five groups: museums, public libraries, academic libraries, archives, and SLAAs.

The museum population was identified by using the IMLS museums database (total number, 18,142), from which a random sample, stratified by region of the country and staff size, was drawn. The public and academic library population was identified by using the American Library Directory (ALD). For SLAAs, all 51 agencies (50 states plus the District of Columbia) were included.

The archives population was identified by compiling a list of all known archives that both served the public interest and were stand-alone institutions (i.e., not subunits of larger libraries or museums). To avoid duplication of data collected from other institution types

<sup>&</sup>lt;sup>1</sup> The IMLS in-house museums database represents approximately the entire museum universe in the United States.

<sup>&</sup>lt;sup>2</sup> ALD includes all known libraries in the United States, including public, academic, government, special libraries, etc. The total population of 23,030 in the directory was reduced to 13,247 once public and academic libraries were identified. While the electronic version of the ALD did not initially allow sorting of the sample by library type (i.e., public or academic), it was possible to distinguish library type by population once a revised database was received.

(such as museums and academic libraries), the archives sample did not include university archives (since those data would be included in the academic library sample), historic sites and national monuments (since those data would be included in the museum sample), or archives of for-profit institutions (since these institutions are not part of the IMLS constituency). The total number of archives that satisfied these criteria was 395, the entire population of which was surveyed.

As an institution type, archives were a challenge to define. A historical society, for instance, may be both a museum and archives, and some institutions have "library" in their name yet consider themselves to be archives. The problem of how to define each institutional category was resolved for the purpose of this survey by allowing each participating institution to choose the category to which it primarily belonged. However, the issues of how to define archives and how to identify the institutions that belong in an archives sample still remain to be addressed.

Using the parameters described above produced a total initial sample size of 6,089 organizations. Figure 1 shows the population size and initial sample size for this survey.

Figure 1 SURVEY POPULATION AND INITIAL SAMPLE SIZE						
Population						
Museums	18,142	2,510				
Libraries	13,247	3,133				
Archives	395	395 (total population)				
SLAAs	51	51 (total population)				
Total	31,835	6,089				

### **Conducting the Survey**

A pretest was conducted in April 2004 that allowed the survey team to determine if there were any questions that respondents were unable to answer and to review any unusual response patterns. Based on the pilot test results, minor modifications were made to the survey. The survey was conducted in both a paper-based and a Web-based format during July, August, and September 2004. To improve the response rate, several follow-up notices were sent to participants, reiterating the importance of the survey and requesting that the survey be completed within two weeks.

#### Response Rate and Validity

A total of 3,931 surveys were sent to 2,124 museums, 1,361 public and academic libraries, 395 archives, and 51 SLAAs.<sup>3</sup> A total of 947 survey responses were received. The overall response rate to the survey was 24 percent.

Figure 2 POPULATIONS, SAMPLE SIZE, AND RETURN RATES							
Population Size Size Total Response Rate Confidence Interval (95% confidence level							
Museum	18,142	2,124	479	23%	±4.4		
Library	13,247	1,361	309	23%	±5.5		
Public library	9,744	1,089	239	22%	±6.3		
Academic library	3,503	272	70	26%	±11.6		
Archives	395	395	117	30%	±7.6		
SLAA	51	51	42	82%	±6.4		
Total	31,835	3,931	947	24%	±3.1		

The findings of the survey are statistically representative at the following levels:

- Museums at the 95 percent (+/-4.4 percent) level
- Public libraries at the 95 percent (+/-6.3 percent) level
- Academic libraries at the 95 percent (+/-11.6 percent) level
- SLAAs at the 95 percent (+/-6.4 percent) level

At these confidence levels, the findings for SLAAs are definitive. The specific results for museums, public libraries, and academic libraries can be discussed in terms of trends for each. Trend results are also discussed when breaking down the data by demographic information, such as size of population served (public libraries) and size of budget (museums).

#### **Definitions**

The following definitions are provided for key terms used in the survey:

*Technology:* refers to the use of computers (hardware and software) to use and manage information in digital format; automated systems to support services; Internet and other network connections; Web sites and Web-based services; office productivity applications like word processing and e-mail; staff to support these activities; and the range of technologies that help staff and users search, access, and experience collections on-site and virtually.

<sup>&</sup>lt;sup>3</sup> The initial museum sample was reduced from 2,510 to 2,124, and the initial library sample was reduced from 3,133 to 1,361 after institutions with bad e-mail and mailing addresses and institutions initially placed in the wrong group were excluded.

*Digitization:* refers to the process of converting, creating, and maintaining books, art works, historical documents, photos, journals, etc., in electronic representation so they can be viewed via computer and other devices.

#### Museums

In this chapter, we provide an overview of the museum data, a detailed description of certain survey question responses by museum size, and a summary of comparisons with data from the 2001 survey.

#### 1. Museum Overview

#### 1.1 Technology overview

- Availability of funding: Sixty-three percent of all museums reported having funding for technology in the past 12 months. In the next 12 months, 62.3 percent of all museums plan to receive technology funding.
- Adequacy of technology funding: A total of 60.4 percent of museums reported that the majority of their technology needs are not met by current funding.
- Maintaining and adding technologies: All museums, regardless of size, agree that
  their institutions are able to maintain their current levels of technology, but they are
  neutral on their institutions' ability to add new uses of technology to meet evolving
  needs.
- *Technology capacity:* This includes equipment, software, connectivity, skills and expertise, and staffing. More than half of the museums (54.8%) reported that they have the technology capacity to meet or almost meet their missions.
- *Technologies in use:* 
  - o Basic computer technologies (e-mail, desktop computers, and office productivity software) are pervasive, used by at least 91.6 percent of museums.
  - o 88 percent of museums have a Web site.
  - o Broadband Internet connections are more prevalent in large museums (84.9%) than small ones (39%). Of the large museums, 31.5 percent use modems (dialup) for Internet access, while 50 percent of small museums use modems.
  - Large and small museums significantly differ in their use of local area networks (LANs): 90.3 percent of large museums have LANs, but only 29.6 percent of small museums have them.
  - o Three-fourths (75.3%) of museums used between 6 and 15 technologies in the past 12 months.
- Staff for technology activities: Across all museums, 23.4 percent have "the right amount" of staff to accomplish their technology activities, while 65.9 percent of museums reported that they do not have enough skilled staff for these activities. Of the large museums, only 17.4 percent have sufficient staff for technology activities, while the majority (76.1%) do not have enough staff for these activities.

• *Needs assessment:* Only 12 percent of museums conduct assessments of user or visitor needs for technology-supported services or experiences.

#### 1.2 Digitization overview

- Digitization policies: In general, more large museums have digitization policies than small and medium museums. However, even among large museums, only 34 percent or less have policies in place related to specific topic areas. For all museums, the topics that were most likely to have associated policies were access (23.4% of museums have policies related to access), digital format (21.5%), materials to be digitized (21.4%), preservation (19.4%), and security (19.3%). The topics least likely to have associated policies were metadata (7.3% of museums), conversion of digital files to next-generation formats (7.6%), and evaluation (8.6%).
- Funding for digitization activities: More large museums (52.2%) had funding to support their digitization activities in the past 12 months than did medium and small museums (38.3 and 28.5%, respectively). In general, the majority of museums (54.2%) did not have digitization funds. Looking toward the next 12 months, 40.3 percent of all museums planned to obtain funding to support their digitization activities.
- *Digitization priorities:* Digitizing photographs was a top priority for 56.2 percent of all museums; digitizing images of items in their collections was important to 53 percent; and digitizing historical documents/archives was a top priority for 45.1 percent of all museums.
- *Materials and images digitized:* Despite what the museums reported about digitization funding, 74.4 percent of them reported that they digitized from 1 to 5,000 images in the past 12 months; however, nearly half of all museums (46.4%) digitized only 1 to 500 images.
- *Materials or images still to be digitized:* Only 9.2 percent of museums reported they have no more images to digitize. Fifteen percent of all museums had between 1 and 500 items to digitize, and 16.5 percent had more than 25,000 items still to digitize.
- Undertaking digitization activities: Among all museums, 55.9 percent rely on training current staff to conduct digitization activities; 35.4 percent use volunteers; 14 percent reassign current staff to digitization tasks; 14.1 percent use contractual staff; 8.8 percent use commercial vendors off-site; and 4.5 percent conduct their digitization activities at other institutions' digitization centers.
- Making digital images available: Overall, 55.7 percent of museums make some or all of their digital images available to the public. Access is available via the Web at 56.2 percent of museums and on-site at 38.8 percent of museums. Over half of museums (54.5%) report that the general public (i.e., those with Internet access) is the target audience for whom they provide access to digital images; 53.4 percent report that the target audience for their digital images is museum staff; and 44.2 percent report that the target audience is outside researchers and scholars.

- *Needs assessment:* Only 10.6 percent of museums conduct assessments of user or visitor needs for digitized materials and images.
- *Collaboration:* When museums collaborate to digitize materials, 39.2 percent turn to historical societies; 38 percent collaborate with other museums; 32.9 percent collaborate with universities and colleges; and 30.4 percent collaborate with academic libraries.
- Capability for digitization activities: On a scale of 1 (deficient) to 5 (fully capable), museums rated themselves highest on staff skills (3.0) and equipment and software (2.6); the category that ranked lowest was funding (1.8). Smaller museums rated their digitization capability lower in almost every category than did medium and large museums.
- *Hindrances to digitization:* On a scale of 1 (strongly agree) to 5 (strongly disagree), museums rated a variety of hindrances to digitization capabilities. Among these, having too little staff time (1.6), having too little funding (1.6), and having other projects with higher priorities (1.7) were rated as the greatest hindrances to digitization activities. Not having collections worth digitizing (4.1) and having a management that is unaware of the benefits of digitization (3.6) were least likely to be regarded as hindrances.

### 2. Museum Size Analyses

This section highlights the difference between small, medium, and large museums based on their budget size and discusses issues related to technology and digitization, comparing how these issues differ among the three size categories. To determine the small, medium, and large categories, we used the museum survey question B on museum annual budget size.

FIGURE 1 MUSEUM SIZE ANALYSES				
Size of Museums' Annual Budget Budgets (2004) Categories				
Less than \$250,000	Small			
\$250,001-\$500,000				
\$500,001-\$750,000	Medium			
\$750,001-\$1,000,000				
\$1,000,001-\$5,000,000				
\$5,000,001-\$10,000,000	Larga			
\$10,000,001-\$25,000,000	Large			
More than \$25,000,000				

Note: Data are based on responses to survey question B; respondents were asked to select only one option.

#### 2.1 Demographics

A total of 479 museums participated in the survey. However, not all participants responded to every question, so the numbers in the tables below might be slightly lower than 479. In addition, some tables are broken down by size of museum while others are presented on the whole, which may result in different sample sizes for different tables.

#### **Type of Museum**

Figure 2 shows the types of museums participating in the survey. The largest participating group was history museums (30.9%), followed by historic houses/sites (19.6%), and art museums (15.8%).

FIGURE 2							
PERCENTAGE OF EACH TYPE OF MUSEUM							
	Budget						
Museum Type	Small	Medium	Large	Total			
	(n=212)	(n=127)	(n=104)	(n=443)			
Aquarium	0.0%	1.8%	2.7%	0.9%			
Arboretum or botanical garden	0.0%	0.9%	4.1%	0.9%			
Art museum	8.2%	23.9%	29.7%	15.8%			
Children's museum	1.9%	4.4%	1.4%	2.5%			
General museum	2.7%	3.5%	2.7%	2.9%			
Historic house/site	25.3%	15.0%	6.8%	19.6%			
History museum	37.7%	23.0%	18.9%	30.9%			
Natural history/anthropology museum	5.4%	3.5%	6.8%	5.2%			
Nature center	3.1%	8.8%	0.0%	4.1%			
Science or technology center	1.9%	0.9%	6.8%	2.5%			
Zoological park	0.0%	1.8%	8.1%	1.8%			
Other*	13.6%	12.4%	12.2%	13.1%			

<sup>\* &</sup>quot;Other" encompasses the following types of museums: archaeological museum, architectural museum, art and history museum, culturally specific museum, historical society, military museum, tribal museum, and university gallery.

Note: Data are based on responses to survey question A; respondents were asked to select only one option.

#### **Budget**

Figure 3 shows the annual budget for museums. Almost half of all museums reported a budget of less than \$250,000, while nearly one-fifth reported a budget of \$1 million to \$5 million.

FIGURE 3 PERCENTAGE OF MUSEUMS WITH EACH SIZE ANNUAL BUDGET				
Annual Budget Percent (n=444)				
Less than \$250,000	48.0%			
\$250,001-\$500,000	14.6%			
\$500,001-\$750,000	6.5%			
\$750,001-\$1,000,000	7.4%			
\$1,000,001-\$5,000,000	17.8%			
\$5,000,001-\$10,000,000	3.2%			
\$10,000,001-\$25,000,000	2.0%			
Over \$25,000,000	0.5%			

Note: Data are based on responses to survey question B; respondents were asked to select only one option.

#### **Staff Size**

Figure 4 shows museum staff size. More than half of the museums participating in the survey had fewer than five full-time staff.

FIGURE 4 PERCENTAGE OF MUSEUMS WITH EACH SIZE CURRENT PAID, FULL-TIME-EQUIVALENT STAFF			
Staff Size Percent (n=444)			
Less than 5	57.9%		
6–10	13.7%		
11–25	11.7%		
26–75	12.2%		
76–150	2.7%		
151–250	1.1%		
251–500	0.7%		
501–1,000 0.0%			
1,001–1,500	0.0%		
More than 1,500	0.0%		

Note: Data are based on responses to survey question C; respondents were asked to select only one option.

### 2.2 Technology

#### **Technology Funding**

Sixty-three percent of all museums reported having funding for technology in the past 12 months. In the next 12 months, 62.6% of all museums plan to receive technology funding.

EXHIBIT 5 FUNDING FOR TECHNOLOGY						
Response Option	Small (n=212)	Medium (n=126)	Large (n=100)	Total (n=438)		
In the past 12 months, did your in	stitution have	funding for	technology?			
Yes	50.2%	73.2%	78.0%	63.2%		
No	46.9%	25.2%	19.0%	34.3%		
Don't know/Not applicable	2.8%	1.6%	3.0%	2.5%		
In the next 12 months, do you plan	n to have fun	ding for your	technology?			
Yes	44.3%	74.6%	86.0%	62.6%		
No	36.3%	11.9%	5.0%	22.1%		
Don't know/Not applicable	19.3%	13.5%	9.0%	15.3%		

Note: Data are based on responses to survey questions 1 and 2; respondents were asked to select only one option.

#### **Adequate Funding of Technology Needs**

Nearly 40 percent of all museums say that current funding meets 51 percent or more of their technology needs. However, 60.4 percent of museums report that current funding meets only 50 percent or *less* of their technology needs. Of the small museums, 20.2 percent report that none (0%) of their technology needs is met.

FIGURE 6 PERCENTAGE OF TECHNOLOGY NEEDS THAT ARE MET BY CURRENT FUNDING						
Percentage of			ıdget			
Needs Met	Small (n=203)	Small (n=203)         Medium (n=124)         Large (n=93)         Total (n=420)				
0%	20.2%	4.8%	3.2%	11.9%		
1–25%	37.4%	28.2%	34.4%	34.0%		
26–50%	10.3%	17.7%	19.4%	14.5%		
51–75%	6.4%	29.0%	23.7%	16.9%		
76–99%	11.3%	12.9%	14.0%	12.4%		
100%	14.3%	7.3%	5.4%	10.2%		

Note: Data are based on responses to survey question 3; respondents were asked to select only one option.

#### **Maintaining and Adding Technology**

Overall, museums are positive about their institutions' ability to maintain their current levels of technology, but they are more negative about their institutions' ability to add new uses of technology to meet evolving needs. Figure 7 shows the mean ratings of an institution's ability to maintain or add technology based on a 5-point scale, with "1" meaning strongly agree and "5" meaning strongly disagree. Therefore, ratings less than 2.5 tend to indicate agreement, and ratings greater than 2.5 tend to indicate disagreement.

FIGURE 7 ABILITY TO MAINTAIN AND ADD TECHNOLOGY						
Budget						
My institution is able to:	Small (n=177)	Medium (n=123)	Large (n=94)	Total (n=394)		
Maintain its current level of technology	2.2	2.3	2.3	2.3		
Add new uses of technology to meet evolving needs	3.1	3.1	3.3	3.1		

Note: Data are based on responses to survey question 4. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

#### **Extent of Technology Capacity**

One-fourth of museums with small budgets have the technology capacity necessary to meet their missions, while more than 40 percent of museums with large budgets cannot completely fulfill their missions with their current technology capacity.

FIGURE 8 TECHNOLOGY CAPACITY TO MEET MISSION					
Budget					
Response Option	Small Medium Large Total				
(n=204) (n=124) (n=99) (n=427)					
Currently meets our mission	25.0%	22.6%	22.2%	23.7%	
Almost meets our mission	27.9%	35.5%	32.3%	31.1%	
Is short of meeting our mission	27.5%	35.5%	40.4%	32.8%	
Does not meet our mission	10.3%	5.6%	4.0%	7.5%	
Don't know/Not applicable	9.3%	0.8%	1.0%	4.9%	

Note: Data are based on survey question 5; respondents were asked to select only one option.

#### **Technologies Used in Past 12 Months**

Almost all museums, regardless of size, are using desktop computers (93.7%), e-mail (92.3%), office productivity software (91.6%), and Web sites for their institutions (88.0%).

Small and medium museums were more likely to use modems (dial-up access) to connect to the Internet than large museums: 50 percent of small and 50.4 percent of medium museums used modems, compared with only 31.5 percent of large museums. Conversely, large museums were much more likely to use broadband Internet connection than small museums and considerably more likely than medium museums: 84.9 percent of large museums used broadband, compared with 39.0 percent of small museums and 72.7 percent of medium museums.

Large museums were also much more likely to use a LAN (local area network) than small museums: 90.3 percent of large museums used LANs, compared with 29.6 percent of small museums.

FIGURE 9 MUSEUMS THAT USED THE FOLLOWING TECHNOLOGIES IN THE PAST 12 MONTHS					
		Budg	get		
Technology	Small (n=200)	Medium (n=124)	Large (n=97)	Total (n=421)	
Accounting/payroll /human resources software	54.1%	81.0%	91.3%	70.9%	
Broadband Internet connection	39.0%	72.7%	84.9%	60.1%	
Computerized catalog of library or other collections	46.3%	55.0%	66.3%	53.5%	
Computerized collections management system	39.9%	67.8%	75.3%	56.6%	
Database software or system for membership development	48.4%	67.5%	81.1%	61.9%	
Desktop computers	87.4%	99.2%	99.0%	93.7%	
E-mail	84.5%	100.0%	97.9%	92.3%	
GIS (geographic information systems) applications	6.8%	14.5%	24.4%	13.2%	
Integrated library system (ILS)	12.1%	8.0%	21.2%	12.9%	
Intranet	26.3%	44.2%	55.1%	38.4%	
LAN (local area network)	29.6%	68.6%	90.3%	55.9%	
Marketing and promotion software and systems	6.6%	14.0%	26.7%	13.5%	
Meta- or federated searching in online collections and catalogs	11.2%	11.5%	24.4%	14.3%	
Modem (dial access) Internet connection	50.0%	50.4%	31.5%	45.8%	
Multimedia services or collections	22.3%	21.4%	43.0%	26.7%	
Notebook or tablet computers	18.2%	47.9%	67.7%	39.2%	
Office productivity software, including word processing, desktop publishing, and spreadsheets	85.7%	96.6%	96.9%	91.6%	
PDAs (personal digital assistant handheld devices)	6.6%	19.0%	36.6%	17.4%	
Personal information management (PIM) software	3.4%	13.3%	19.8%	10.1%	
Point-of-sale software and systems	5.6%	24.6%	58.1%	23.8%	
RFID (radio frequency identification) in services or collections	0.6%	1.8%	5.9%	2.1%	
Software to manage public-access computers and printing	11.5%	9.8%	21.3%	13.3%	
Video tours	11.6%	13.2%	12.4%	12.2%	
Virtual reality tours	7.7%	7.1%	12.5%	8.6%	
Web portal or gateway for services or collections	12.8%	22.1%	37.9%	21.4%	
Web site for your institution	78.0%	96.7%	96.9%	88.0%	
Wireless network, including WiFi	14.0%	18.4%	23.6%	17.5%	
Other	7.1%	16.7%	12.5%	9.2%	

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

Three-fourths (75.3%) of museums used between 6 and 15 technologies in the past 12 months.

FIGURE 10 PERCENTAGE OF MUSEUMS THAT USED THE FOLLOWING NUMBER OF TECHNOLOGIES IN THE PAST 12 MONTHS					
	Budget				
	Small (n=200)	Medium (n=124)	Large (n=97)	Total (n=421)	
0	6.5%	0.0%	1.0%	3.3%	
1–5	21.5%	3.2%	3.1%	11.9%	
6–10	51.0%	41.9%	16.6%	40.4%	
11-15	17.0%	48.4%	54.6%	34.9%	
16-20	4.0%	6.5%	21.6%	8.8%	
21 or more	0.0%	0.0%	3.1%	0.7%	

Note: Data are based on responses to survey question 6.

#### **Staff Capabilities**

More medium museums (28.8%) have the right number of skilled staff to accomplish their technology activities than both small (22.9%) and large (17.4%) museums.

Overall, the majority of museums (65.9%) do not have enough skilled staff to accomplish their technology activities.

FIGURE 11 EXTENT TO WHICH MUSEUMS HAVE SUFFICIENT SKILLED STAFF TO ACCOMPLISH TECHNOLOGY ACTIVITIES					
Response Option Small Medium Large Total (n=192) (n=118) (n=92) (n=402)					
We do not have enough skilled staff to accomplish our technology activities.	60.4%	66.9%	76.1%	65.9%	
We have the right amount of skilled staff to accomplish our technology activities.	22.9%	28.8%	17.4%	23.4%	
We have more than enough skilled staff to accomplish our technology activities.	1.6%	0.0%	1.1%	1.0%	
Other (please list)	4.7%	1.7%	3.3%	3.5%	
Don't know/Not applicable	10.4%	2.5%	2.2%	6.2%	

Note: Data are based on responses to survey question 10; respondents were asked to select only one option.

#### **Needs Assessments**

A higher number of large and medium museums (16.8 and 13.6%, respectively) conduct assessments of user or visitor needs for technology-supported services or experiences at their institutions than small museums (8.5%).

Overall, however, the majority of museums (80.3%) do not conduct assessments of user or visitor needs for technology-supported services or experiences at their institutions.

FIGURE 12 CONDUCT NEEDS ASSESSMENTS FOR TECHNOLOGY-SUPPORTED SERVICES						
Budget						
Response Option	Small	Medium	Large	Total		
	(n=188)	(n=118)	(n=95)	(n=401)		
Yes	8.5%	13.6%	16.8%	12.0%		
No	83.0%	79.7%	75.8%	80.3%		
Don't know/Not applicable	8.5%	6.8%	7.4%	7.7%		

Note: Data are based on responses to survey question 12; respondents were asked to select only one option.

#### 2.3 Digitization

#### **Digitization Policies**

Overall, a higher number of large museums have digitization policies in place than medium or small museums. The most prevalent digitization policies are those for access (23.4% of museums have access policies), digital format (21.5%), and materials to be digitized (21.4%). The least prevalent policies include those for metadata (7.3%) and conversion of digital files to next-generation formats (7.6%). Overall, however, the data show that even the most prevalent policies are in place in less than 25 percent of all museums.

FIGURE 13					
DIGITIZATION POLICI	ES IN PLA	CE			
	Budget				
Digitization Policies	Small (n=182)	Medium (n=115)	Large (n=92)	Total (n=389)	
Access	17.7%	25.4%	32.2%	23.4%	
Best practices	5.2%	8.0%	17.0%	8.8%	
Conversion of digital files to next-generation formats	5.6%	8.7%	10.1%	7.6%	
Digital format (e.g., TIFF, GIF, PAL)	18.0%	17.0%	34.1%	21.5%	
Evaluation	6.9%	8.3%	12.4%	8.6%	
Institutional repository	16.9%	16.8%	20.2%	17.7%	
Intellectual property issues	9.1%	20.5%	21.1%	15.3%	
Materials to be digitized	18.8%	20.5%	27.5%	21.4%	
Priorities for digitization	15.1%	18.6%	25.3%	18.5%	
Preservation	16.9%	21.1%	22.0%	19.4%	
Quality control	12.0%	14.4%	21.3%	14.9%	
Standards	13.1%	14.4%	24.7%	16.2%	
Metadata	6.4%	3.7%	13.5%	7.3%	
Security	15.0%	20.7%	25.8%	19.3%	
Other	0.0%	4.2%	17.6%	3.9%	

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply.

#### **Digitization Funding**

A higher number of large museums (52.2%) had funding to support their digitization activities

in the past 12 months than did medium and small museums (38.3 and 28.5%, respectively). In general, the majority (54.2%) of museums did not have digitization funds.

FIGURE 14 FUNDING TO SUPPORT DIGITIZATION ACTIVITIES					
Budget					
Response Option	Small (n=186)			Total (n=393)	
Yes	28.5%	38.3%	52.2%	36.9%	
No	61.3%	52.2%	42.4%	54.2%	
Don't know/Not applicable	10.2%	9.6%	5.4%	8.9%	

Note: Data are based on responses to survey question 18; respondents were asked to select only one option.

#### **Materials for Digitization**

Overall, 10.9 percent of museums have been digitizing photographs, 9.1 percent have been digitizing images of items in their collections, 8.4 percent have been digitizing education and training materials about their collections, and 8.4 percent have been digitizing historical documents/archives.

FIGURE 15 MATERIALS THAT HAVE BEEN DIGITIZED				
IN THE PAST 12 MONTHS OR ARE C	URRENTLY	BEING D	IGITIZED	
		Bud	lget	
Material	Small (n=179)	Medium (n=114)	Large (n=94)	Total (n=387)
Correspondence, diaries, and other personal records	3.0%	3.6%	3.4%	3.3%
Course material	3.7%	5.5%	4.4%	4.4%
Education and training material about the collections	7.5%	8.3%	9.9%	8.4%
Films, videotapes	3.0%	6.4%	5.6%	4.6%
Government publications	0.6%	0.0%	0.0%	0.3%
Historical documents/archives	8.8%	9.3%	6.7%	8.4%
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	10.0%	9.0%	7.5%	9.1%
Information on the institution	6.7%	1.8%	8.0%	5.5%
Journals and other serials	1.9%	1.9%	2.3%	2.0%
Manuscripts	1.2%	2.8%	5.6%	2.8%
Maps	1.9%	7.3%	6.7%	4.7%
Music and other recorded sound	0.6%	0.9%	6.9%	2.3%
Newspapers	0.6%	0.0%	4.5%	1.4%
Photographs	11.0%	14.4%	6.5%	10.9%
Rare books	1.8%	3.8%	3.4%	2.8%
Records about the collection	9.8%	4.6%	5.6%	7.2%
Sheet music	0.0%	1.9%	1.1%	0.8%
Special exhibits	4.3%	10.2%	4.4%	6.1%
Theses and dissertations	0.7%	1.0%	1.1%	0.9%
Other (please list)	2.2%	6.3%	12.5%	5.1%

Note: Data are based on responses to survey question 20; respondents were asked to select all that apply.

### **Primary Digitization Priorities**

Of the museums surveyed, the three highest digitization priorities were as follows:

- Photographs: 56.2 percent of all museums considered this a digitization priority.
- Images of items in the collections: 53.0 percent identified this category as a digitization priority.
- Historical documents/archives: 45.1 percent of all museums considered this a priority.

FIGURE 16 DIGITIZATION PRIORITIES					
	Budget				
Priority	Small (n=179)	Medium (n=112)	Large (n=94)	Total (n=385)	
Correspondence, diaries, and other personal records	13.9%	19.4%	13.4%	15.2%	
Course material	3.2%	8.2%	4.5%	4.7%	
Education and training material about the collections	14.8%	15.3%	16.4%	15.2%	
Films, videotapes	6.5%	5.1%	9.0%	6.6%	
Government publications	2.8%	0.0%	0.0%	1.6%	
Historical documents/archives	47.7%	48.0%	32.8%	45.1%	
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	49.1%	53.1%	65.7%	53.0%	
Information on the institution	13.0%	10.2%	20.9%	13.6%	
Journals and other serials	2.3%	0.0%	0.0%	1.3%	
Manuscripts	3.2%	9.2%	3.0%	4.7%	
Maps	10.2%	11.2%	7.5%	10.0%	
Music and other recorded sound	3.2%	5.1%	0.0%	3.1%	
Newspapers	5.1%	2.0%	1.5%	3.7%	
Photographs	54.2%	57.1%	61.2%	56.2%	
Rare books	1.9%	1.0%	9.0%	2.9%	
Records about the collection	13.0%	15.3%	10.4%	13.1%	
Sheet music	0.5%	0.0%	1.5%	0.5%	
Special exhibits	7.4%	10.2%	10.4%	8.7%	
Theses and dissertations	0.5%	0.0%	1.5%	0.5%	
Other (please list)	2.3%	3.1%	4.5%	2.9%	
Don't know/Not applicable	12.0%	5.1%	3.0%	8.7%	

Note: Data are based on responses to survey question 22; respondents were asked to select their institution's top three priorities.

#### **Number of Digital Materials Created in the Past 12 Months**

Almost three-quarters (74.4%) of museums digitized between 1 and 5,000 images in the past 12 months.

FIGURE 17 NUMBER OF DIGITAL MATERIALS OR IMAGES						
CREA	CREATED IN THE PAST 12 MONTHS					
Budget						
Number	Small Medium Large Total					
	(n=180)	(n=112)	(n=94)	(n=386)		
0	33.9%	10.7%	14.9%	22.5%		
1-500	45.6%	54.5%	38.3%	46.4%		
501-1,000	13.3%	17.9%	14.9%	15.0%		
1,001-5,000	6.1%	15.2%	23.4%	13.0%		
5,001–10,000	1.1%	0.9%	4.3%	1.8%		
10,001–25,000	0.0%	0.0%	1.1%	0.3%		
More than 25,000	0.0%	0.9%	3.2%	1.0%		

Note: Data are based on responses to survey question 23; respondents were asked to select only one option.

#### Number of Additional Images Remaining to Be Digitized

Overall, 66.9 percent of all museums have 1,001 to 25,000 or more digital materials or images left to be digitized. Only 9.2 percent of museums overall report that they have no materials or images left to digitize.

FIGURE 18 Number of Digital Materials or Images Left to Be Created						
Number Small Medium Large Total						
	(n=176) (n=112) (n=93) (n=38					
0	14.2%	5.4%	4.3%	9.2%		
1–500	19.9%	12.5%	8.6%	15.0%		
501-1,000	9.1%	10.7%	6.5%	8.9%		
1,001-5,000	26.7%	24.1%	17.2%	23.6%		
5,001-10,000	13.1%	14.3%	15.1%	13.9%		
10,001–25,000	8.5%	17.0%	16.1%	12.9%		
More than 25,000	8.5%	16.1%	32.3%	16.5%		

Note: Data are based on survey question 24; respondents were asked to select only one option.

#### **Undertaking Digitization Activities**

Overall, museums undertake their digitization activities by the following:

- Training current staff to perform these activities: 55.9 percent use this means.
- Having volunteers perform these activities: 35.4 percent use this means.
- Reassigning current staff to perform these activities: 14.9 percent use this means.
- Hiring contractual staff to perform these activities in-house: 14.1 percent use this means.

FIGURE 19					
MEANS OF UNDERTAKING	DIGITIZA	TION ACTI	VITIES		
		Bud	9		
Response Option	Small (n=175)	Medium (n=110)	Large (n=91)	Total (n=376)	
Contractual staff were hired to perform these activities in-house.	4.6%	16.4%	29.7%	14.1%	
New institutional staff were hired to perform these activities.	4.6%	3.6%	15.4%	6.9%	
Current staff were trained to perform these activities.	39.4%	69.1%	71.4%	55.9%	
Current staff were reassigned to perform these activities.	8.0%	15.5%	27.5%	14.9%	
Volunteers perform these activities.	32.6%	41.8%	33.0%	35.4%	
These activities are performed by commercial vendors off-site.	4.6%	8.2%	17.6%	8.8%	
Materials are digitized off-site at another institution's digitization center.	2.3%	5.5%	7.7%	4.5%	
Other (please list)	3.4%	6.4%	4.4%	4.5%	
Don't know/Not applicable	33.3%	11.0%	8.9%	20.9%	

Note: Data are based on responses to survey question 26; respondents were asked to select all that apply.

#### The Availability of Digital Image Collections to the Public

Overall, 55.7 percent of museums make some or all of their digital image collections available to the public. Almost three-fourths (73.6%) of museums with large budgets make their digital image collections available to the public, whereas only 58.7 percent of museums with medium budgets and 44.6 percent of museums with small budgets make their digital image collections available to the public.

FIGURE 20 PUBLIC AVAILABILITY OF DIGITAL IMAGE COLLECTIONS						
Budget						
Response Option	Small (n=175)	Medium (n=109)	Large (n=91)	Total (n=375)		
Yes, some of our digital image collections are available to the public.	33.7%	46.8%	63.7%	44.8%		
Yes, all of our digital image collections are available to the public.	10.9%	11.9%	9.9%	10.9%		
No, our digital image collections are not available to the public.	26.9%	27.5%	17.6%	24.8%		
Don't know/Not applicable	28.6%	13.8%	8.8%	19.5%		

Note: Data are based on responses to survey question 27; respondents were asked to select only one option.

#### **How Digital Image Collections Are Made Available**

Of those museums that make their digital image collections available to the public, the majority (56.2%) make their collections available via the Web, and more than one-third make their collections available on the premises on their computer networks (LANs).

FIGURE 21 HOW DIGITAL IMAGE COLLECTIONS ARE MADE AVAILABLE						
	Budget					
Response Option	Small (n=127)	Medium (n=79)	Large (n=75)	Total (n=281)		
On the premises on our computer network (LAN)	33.9%	45.6%	40.0%	38.8%		
On the Web	41.7%	63.3%	73.3%	56.2%		
Through a third party	6.3%	2.5%	6.7%	5.3%		
Don't know/Not applicable	36.8%	17.9%	12.0%	24.8%		

Note: Data are based on responses to survey question 28; respondents were asked to select all that apply. Table only includes respondents who reported that they make some or all of their digital image collections available to the public.

#### **Target Audience**

Of all museums surveyed, 54.5 percent identified the general public who have Internet access as their target audience for access to digital images; 53.4 percent identified museum staff as their target audience; and 44.2 percent identified outside researchers and scholars as their target audience for access to digital images.

FIGURE 22							
TARGET AUDIENCE							
		Budget					
Response Option	Small (n=174)	Medium (n=108)	Large (n=91)	Total (n=373)			
General public who have Internet access	43.1%	55.6%	74.7%	54.4%			
Onsite visitors at our institution	39.7%	25.9%	26.4%	32.4%			
Members (e.g., library card holders, museum members)	23.0%	11.1%	12.1%	16.9%			
Our staff	45.4%	59.3%	62.6%	53.6%			
Consortia/partners	4.0%	2.8%	3.3%	3.5%			
Researchers/scholars at our institution	19.0%	23.1%	20.9%	20.6%			
Faculty at our institution	8.6%	5.6%	3.3%	6.4%			
Educators not part of our institution	14.9%	26.9%	27.5%	21.4%			
Students at our institution	9.2%	5.6%	3.3%	6.7%			
Students at affiliated institutions	5.2%	5.6%	3.3%	4.8%			
Alumni	1.1%	0.0%	0.0%	0.5%			
Other researchers and scholars	40.2%	46.3%	48.4%	44.0%			
Other	1.7%	4.6%	2.2%	2.7%			
Don't know/Not applicable	10.3%	5.6%	0.0%	6.4%			

Note: Data are based on survey question 33; respondents were asked to select their institution's top three target audiences.

#### **Needs Assessments**

A higher percentage of large museums conduct assessments of user or visitor needs for digitized materials and images than either medium or small museums. However, most museums (84.4%), regardless of size, do not conduct such assessments at all.

FIGURE 23 CONDUCT NEEDS ASSESSMENTS FOR DIGITIZED MATERIALS						
	Budget					
Response Option	Small (n=178)	Medium (n=109)	Large (n=92)	Total (n=379)		
Yes	6.7%	9.2%	19.6%	10.6%		
No	87.1%	85.3%	78.3%	84.4%		
Don't know/Not applicable	6.2%	5.5%	2.2%	5.0%		

Note: Data are based on responses to survey question 35; respondents were asked to select only one option.

#### Collaboration

Slightly more than one-fifth (20.9%) of museums collaborate (through specific partnering agreements) with other institutions and organizations to digitize materials.

FIGURE 24 COLLABORATION TO DIGITIZE MATERIALS							
Response Option	Small   Medium   Large   Tot   (n=179)   (n=108)   (n=91)   (n=3						
Yes	14.5%	26.9%	26.4%	20.9%			
No	81.0%	67.6%	70.3%	74.6%			
Don't know/Not applicable	4.5%	5.6%	3.3%	4.5%			

Note: Data are based on survey question 37; respondents were asked to select only one option.

When museums collaborate to digitize materials, 39.2 percent collaborate with historical societies; 38.0 percent collaborate with other museums; 32.9 percent collaborate with universities and colleges; and 30.4 percent collaborate with academic libraries.

FIGURE 25							
COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS							
	Small	Medium	Large	Total			
	(n=26)	(n=29)	(n=24)	(n=79)			
State library agencies	34.6%	10.3%	16.7%	20.3%			
Academic libraries	23.1%	20.7%	50.0%	30.4%			
Individual public libraries	19.2%	24.1%	16.7%	20.3%			
Private libraries	3.8%	3.4%	12.5%	6.3%			
Museums	26.9%	31.0%	58.3%	38.0%			
Consortia	7.7%	3.4%	29.2%	12.7%			
State archives	23.1%	13.8%	12.5%	16.5%			
Special libraries	0.0%	6.9%	12.5%	6.3%			
Historical societies	42.3%	34.5%	41.7%	39.2%			
Federal government agencies or archives	3.8%	17.2%	25.0%	15.2%			
Other state government agencies	15.4%	10.3%	29.2%	17.7%			
City, municipal, or other local government agencies or archives	7.7%	20.7%	12.5%	13.9%			
Universities and colleges	19.2%	27.6%	54.2%	32.9%			
Community organizations	11.5%	6.9%	8.3%	8.9%			

FIGURE 25 COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS							
Small (n=26)         Medium (n=29)         Large (n=24)         Total (n=79)							
Private companies	0.0%	0.0%	8.3%	2.5%			
Foundations	0.0%	3.4%	4.2%	2.5%			
State library associations	11.5%	6.9%	4.2%	7.6%			
State museum associations	11.5%	10.3%	4.2%	8.9%			
Other professional associations	3.8%	6.9%	8.3%	6.3%			
Other	23.1%	10.3%	4.2%	12.7%			

Note: Data are based on survey question 37; respondents were asked to select all that apply.

#### Capabilities in Initiating, Accomplishing, and Sustaining Digitization Activities

Small museums rate themselves the least capable at initiating, accomplishing, and sustaining digitization activities, while medium and large museums rate themselves somewhat more capable.

Figure 26 shows the average ratings of an institution's capability to initiate, accomplish, and sustain digitization activities based on a 5-point scale, with "1" being deficient and "5" being fully capable. Therefore, ratings less than 2.5 tend to indicate deficiency and ratings greater than 2.5 tend to indicate capability.

FIGURE 26 CAPABILITY TO INITIATE, ACCOMPLISH, AND SUSTAIN DIGITIZATION ACTIVITIES						
Comphilite.	Budget					
Capability		Medium (n=103)	_	Total (n=349)		
Staff skills and expertise	2.7	3.1	3.2	3.0		
Equipment and software	2.4	2.8	2.7	2.6		
Funding	1.8	1.9	1.8	1.8		
Established digitization plan	1.8	2.2	2.4	2.1		
Established digitization policies	1.7	2.2	2.3	2.0		
Established quality standards	1.8	2.3	2.6	2.2		
Established procedures for preparation for creating digital images	1.9	2.5	2.8	2.3		
Established procedures for the management of images and files	2.1	2.6	2.7	2.4		
Other (please list)	1.0	2.3	5.0	1.9		

Note: Data are based on responses to survey question 39; respondents were asked to select all that apply. The scale for this question was 1, meaning deficient, to 5, meaning fully capable.

#### **Hindrances to Digitization Activities**

Overall, museums (regardless of size) tended to agree that all of the items listed in Figure 27 are hindrances to their digitization activities, with "lack of staff time," "lack of funds," and "other projects have higher priority" cited as the strongest ones. "Not having collections worth digitizing" and "management is unaware of the benefits of digitization" were the least-cited hindrances.

Figure 27						
HINDRANCES TO DIGITIZATION ACTIVITIES						
Digitization Activities in Your Small Medium Large Total						
Institution are Hindered by the Following:	(n=163)	(n=105)	(n=88)	(n=356)		
Lack of staff time	1.6	1.5	1.6	1.6		
Lack of staff skills and expertise	2.2	2.4	2.6	2.4		
Lack of funds	1.6	1.6	1.5	1.6		
Lack of sufficient equipment and/or software	2.0	2.2	2.2	2.1		
Lack of an established digitization plan	2.1	2.3	2.6	2.3		
Lack of established digitization policies	2.1	2.4	2.7	2.3		
Lack of established quality standards	2.2	2.5	2.9	2.5		
Lack of established policies and procedures for preparation for materials for digitizing	2.2	2.5	2.9	2.4		
Lack of established policies and procedures for the management of images and files	2.2	2.6	2.8	2.5		
Other projects have higher priorities	1.7	1.6	1.9	1.7		
Concern about intellectual property issues	2.8	2.9	3.0	2.9		
Security concerns	2.9	3.0	3.2	3.0		
Not having collections worth digitizing	4.0	4.0	4.3	4.1		
Concern about costs of preservation and management	2.3	2.5	2.6	2.4		
Management is unaware of the benefits of digitization	3.4	3.7	3.8	3.6		
Other (please list)	2.2	0.0	2.0	2.1		

Note: Data are based on responses to survey question 40; respondents were asked to rate each potential hindrance. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

#### 3. Comparisons of the 2001 and the 2004 Survey Findings

This section highlights the differences in the following categories between the 2001 and the 2004 survey findings for museums.

- Top technologies used
- Funding for technology and digitization
- Sources of funding for digitization activities
- Digitization policies
- Top goals for digitization projects

Because of some differences between the 2001 and 2004 survey questions, comparisons are made only where applicable.

#### 3.1 Overview

- Adoption and use of technologies: Overall, the adoption and use of technologies in museums has increased, particularly among computer technologies like institutional Web sites, computerized catalogs of library or other collections, Intranet, e-mail, and accounting/payroll/human resources software. Medium and large museums are particularly strong in all of these technologies, and there has been substantial growth among small museums over the three-year period. For example, the percentage of small museums with Web sites grew from 40 to 78 percent. Small museums also increased their use of e-mail; only 53.1 percent used e-mail in 2001, compared with 84.5 percent in 2004. In addition, use of desktop computers went up dramatically among small museums; 58.1 percent used desktops in 2001, compared with 87.4 percent in 2004.
- Digitization policies: Museums reported across-the-board growth in digitization policies in place and in development over the three-year period. For example, in 2004, 23 percent of museums had policies in place regarding access, whereas only 4.8 percent had access policies in place in 2001; 21.7 percent had access policies in development in 2004, compared with only 7.6 percent in 2001. Still, even in 2004, the majority of museums had no digitization policies of any kind in place or in development.
- Digitization goals: The top goals reported in the surveys indicate positive trends in increasing access to collections, materials, and files. In 2004, 56 percent of museums indicated that increasing access was an important goal, compared with only 6.1 percent of museums in 2001. Preserving materials of importance or value was important for only 31.3 percent of museums in 2001, but by 2004 this figure had grown to 48.7 percent. In 2004, 18.1 percent of museums indicated that providing greater information about their collections to artists, scholars, students, teachers, and the public was an important goal, while in 2001, only 0.9 percent identified this as an important goal.

#### 3.2 Top Technologies Used

Overall, the adoption and use of technologies in museums has increased significantly, particularly among basic computer technologies. For each of the following technologies, there was an increase from the percentage of museums that reported using them in 2001 to the percentage of museums that reported using them in 2004. The top three technologies used in 2001 were as follows:

- Office productivity software, including word processing, desktop publishing, and spreadsheets: 72.7 percent of museums were using this technology.
- Desktop computers: 72.7 percent of museums were using this technology.
- E-mail: 69.6 percent were using this technology.

In 2004, the top technologies were as follows:

- Desktop computers: 93.6 percent of museums were using this technology.
- E-mail: 92.2 percent were using this technology.
- Office productivity software, including word processing, desktop publishing, and spreadsheets: 91.3 percent of museums were using this technology.

FIGURE 28 TECHNOLOGIES USED IN THE PAST 12 MONTHS				
Surv				
Technology	2001 (n=260)	2004 (n=434)		
Accounting/payroll/human resources software	49.2%	71.4%		
Computerized catalog of library or other collections	28.1%	53.4%		
Computerized collections management system	52.7%	56.0%		
Database software or system for membership development	46.2%	61.7%		
Desktop computers	72.7%	93.6%		
E-mail	69.6%	92.2%		
Intranet	14.6%	38.3%		
Marketing and promotion software and systems	2.3%	13.6%		
Notebook or tablet computers	26.5%	39.3%		
Office productivity software, including word processing, desktop publishing, and spreadsheets	72.7%	91.3%		
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	9.2%	17.2%		
Point-of-sale software and systems	11.2%	23.9%		
Video tours	6.9%	12.2%		
Virtual reality tours	3.8%	8.7%		
Web site for your institution	60.8%	88.4%		
Other	1.2%	8.9%		

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

Since 2001, there has been significant growth in the percentage of small museums that use technology. For example, the percentage of small museums that used Web sites in the past 12 months increased from 40 percent in 2001 to 78 percent in 2004. A similar increase can be found for e-mail (53.1% in 2001, compared with 84.5% in 2004) and desktop computers (58.1% in 2001, compared with 87.4% in 2004).

Figure 29								
TECHNOLOGIES USED IN THE PAST 12 MONTHS, BY MUSEUM SIZE								
Budget								
Technology		2001			2004			
Toomylogy	Small (n=160)	Medium (n=54)	Large (n=37)	Small (n=200)	Medium (n=124)	Large (n=97)		
Accounting/payroll/human resources software	31.9%	70.4%	91.9%	54.1%	81.0%	91.3%		
Computerized catalog of library or other collections	23.1%	31.5%	45.9%	46.3%	55.0%	66.3%		
Database software or system for membership development	29.4%	68.5%	86.5%	48.4%	67.5%	81.1%		
Desktop computers	58.1%	96.3%	100.0%	87.4%	99.2%	99.0%		
E-mail	53.1%	94.4%	100.0%	84.5%	100.0%	97.9%		
Intranet	3.8%	25.9%	37.8%	26.3%	44.2%	55.1%		
Marketing and promotion software and systems	0.6%	3.7%	2.7%	6.6%	14.0%	26.7%		
Notebook or tablet computers	10.0%	44.4%	70.3%	18.2%	47.9%	67.7%		
Office productivity software, including word processing, desktop publishing, and spreadsheets	58.8%	96.3%	100.0%	85.7%	96.6%	96.9%		
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	3.8%	7.4%	32.4%	6.6%	19.0%	36.6%		
Point-of-sale software and systems	1.9%	11.1%	48.6%	5.6%	24.6%	58.1%		
Video tours	5.0%	9.3%	8.1%	11.6%	13.2%	12.4%		
Virtual reality tours	0.6%	7.4%	13.5%	7.7%	7.1%	12.5%		
Web site for your institution	40.0%	92.6%	100.0%	78.0%	96.7%	96.9%		
Other	1.9%	0.0%	0.0%	7.1%	16.7%	12.5%		

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply. Size information is missing for 13 museums surveyed in 2004 and for 9 museums surveyed in 2001; therefore, the totals vary from Figure 28.

# 3.3 Funding for Technology and Digitization

The percentage of museums that reported having funding in 2004 for both technology and digitization activities is down from the percentage that reported having funding in 2001.

EXHIBIT 30 FUNDING FOR TECHNOLOGY AND DIGITIZATION						
			Survey	Year		
	2001 2004 (n=250) (n=457)				~ <del>-</del>	
Response Option	Yes	No	Don't know/ Not applicable	Yes	No	Don't know/ Not applicable
Technology						
In the past 12 months, did your institution have funding for technology?	84.0%	16.0%	-	63.0%	34.1%	2.8%
In the next 12 months, do you plan to have funding for your technology?	-	-	-	62.3%	22.5%	15.2%
Digitization	•			•		
In the past 12 months, did your institution have funding to support your digitization activities?	37.7%	62.3%	-	37.0%	53.8%	9.1%
In the next 12 months, do you plan to obtain funding to support your digitizing activities?	62.7%	37.3%	-	40.3%	36.8%	23.0%

Note: Data are based on responses to survey questions 1, 2, 18, and 19; respondents were asked to select only one option.

# 3.4 Sources of Funding for Technology

The top two sources of funding in both 2001 and 2004 were as follows:

- Institutional operating funds
- Gifts from donors

FIGURE 31 FUNDING FOR TECHNOLOGY		
Source of Funding	Survey 2001	2004
Endowment funds	(n=210)	(n=288)
Foundation grants	12.4% 23.8%	8.3% 17.7%
Gifts from donors	50.0%	31.9%
Grants from Federal agencies	11.4%	9.4%
Institutional operating funds	67.1%	53.8%
State funds	23.3%	15.6%
City, county, or other local government funds	21.4%	18.1%
Corporate funds	0.0%	8.0%
Other sources	9.0%	12.8%

Note: Data are based on responses to survey question 1; respondents were asked to select all that apply.

# 3.5 Sources of Funding for Digitization Activities

The top three sources of funding in 2004 were the same as they were in 2001:

- Institutional operating funds
- Gifts from donors
- Foundation grants

FIGURE 32 FUNDING FOR DIGITIZATION ACTIVITIES					
	Surve	y Year			
Source of Funding	2001 (n=93)	2004 (n=149)			
Endowment funds	17.2%	4.7%			
Foundation grants	30.1%	21.5%			
Gifts from donors	37.6%	24.8%			
Grants from Federal agencies	17.2%	15.5%			
Institutional operating funds	63.4%	51.7%			
State funds	18.3%	19.5%			
City, county, or other local government funds	16.1%	14.1%			
Corporate funds	0.0%	7.4%			
Other sources	8.6%	10.7%			

Note: Data are based on responses to survey question 18; respondents were asked to select all that apply.

# 3.6 Digitization Policies

There has been an increase in the number of digitization policies in place or in development (versus not in place or in development/don't know) since 2001. However, the majority of museums do not have policies in place or in development.

FIGURE 33							
DIGITIZATION POLICIES							
			2001			2004	
		Ι	(n=251)	No maliaisa in		(n=401)	No maliaisa in
Policy	Not checked	Policies in place	Policies in development	No policies in place or in development/ Don't know	Policies in place	Policies in development	No policies in place or in development/ Don't know
Access	12.4%	4.8%	7.6%	75.3%	23.0%	21.7%	55.3%
Best practices	16.3%	2.8%	5.6%	75.3%	8.6%	22.1%	69.4%
Conversion of digital files to next-generation formats	21.9%	0.8%	2.0%	75.3%	7.4%	17.6%	75.0%
Digital format (e.g., TIFF, GIF, PAL)	12.7%	6.4%	5.6%	75.3%	21.2%	17.9%	60.9%
Evaluation	19.1%	2.0%	3.6%	75.3%	8.4%	16.2%	75.5%
Intellectual property issues	12.7%	4.4%	7.6%	75.3%	15.7%	19.8%	64.5%
Materials to be digitized	11.6%	5.2%	8.0%	75.3%	21.3%	22.3%	56.4%
Priorities for digitization	9.6%	6.4%	8.8%	75.3%	18.8%	21.6%	59.6%
Preservation	14.3%	3.2%	7.2%	75.3%	19.8%	24.4%	55.7%
Quality control	16.7%	3.2%	4.8%	75.3%	14.8%	19.7%	65.5%
Standards	15.1%	4.4%	5.2%	75.3%	16.3%	21.0%	62.7%
Other	11.2%	13.1%	0.4%	75.3%	3.8%	2.9%	93.3%

Note: Data are based on survey question 16; respondents were asked to select all that apply.

# 3.7 Top Goals for Digitization Projects

In 2001, the top three responses museums provided when asked about their goals for digitization activities were as follows:

- Minimize damage to original materials: This was a goal for 32.6 percent of museums.
- Preserve materials of importance or value: This was a goal for 31.3 percent.
- Don't know/Not applicable: This response option was chosen by 27.9 percent of museums.

In 2004, however, the top three goals for digitization activities were as follows:

- Increase access to collections/materials/files: This was a goal for 56.0 percent of museums.
- Preserve materials of importance or value: This was a goal for 48.7 percent.
- Minimize damage to original materials: This was a goal for 33.0 percent of museums.

FIGURE 34 GOALS FOR DIGITIZATION ACTIVITIES				
	Survey year			
Goal	2001 (n=230)	2004 (n=382)		
Preserve materials of importance or value	31.3%	48.7%		
Increase access to collections/materials/files	6.1%	56.0%		
Minimize damage to original materials	32.6%	33.0%		
Provide access to materials via the Web	25.7%	30.6%		
Increase interest in the institution	17.0%	20.7%		
Save space in the institution	20.4%	4.2%		
Present more of the collection than is on display at any one time	4.8%	10.5%		
Save costs by eliminating duplication of materials	1.7%	2.6%		
Provide access to materials for specific audiences (e.g., reserve room materials for students)	0.0%	3.4%		
Encourage cooperation among institutions to increase the number and variety of materials available	26.5%	0.8%		
For distance and other e-learning programs	0.0%	2.1%		
Provide greater information about the institution's collections to artists, scholars, students, teachers, and the public	0.9%	18.1%		
Increase access to state services	16.1%	1.0%		
For our institution's internal records	0.0%	15.2%		
Support educational programs	3.0%	9.7%		
Other (please list)	0.0%	1.0%		
Don't know/Not applicable	27.9%	11.0%		

Note: Data are based on responses to survey question 31; respondents were asked to select their institution's top three goals.

# **Chapter 1. Public Libraries**

In this chapter, we provide an overview of the public library data, a detailed description of certain survey question responses by public library size, and a summary of comparisons with the data from the 2001 survey.

# 1. Public Library Overview

### 1.1 Technology Overview

- Availability of funding: Overall, more than three-fourths of public libraries (81.4 percent) had funding for technology in the past 12 months. Most large public libraries (92.7 percent) had funds, but small libraries were not as well funded (72.6 percent.) Anticipated technology funding for the next 12 months is weaker overall at 74.3 percent.
- Adequacy of technology funding: The majority of medium and large public libraries report that 76 percent or more of their technology needs are adequately funded. The majority of small public libraries report that 50 percent or less of their technology needs are funded. Among the small public libraries, however, 21.7 percent reported that 100 percent of their technology needs are adequately funded.
- *Maintaining and adding technologies:* Public libraries, regardless of size, tended to agree that their institutions are able to maintain their current levels of technology, with larger libraries reporting stronger agreement. Generally, public libraries are neutral about their ability to add new uses of technology to meet evolving needs.
- Technology capacity: This includes equipment, software, connectivity, skills and
  expertise, and staffing. Three-fourths of public libraries either have the technology
  capacity necessary to meet their needs or their capacity almost meets their mission.
  Only one-fourth report that their technology capacity falls short of meeting, or does
  not meet, their needs.

### • *Technologies in use:*

- O Public libraries' use of basic technologies over the past 12 months is pervasive, particularly for e-mail (100%), desktop computers (96.4%), and office productivity software (96.8%).
- o All large public libraries have a Web site, but only 66.1 percent of small public libraries have one.
- Broadband Internet access is used by 67.3 percent of small public libraries, 83.6 percent of medium public libraries, and 90.4 percent of large public libraries. Modem (dial-up Internet access) use is strongest among small public libraries, 34 percent of which use modems, compared with 23.1 percent of medium and 26 percent of large public libraries.
- o Wireless networks, including WiFi, are used in 47.1 percent of large public libraries but only in 17.3 percent of small libraries.

- Computerized catalogs of collections are very heavily used in medium and large public libraries; 96.6 percent of medium public libraries and 98.1 percent of large ones use computerized catalogs, while 70.5 percent of small libraries use them.
- o Meta- or federated searching in online collections and catalogs is used in 40.8 percent of public libraries.
- o Software to manage public-access computers and printing is in use in 43 percent of public libraries.
- Staff for technology activities: Libraries that "have the right amount of skilled staff" included 20.4 percent of small libraries, 21.1 percent of medium libraries, and 35.3 percent of large libraries. Overall, the majority of public libraries (73.1%), regardless of size, do not have enough skilled staff to accomplish their technology activities.
- *Needs assessment:* Only one-fourth (25.9%) of all public libraries conduct assessments of user or visitor needs for technology-supported services or experiences. Overall, the majority of public libraries (67.6%), regardless of size, do not conduct needs assessments.

# 1.2 Digitization Overview

- *Digitization policies:* Among the few public libraries that have policies, policies related to access (20% of libraries), best practices (10.8%), security (10.5%), and intellectual property (9.9%) are the most prevalent. Overall, however, the majority of public libraries (71.6%) do not have (or do not know whether they have) digitization policies in place or in development.
- Funding for digitization activities: More large public libraries (17.6%) had funding to support digitization activities than did medium and small public libraries (12.3 and 9.3%, respectively). The majority of public libraries, regardless of size, did not have funding to support their digitization activities in the past 12 months.
- *Digitization priorities:* Digitizing historical documents/archives was a top priority for 50.5 percent of all public libraries; digitizing photographs was important to 31.7 percent; and digitizing newspapers was a top priority for 28.8 percent of all public libraries.
- *Materials and images digitized:* The great majority of all public libraries are not active digitizers although a small percentage is very active. Large public libraries were more active than small and medium public libraries in digitization over the past 12 months; 36 percent of large public libraries digitized 1 to 500 images, 2 percent digitized 5,000 to 10,000 images, and 2 percent digitized more than 25,000 images. Almost all of the small and medium public libraries (82.4 and 80.4%, respectively) created zero digital materials or images in the past 12 months.
- *Materials or images still to be digitized:* Large public libraries have significant numbers of images to be created; in fact, 12.2 percent have more than 25,000 images

- left. Overall, 46.6 percent of public libraries report that they have zero materials or images left to be digitized; 55.7 percent of small libraries report that they have zero materials to digitize, and 49.1 percent of medium libraries report zero materials.
- Undertaking digitization activities: Among the public libraries that have digitization activities, 17.2 percent train current staff to perform digitization activities and 9.1 percent use volunteers. These were the most cited means for undertaking digitization activities. Using outside help is also frequently cited: 6.2 percent of public libraries used commercial vendors to perform digitization off-site; 2.9 percent performed these activities at another institution's digitization center; and 2.4 percent used contractual staff to perform digitization activities in-house.
- Making digital images available: Among large public libraries, 37.5 percent make some or all of their digital image collections available to the public, compared with 17.9 percent of small libraries and 14.8 percent of medium libraries. Large public libraries are more likely to make digital images available on the Web; 37.2 percent of large public libraries have digital images on the Web. Among small public libraries, 16.3 percent use their computer network (local area network or LAN) to make digital images available to the public. Overall, the majority (73.6%) of public libraries responded "Don't know/Not applicable" when asked whether they make digital images available to the public.
- Capability for digitization activities: On average and across all categories, public libraries indicated that they feel deficient in their capability to initiate, accomplish, and sustain digitization activities. On a scale of 1 (deficient) to 5 (fully capable), the highest ratings were among large public libraries related to their staff skills and expertise (2.3) and equipment and software (2.4).
- *Hindrances to digitization:* Overall, public libraries tended to agree the most strongly that lack of funds and lack of staff time are hindrances to their digitization activities.

# 2. Public Library size analyses

This section highlights the difference between small, medium, and large public libraries based on their budget size. To determine the small, medium, and large categories, we used the public library survey question D on public library annual budget size.

FIGURE 1 PUBLIC LIBRARY SIZE ANALYSES				
Size of Annual Budgets	<b>Budget Categories</b>			
Less than \$250,000	Small			
\$250,001-\$500,000	Medium			
\$500,001-\$750,000	Medium			
\$750,001-\$1,000,000				
\$1,000,001-\$5,000,000				
\$5,000,001-\$10,000,000	Large			
\$10,000,001-\$25,000,000				
More than \$25,000,000				

Note: Data are based on responses to survey question D: respondents were asked to select only one option.

# 2.1 Demographics

A total of 239 public libraries participated in the survey. One survey was removed from the analyses due to a large amount of incomplete data, resulting in a final sample size of 238. However, not all pubic library participants responded to every question, so the sample sizes in the tables below might be slightly lower than 238. In addition, some tables are broken down by size of public library while others are presented on the whole, which may result in different sample sizes for different tables.

#### **Population**

Figure 2 shows the size of the populations served by the public libraries participating in the survey. More than one-third of the public libraries reported serving fewer than 5,000 people.

FIGURE 2 PERCENTAGE OF PUBLIC LIBRARIES SERVING EACH POPULATION SIZE				
Population Size	Percent (n=238)			
Less than 5,000	34.5			
5,001–10,000	16.4			
10,001–25,000	21.8			
25,001–50,000	13.0			
50,001–100,000	6.7			
100,001–250,000	5.0			
250,001–500,000	1.7			
500,001-1,000,000	0.4			
Over 1,000,000	0.4			

Note: Data are based on responses to survey question B; respondents were asked to select only one option.

# **Budget**

Figure 3 shows the annual budgets for the public libraries in the survey sample. Just over half of the public library participants had an annual budget of less than \$250,000.

FIGURE 3 PERCENTAGE OF PUBLIC LIBRARIES WITH EACH SIZE ANNUAL BUDGET				
Budget Size	Percent (n=233)			
Less than \$250,000	50.6%			
\$250,001-\$500,000	16.7%			
\$500,001-\$750,000	8.6%			
\$750,001-\$1,000,000	6.0%			
\$1,000,001-\$5,000,000	12.4%			
\$5,000,001-\$10,000,000	4.3%			
\$10,000,001-\$25,000,000	0.9%			
Over \$25,000,000	0.4%			

Note: Data are based on responses to survey question D; respondents were asked to select only one option.

# **Staff Size**

Figure 4 shows the number of full-time staff reported by public libraries. More than half of the public libraries had fewer than five full-time-equivalent staff.

FIGURE 4 PERCENTAGE OF PUBLIC LIBRARIES WITH EACH SIZE CURRENT PAID,				
FULL-TIME-EQUIV	/			
Staff Size Percent (n=235)				
Less than 5	54.5%			
6–10	18.7%			
11–25	14.9%			
26–75	8.9%			
76–150	1.7%			
151–250	0.9%			
251–500	0.4%			
501-1,000	0.0%			
1,001–1,500	0.0%			
More than 1,500	0.0%			

Note: Data are based on responses to survey question E; respondents were asked to select only one option.

# 2.2 Technology

# **Technology Funding**

Overall, more than three-quarters of public libraries (81.4 percent) had funding for technology in the past 12 months. Most large public libraries (92.7 percent) had funds, but small libraries were not as well funded (72.6 percent.) Anticipated technology funding for the next 12 months is weaker overall at 74.3 percent.

FIGURE 5 FUNDING FOR TECHNOLOGY						
Small (n=117)         Medium (n=58)         Large (n=55)         Total (n=230)						
In the past 12 months, did your in	stitution have	funding for	technology?			
Yes	72.6%	88.1%	92.7%	81.4%		
No	27.4%	10.2%	1.8%	16.9%		
Don't know/Not applicable	0.0%	1.7%	5.5%	1.7%		
In the next 12 months, do you plan	In the next 12 months, do you plan to have funding for your technology?					
Yes	62.4%	81.0%	92.7%	74.3%		
No	15.4%	1.7%	1.8%	8.7%		
Don't know/Not applicable	22.2%	17.2%	5.5%	17.0%		

Note: Data are based on responses to survey question 1 and 2; respondents were asked to select only one option.

# **Adequate Funding of Technology Needs**

The majority of medium and large public libraries report that 76 percent or more of their technology needs are adequately funded, while the majority of small public libraries report that 50 percent or less of their technology needs are adequately funded.

FIGURE 6 PERCENTAGE OF TECHNOLOGY NEEDS THAT ARE ADEQUATELY FUNDED						
Small         Medium (n=115)         Large (n=53)         Total (n=226)						
0%	6.1%	3.4%	0.0%	4.0%		
1–25%	31.3%	10.3%	20.8%	23.5%		
26–50%	13.0%	12.1%	3.8%	10.6%		
51–75%	13.9%	22.4%	20.8%	17.7%		
76–99%	13.9%	24.1%	37.7%	22.1%		
100%	21.7%	27.6%	17.0%	22.1%		

Note: Data are based on responses to survey question 3; respondents were asked to select only one option.

### **Maintaining and Adding Technology**

Overall, public libraries agree that they are able to maintain their current levels of technology. In fact, the larger that libraries are, the more they agree that they are able to maintain their current levels of technology. However, public libraries are neutral on their ability to add new uses of technology to meet evolving needs.

Figure 7 shows the mean ratings of an institution's ability to maintain or add technology based on a 5-point scale with "1" being "strongly agree" and "5" being "strongly disagree." Therefore, ratings less than 2.5 indicate agreement, ratings between 2.5 and 3.5 indicate neither agreement nor disagreement, and ratings greater than 3.5 indicate disagreement.

FIGURE 7					
Ability to Maintain and Add Technology					
Mean Rating					
My institution is able to:	Small (n=114)	Medium (n=57)	Large (n=53)	Total (n=224)	
Maintain its current level of technology	2.5	2.0	1.9	2.2	
Add new uses of technology to meet evolving needs	3.4	2.9	3.0	3.2	

Note: Data are based on responses to survey question 4. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

### **Extent of Technology Capacity**

More than three-quarters of public libraries either currently have the technology capacity necessary to meet their mission, or their technology capacity almost meets their mission. Nearly one-quarter of public libraries report that their technology capacity falls short of or does not meet their mission.

FIGURE 8 TECHNOLOGY CAPACITY TO MEET MISSION								
Response Option         Small (n=115)         Medium (n=58)         Large (n=53)         Total (n=220)								
Currently meets our mission	40.0%	36.2%	41.5%	39.4%				
Almost meets our mission	38.3%	39.7%	34.0%	37.6%				
Is short of meeting our mission	14.8%	20.7%	24.5%	18.6%				
Does not meet our mission	6.1%	3.4%	0.0%	4.0%				
Don't know/Not applicable	0.9%	0.0%	0.0%	0.4%				

Note: Data are based on responses to survey question 5; respondents were asked to select only one option.

### **Technologies Used in Past 12 Months**

All public libraries used e-mail in the past 12 months, and almost all used office productivity software and desktop computers. Few public libraries used point-of-sale software and systems, or virtual reality tours.

In the past 12 months, all large public libraries had Web sites, whereas only 66.1 percent of small public libraries and 87.7 percent of medium public libraries did.

FIGURE 9 PUBLIC LIBRARIES THAT USED THE FOLLOWING TECHNOLOGIES IN THE PAST 12 MONTHS						
Technology	Small (n=113)	Medium (n=58)	Large (n=53)	Total (n=224)		
Accounting/payroll software/human relations	36.4%	70.9%	75.0%	54.4%		
Broadband Internet connection	67.3%	83.6%	90.4%	77.0%		
Computerized catalog of library or other collections	70.5%	96.6%	98.1%	83.9%		
Computerized collections management system	50.0%	63.0%	66.7%	57.3%		
Database software or system for membership development	33.3%	50.0%	49.0%	41.4%		
Desktop computers	95.6%	98.3%	96.2%	96.4%		
E-mail	100.0%	100.0%	100.0%	100.0%		
GIS (geographic information systems) applications	7.8%	9.6%	12.5%	9.4%		
Integrated library system (ILS)	36.8%	60.0%	90.0%	55.5%		
Intranet	18.1%	43.4%	69.4%	36.7%		
LAN (local area network)	68.2%	82.5%	92.2%	77.7%		
Marketing and promotion software and systems	11.8%	18.5%	12.5%	13.7%		
Meta- or federated searching in online collections and catalogs	38.7%	41.1%	44.9%	40.8%		
Modem (dial access) Internet connection	34.0%	23.1%	26.0%	29.3%		
Multimedia services or collections	43.0%	71.4%	84.3%	60.9%		
Notebook or tablet computers	14.3%	42.9%	54.9%	31.6%		
Office productivity software, including word processing, desktop publishing, and spreadsheets	96.4%	94.7%	100.0%	96.8%		
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	6.7%	13.0%	32.0%	14.4%		
Personal information management (PIM) software	3.8%	7.4%	10.2%	6.3%		
Point-of-sale software and systems	1.9%	3.8%	9.8%	4.3%		
RFID (radio frequency identification) in services or collections	0.0%	3.7%	4.0%	1.9%		
Software to manage public-access computers and printing	40.6%	43.9%	47.1%	43.0%		
Video tours	3.9%	3.7%	10.0%	5.3%		
Virtual reality tours	2.9%	3.8%	4.1%	3.4%		
Web portal or gateway for services or collections	26.0%	48.1%	52.9%	38.3%		
Web site for your institution	66.1%	87.7%	100.0%	79.9%		
Wireless network, including WiFi	17.3%	29.6%	47.1%	27.8%		
Other	5.6%	13.3%	14.3%	8.6%		

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

The majority of small public libraries used between 6 and 15 technologies in the past 12 months, while the majority of medium and large public libraries used between 11 and 20 technologies.

FIGURE 10 PERCENTAGE OF PUBLIC LIBRARIES THAT USED THE FOLLOWING NUMBER OF TECHNOLOGIES IN THE PAST 12 MONTHS				
Number		В	udget	
1(4111001	Small (n=113)   Medium (n=58)   Large (n			
0	0.0%	0.0%	0.0%	0.0%
1-5	12.3%	1.7%	0.0%	6.7%

#### FIGURE 10 PERCENTAGE OF PUBLIC LIBRARIES THAT USED THE FOLLOWING NUMBER OF **TECHNOLOGIES IN THE PAST 12 MONTHS** Number **Small (n=113)** Medium (n=58) **Large (n=53) Total (n=224)** 48.7% 6-10 22.4% 13.2% 33.5% 11-15 37.2% 58.6% 58.5% 47.8% 16-20 0.9% 17.3% 20.8% 9.8% 0.9% 0.0% 7.5% 21 or more 2.2%

Note: Data are based on survey question 6.

### **Staff Capabilities**

Among large public libraries, 35.3 percent reported that they have the right number of staff to accomplish their technology activities. Overall, however, the majority of public libraries (73.1%) report that they do not have enough skilled staff to accomplish their technology activities.

FIGURE 11. EXTENT TO WHICH LIBRARIES HAVE SUFFICIENT SKILLED STAFF TO ACCOMPLISH TECHNOLOGY ACTIVITIES						
Budget Small Medium Large Total						
Response Option	(n=108) (n=57) (n=51) (n=					
We do not have enough skilled staff to accomplish our technology activities.	75.9%	78.9%	60.8%	73.1%		
We have the right amount of skilled staff to accomplish our technology activities.	20.4%	21.1%	35.3%	24.1%		
We have more than enough skilled staff to accomplish our technology activities.	0.0%	0.0%	0.0%	0.0%		
Other (please list)	1.9%	0.0%	3.9%	1.9%		
Don't know/Not applicable	1.9%	0.0%	0.0%	0.9%		

Note: Data are based on responses to survey question 10; respondents were asked to select only one option.

#### **Needs Assessments**

A slightly higher number of small and medium public libraries (27.1 and 27.6%, respectively) conduct assessments of user or visitor needs for technology-supported services or experiences at their institutions than large public libraries (21.6%) do. More than two-thirds of public libraries (67.6%) do not conduct these assessments.

FIGURE 12					
CONDUCT NEEDS ASSESSMENTS					
FOR TECHNOLOGY-SUPPORTED SERVICES					
Response Option	Small (n=107)	Medium (n=58)	Large (n=51)	Total (n=216)	
Yes	27.1%	27.6%	21.6%	25.9%	
No	65.4%	69.0%	70.6%	67.6%	
Don't know/Not applicable	7.5%	3.4%	7.8%	6.5%	

Note: Data are based on responses to survey question 12; respondents were asked to select only one option.

# 2.3 Digitization

# **Digitization Policies**

The most prevalent digitization policies among all public libraries are those for access (20.0%), best practices (10.8%), and security (10.5%). The least prevalent policies include those for conversion of digital files to next-generation formats (0.5%) and metadata (1.9%). Overall, the data show that even the most prevalent policies are in place in less than one-fourth of all public libraries.

FIGURE 13. DIGITIZATION POLICIES IN PLACE					
Type of Policy	Small (n=108)	Medium (n=56)	Large (n=51)	Total (n=215)	
Access	24.1%	25.0%	5.9%	20.0%	
Best practices	15.0%	10.9%	2.0%	10.8%	
Conversion of digital files to next-generation formats	0.9%	0.0%	0.0%	0.5%	
Digital format (e.g., TIFF, GIF, PAL)	3.7%	3.6%	7.8%	4.7%	
Evaluation	4.7%	7.3%	3.9%	5.2%	
Institutional repository	1.9%	1.9%	3.9%	2.4%	
Intellectual property issues	8.5%	10.9%	11.8%	9.9%	
Materials to be digitized	3.8%	0.0%	2.0%	2.4%	
Priorities for digitization	3.8%	0.0%	5.9%	3.3%	
Preservation	4.7%	0.0%	7.8%	4.2%	
Quality control	7.5%	3.6%	5.9%	6.1%	
Standards	9.4%	3.6%	7.8%	7.5%	
Metadata	1.9%	0.0%	3.9%	1.9%	
Security	12.3%	7.4%	10.0%	10.5%	
Other	0.0%	4.3%	0.0%	1.2%	

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply.

### **Digitization Funding**

More large public libraries (17.6%) had funding to support their digitization activities in the past 12 months than medium and small public libraries (12.3 and 9.3%, respectively). More than two-thirds of all public libraries did not have funding to support their digitization activities in the past 12 months.

FIGURE 14						
FUNDING TO SUPPORT DIGITIZATION ACTIVITIES						
Response Option Small Medium Large Total (n=108) (n=57) (n=51) (n=216)						
Yes	9.3%	12.3%	17.6%	12.0%		
No	71.3%	70.2%	70.6%	70.8%		
Don't know/Not applicable	19.4%	17.5%	11.8%	17.1%		

Note: Data are based on responses to survey question 18; respondents were asked to select only one option.

### **Materials for Digitization**

Overall, few public libraries report digitizing any materials currently or in the past 12 months. Information on the institution, and photographs were digitized more than any other type of material. Medium and large public libraries are also digitizing historical documents/archives.

FIGURE 15 MATERIALS THAT HAVE BEEN DIGITIZED IN THE PAST 12 MONTHS OR ARE CURRENTLY BEING DIGITIZED					
Material	Small (n=108)	Medium (n=57)	Large (n=50)	Total (n=215)	
Correspondence, diaries and other personal records	0.9%	3.6%	4.1%	2.4%	
Course material	1.9%	0.0%	2.1%	1.4%	
Education and training material about the collections	1.9%	0.0%	2.1%	1.4%	
Films, videotapes	0.0%	1.8%	2.1%	1.0%	
Government publications	0.0%	0.0%	0.0%	0.0%	
Historical documents/archives	0.9%	5.4%	6.0%	3.3%	
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	1.9%	0.0%	2.2%	1.5%	
Information on the institution	5.7%	3.6%	4.2%	4.8%	
Journals and other serials	1.0%	0.0%	2.1%	1.0%	
Manuscripts	1.0%	0.0%	2.0%	1.0%	
Maps	1.0%	1.8%	4.3%	1.9%	
Music and other recorded sound	0.9%	0.0%	0.0%	0.5%	
Newspapers	0.0%	1.8%	0.0%	0.5%	
Photographs	4.7%	5.5%	4.1%	4.8%	
Rare books	0.9%	0.0%	2.1%	1.0%	
Records about the collection	0.0%	3.6%	2.2%	1.4%	
Sheet music	0.0%	0.0%	0.0%	0.0%	
Special exhibits	0.0%	1.8%	2.2%	1.0%	
Theses and dissertations	0.9%	0.0%	0.0%	0.5%	
Other (please list)	0.0%	0.0%	0.0%	0.0%	

Note: Data are based on responses to survey question 20; respondents were asked to select all that apply.

### **Primary Digitization Priorities**

For the public libraries surveyed, the most frequently identified digitization priorities were as follows:

- Historical documents/archives: 50.5 percent of all libraries considered this a priority.
- Photographs: 31.7 percent considered this a priority.
- Newspapers: 28.8 percent considered this a priority.

FIGURE 16					
DIGITIZATION PRIORITIES					
Priority	Small (n=106)	Medium (n=54)	Large (n=48)	Total (n=208)	
Correspondence, diaries, and other personal records	9.4%	18.5%	25.0%	15.4%	
Course material	0.0%	1.9%	0.0%	0.5%	
Education and training material about the collections	3.8%	1.9%	4.2%	3.4%	

FIGURE 16				
DIGITIZATION P	RIORITIES			
Priority	Small (n=106)	Medium (n=54)	Large (n=48)	Total (n=208)
Films, videotapes	3.8%	1.9%	2.1%	2.9%
Government publications	1.9%	1.9%	0.0%	1.4%
Historical documents/archives	41.5%	61.1%	58.3%	50.5%
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	5.7%	7.4%	2.1%	5.3%
Information on the institution	4.7%	9.3%	14.6%	8.2%
Journals and other serials	5.7%	1.9%	0.0%	3.4%
Manuscripts	0.9%	7.4%	6.3%	3.8%
Maps	4.7%	18.5%	8.3%	9.1%
Music and other recorded sound	0.9%	0.0%	0.0%	0.5%
Newspapers	25.5%	31.5%	33.3%	28.8%
Photographs	24.5%	29.6%	50.0%	31.7%
Rare books	10.4%	9.3%	10.4%	10.1%
Records about the collection	6.6%	0.0%	0.0%	3.4%
Sheet music	0.0%	0.0%	0.0%	0.0%
Special exhibits	1.9%	3.7%	0.0%	1.9%
Theses and dissertations	0.0%	1.9%	0.0%	0.5%
Other (please list)	1.9%	7.4%	6.3%	4.3%
Don't know/Not applicable	41.0%	22.2%	22.9%	31.9%

Note: Data are based on responses to survey question 22; respondents were asked to select their institution's top three priorities.

# **Number of Digital Materials Created in the Past 12 Months**

Across all public libraries, 21.5 percent created between 1 and 500 digital images in the past 12 months. However, three-quarters of public libraries (75.2%) created zero digital materials or images in the past 12 months.

FIGURE 17. NUMBER OF DIGITAL MATERIALS OR IMAGES CREATED IN THE PAST 12 MONTHS								
Number	Small (n=108)         Medium (n=56)         Large (n=50)         Total (n=214)							
0	82.4%	80.4%	54.0%	75.2%				
1-500	16.7%	17.9%	36.0%	21.5%				
501-1,000	0.9%	0.0%	6.0%	1.9%				
1,001–5,000	0.0%	1.8%	0.0%	0.5%				
5,001–10,000	0.0%	0.0%	2.0%	0.5%				
10,001–25,000	0.0%	0.0%	0.0%	0.0%				
More than 25,000	0.0%	0.0%	2.0%	0.5%				

Note: Data are based on responses to survey question 23; respondents were asked to select only one option.

# **Number of Additional Images Remaining to be Digitized**

Large public libraries report considerable numbers of items still to be digitized, including 12.2 percent with more than 25,000 images to be digitized. Overall, however, 46.6 percent of public libraries report that they have no digital materials or images left to digitize.

FIGURE 18 Number of Digital Materials or Images Left to be Created								
Number	Small (n=106)							
0	55.7%	49.1%	24.5%	46.6%				
1–500	26.4%	15.1%	22.4%	22.6%				
501–1,000	5.7%	9.4%	10.2%	7.7%				
1,001-5,000	7.5%	13.2%	16.3%	11.1%				
5,001–10,000	2.8%	9.4%	12.2%	6.7%				
10,001–25,000	0.9%	0.0%	2.0%	1.0%				
More than 25,000	0.9%	3.8%	12.2%	4.3%				

Note: Data are based on responses to survey question 24; respondents were asked to select only one option.

### **Undertaking Digitization Activities**

More than three-quarters of small and medium public libraries, and one-half of large public libraries either do not know how their institution undertakes digitization activities, or this question was not applicable to them. Large public libraries undertake their digitization activities by the following:

- Training current staff to perform these activities: 17.2 percent use this means.
- Having volunteers perform these activities: 9.1 percent use this means.
- Having these activities performed by commercial vendors off-site: 6.2 percent use this
  means.

FIGURE 19. MEANS OF UNDERTAKING DIGITIZATION ACTIVITIES					
	Budget				
Response Option	Small (n=106)	Medium (n=55)	Large (n=48)	Total (n=209)	
Contractual staff were hired to perform these activities in-house.	2.8%	1.8%	2.1%	2.4%	
New institutional staff were hired to perform these activities.	0.9%	1.8%	0.0%	1.0%	
Current staff were trained to perform these activities.	7.5%	20.0%	35.4%	17.2%	
Current staff were reassigned to perform these activities.	3.8%	5.5%	4.2%	4.3%	
Volunteers perform these activities.	10.4%	5.5%	10.4%	9.1%	
These activities are performed by commercial vendors off-site.	4.7%	1.8%	14.6%	6.2%	
Materials are digitized off-site at another institution's digitization center.	1.9%	0.0%	8.3%	2.9%	

FIGURE 19. MEANS OF UNDERTAKING DIGITIZATION ACTIVITIES				
MIEANS OF UNDERTAKING DIGITIZATION ACTIVITIES  Budget				
Response Option	Small (n=106)         Medium (n=55)         Large (n=48)         Total (n=20)			
Other (please list)	0.9%	0.0%	2.1%	1.0%
Don't know/Not applicable	75.5%	77.8%	51.1%	70.5%

Note: Data are based on responses to survey question 26; respondents were asked to select all that apply.

### The Availability of Digital Image Collections to the Public

Overall, 21.7 percent of public libraries make some or all of their digital image collections available to the public. A higher number of large public libraries (37.5%) make some or all of their digital image collections available to the public than small and medium public libraries (17.9 and 14.8%, respectively). However, 73.6% of all public libraries responded "Don't know/not applicable" to this question.

FIGURE 20. PUBLIC AVAILABILITY OF DIGITAL IMAGE COLLECTIONS							
Response Option Small Medium Large Tot (n=106) (n=54) (n=48) (n=2							
Yes, some of our digital image collections are available to the public.	7.5%	3.7%	16.7%	8.7%			
Yes, all of our digital image collections are available to the public.	10.4%	11.1%	20.8%	13.0%			
No, our digital image collections are not available to the public.	1.9%	5.6%	10.4%	4.8%			
Don't know/Not applicable	80.2%	79.6%	52.1%	73.6%			

Note: Data are based on responses to survey question 27; respondents were asked to select only one option.

### **How Digital Image Collections Are Made Available**

Of those large public libraries that make their digital image collections available to the public, more than one-third make their collections available on the Web. Both large and small public libraries are more likely to make collections available on the premises on their computer network (LAN) than medium libraries.

Of those small and medium public libraries that make their digital image collections available to the public, the majority (79.6 and 80.9%, respectively) either do not know how their collections are made available, or this question was not applicable to them.

FIGURE 21 HOW DIGITAL IMAGE COLLECTIONS ARE MADE AVAILABLE					
Small   Medium   Large   Total   (n=104)   (n=48)   (n=43)   (n=195)					
On the premises on our computer network (LAN)	16.3%	6.3%	18.6%	14.4%	
On the Web	4.8%	12.5%	37.2%	13.8%	
Through a third party	1.9%	6.3%	4.7%	3.6%	
Don't know/Not applicable	79.6%	80.9%	53.5%	74.1%	

Note: Data are based on responses to survey question 28; respondents were asked to select all that apply. Table only includes respondents who reported that they make some or all of their digital image collections available to the public.

#### **Needs Assessments**

Only small and medium public libraries (4.6 and 3.8%, respectively) reported that they conduct assessments of their user or visitor needs for digitized materials and images. No large public libraries reported that they conduct assessments. Overall, three-quarters or more of public libraries do not conduct assessments of their user or visitor needs for digitized materials.

FIGURE 22.							
Response Option	CONDUCT NEEDS ASSESSMENTS FOR DIGITIZED MATERIALS  Response Option  Small Medium Large Total (n=109) (n=53) (n=48) (n=210)						
Yes	4.6%	3.8%	0.0%	3.3%			
No	77.1%	86.8%	87.5%	81.9%			
Don't know/Not applicable	18.3%	9.4%	12.5%	14.8%			

Note: Data are based on responses to survey question 35; respondents were asked to select only one option.

#### Collaboration

Overall, 16 percent of public libraries collaborate (through specific partnering agreements) with other institutions and organizations to digitize materials. Large public libraries are about three times more likely to collaborate (through specific partnering agreements) than medium or small public libraries.

FIGURE 23 COLLABORATION TO DIGITIZE MATERIALS						
Response Option	Small (n=109)         Medium (n=52)         Large (n=48)         Total (n=209)					
Yes	11.0%	11.5%	33.3%	16.3%		
No	73.4%	78.8%	60.4%	71.8%		
Don't know/Not applicable	15.6%	9.6%	6.3%	12.0%		

Note: Data are based on responses to survey question 37; respondents were asked to select only one option.

FIGURE 24 COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS							
Small   Medium   Large   Total   (n=12)   (n=6)   (n=16)   (n=34)							
State library agencies	8.3%	66.7%	43.8%	35.3%			
Academic libraries	0.0%	0.0%	18.8%	8.8%			
Individual public libraries	16.7%	33.3%	25.0%	23.5%			
Private libraries	0.0%	0.0%	0.0%	0.0%			
Museums	8.3%	0.0%	12.5%	8.8%			
Consortia	8.3%	33.3%	37.5%	26.5%			

FIGURE 24					
COLLABORATION WITH OTHER IN	STITUTIO	NS AND OF	RGANIZAT	IONS	
	Small (n=12)	Medium (n=6)	Large (n=16)	Total (n=34)	
State archives	0.0%	16.7%	12.5%	8.8%	
<ul> <li>Special libraries</li> </ul>	0.0%	0.0%	12.5%	5.9%	
Historical societies	41.7%	16.7%	18.8%	26.5%	
Federal government agencies or archives	0.0%	0.0%	0.0%	0.0%	
Other state government agencies	0.0%	0.0%	6.3%	2.9%	
City, municipal, or other local government agencies or archives	16.7%	16.7%	12.5%	14.7%	
Universities and colleges	16.7%	0.0%	0.0%	5.9%	
Community organizations	0.0%	0.0%	12.5%	5.9%	
Private companies	0.0%	16.7%	6.3%	5.9%	
Foundations	0.0%	0.0%	6.3%	2.9%	
State library associations	8.3%	0.0%	6.3%	5.9%	
State museum associations	0.0%	0.0%	0.0%	0.0%	
Other professional associations	0.0%	0.0%	0.0%	0.0%	
Other	16.7%	0.0%	6.3%	8.8%	

Note: Data are based on responses to survey question 37; respondents were asked to select all that apply.

### Capabilities in Initiating, Accomplishing, and Sustaining Digitization Activities

Figure 25 shows the average ratings of an institution's capability to initiate, accomplish, and sustain digitization activities based on a 5-point scale with "1" being "deficient" and "5" being "fully capable." Therefore, ratings less than 2.5 tend to indicate deficiency and ratings greater than 2.5 tend to indicate capability. Overall, public libraries rate their capability at initiating, accomplishing, and sustaining digitization activities between "deficient" and "somewhat deficient" in all areas.

FIGURE 25 CAPABILITY TO INITIATE, ACCOMPLISH, AND SUSTAIN DIGITIZATION ACTIVITIES						
Capability	Small (n=107)	Medium (n=50)	Large (n=47)	Total (n=204)		
Staff skills and expertise	2.0	1.8	2.3	2.0		
Equipment and software	1.9	1.7	2.4	2.0		
Funding	1.3	1.6	2.1	1.6		
Established digitization plan	1.5	1.3	1.8	1.5		
Established digitization policies	1.5	1.3	1.7	1.5		
Established quality standards	1.5	1.3	1.7	1.5		
Established procedures for preparation for creating digital images	1.4	1.3	1.8	1.5		
Established procedures for the management of images and files	1.5	1.4	1.8	1.5		
Other (please list)	1.0	1.0	1.0	1.0		

Note: Data are based on responses to survey question 39; respondents were asked to select all that apply. The scale for this question was 1, meaning deficient, to 5, meaning fully capable.

# **Hindrances to Digitization Activities**

Overall, public libraries (regardless of size) tended to agree that all of the following are hindrances to their digitization activities, with the strongest agreement elicited by "lack of funds" and "lack of staff time." Public libraries tended to disagree with the notions that "not having collections worth digitizing" and "management is unaware of the benefits of digitization" were hindrances to digitization.

D				
Figure 26				
HINDRANCES TO DIGITIZATION	ľ			1
Digitization activities in your institution	Small	Medium	Large	Total
are hindered by the following:	(n=106)	(n=51)	(n=46)	(n=203)
Lack of staff time	1.6	1.4	1.6	1.6
Lack of staff skills and expertise	1.7	1.5	2.0	1.7
Lack of funds	1.4	1.5	1.7	1.5
Lack of sufficient equipment and/or software	1.7	1.5	2.0	1.7
Lack of an established digitization plan	1.8	1.5	1.8	1.7
Lack of established digitization policies	1.9	1.5	1.8	1.8
Lack of established quality standards	1.9	1.6	2.0	1.8
Lack of established policies and procedures for preparation of materials for digitizing	1.8	1.5	2.0	1.8
Lack of established policies and procedures for the management of images and files	1.8	1.6	2.1	1.8
Having other projects of higher priority	1.8	1.5	1.7	1.7
Concern about intellectual property issues	2.7	2.6	2.8	2.7
Security concerns	2.8	2.8	3.0	2.9
Not having collections worth digitizing	3.0	3.2	4.1	3.4
Concern about costs of preservation and management	2.0	1.8	2.2	2.0
Management is unaware of the benefits of digitization	2.7	3.3	3.8	3.2
Other (please list)	2.0	1.5	0.0	1.9

Note: Data are based on responses to survey question 40; respondents were asked to rate each potential hindrance. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

# 3. Comparisons of the 2001 and the 2004 survey findings

This section highlights the differences in the following categories between the 2001 and the 2004 survey findings for public libraries.

- Top technologies used
- Funding for technology and digitization
- Sources of funding for digitization activities
- Digitization policies
- Top goals for digitization projects

Because of some differences between the 2001 and 2004 survey questions, comparisons are made only where applicable.

#### 3.1 Overview

- Technologies used in the past 12 months: There were slight increases in some technologies (e-mail, office productivity software, desktop computers, institutional Web sites) and decreases in others (notebook or tablet computers, accounting/payroll, and software/human resources). The newer technologies (broadband, WiFi, software to manage public-access computers and printing, and federated searching) were not options in the 2001 survey, so these are not reflected in the comparisons.
- Availability of funding for technology and digitization: Fewer public libraries reported having funding for technology in 2004 (81.4%) than in 2001 (98.7%). Similarly, in 2004, 12.3 percent of the libraries had funding for digitization activities, a drop from 30 percent in 2001.
- Sources of funding for digitization activities: In 2001, 46.3 percent of all libraries identified institutional operating funds as a major source of funding for digitization activities; 25.4 percent identified gifts from donors as a major source; and 23.9 percent identified foundation grants as a major source of funding. In 2004, 37 percent of all libraries identified city, county, or other local government funds as a major source of funding; 33.3 percent identified institutional operating funds; and 22.2 percent identified gifts from donors and grants from Federal agencies as top sources.
- *Digitization policies*: In general, the percentage of public libraries that have digitization policies in place or in development increased from 2001 to 2004. For example, 20.6 percent of all libraries had access policies in 2004, while only 1.3 percent of libraries had access policies in 2001; and 10.7 percent of all libraries had best practices policies in 2004, as opposed to only 0.9 percent in 2001. Still, more than three-quarters of libraries did not have policies in place or in development in 2004.
- *Digitization goals*: Preserving materials of importance and value ranked first in both 2001 and 2004: 37.4 percent of all public libraries surveyed in 2001 ranked this goal as important, and 42.2 percent ranked it as important in 2004. In 2001, increasing

interest in the institution came in second, with 32.5 percent of libraries indicating this to be an important goal; but in 2004, increasing access to collections, materials, and files came in second, with 32.2 percent of libraries identifying this goal as important. Providing access to materials via the Web was important in 2001 to 26.7 percent of all libraries, while minimizing damage to original materials was important in 2004 to 23.2 percent of all libraries.

# 3.2 Top Technologies Used

For most types of technology that we asked about, there was an increase from the percentage of public libraries that reported using them in 2001 to the percentage of public libraries that reporting using them in 2004. However, the number of libraries using notebook or tablet computers, technology related to accounting/payroll/human resources, and computerized catalogs of library or other collections decreased 6 to 17 percent. The top three technologies used in 2001 and 2004 were e-mail, office productivity software, and desktop computers.

FIGURE 27 TECHNOLOGIES USED IN THE PAST 12 MONTHS			
TECHNOLOGIES USED IN THE LAST 12 MC		y Year	
Technology	2001 (n=235)	2004 (n=228)	
Accounting/payroll/human resources software	63.8%	53.8%	
Database software or system for membership development	27.2%	42.1%	
Desktop computers	89.4%	96.0%	
E-mail	98.3%	100.0%	
Intranet	37.0%	36.5%	
Marketing and promotion software and systems	9.8%	13.9%	
Notebook or tablet computers	48.9%	31.5%	
Office productivity software, including word processing, desktop publishing, and spreadsheets	91.1%	96.9%	
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	15.3%	14.6%	
Point-of-sale software and systems	3.4%	4.7%	
Video tours	3.4%	5.2%	
Virtual reality tours	2.6%	3.4%	
Web site for your institution	75.3%	80.3%	
Other	1.3%	8.6%	

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

### 3.3 Funding for Technology and Digitization

The percentage of public libraries that reported that they had funding in 2004 for both technology and digitization activities is lower than the percentage that reported they had funding in 2001.

FIGURE 28						
FUNDING FOR TECHNOLOGY AND DIGITIZATION						
			Survey	Year		
		200	· <del>-</del>		20	~ <del>-</del>
		(n=2	230)		(n=2	236)
Response Option	Yes	No	Don't know/ Not applicable	Yes	No	Don't know/ Not applicable
Technology						
In the past 12 months, did your institution have funding for technology?	98.7%	1.3%	_	81.4%	16.9%	1.7%
In the next 12 months, do you plan to have funding for your technology?	_	-	_	74.9%	8.5%	16.6%
1. Digitization						
In the past 12 months, did your institution have funding to support your digitization activities?	30.0%	70.0%	-	12.3%	70.8%	16.9%
In the next 12 months, do you plan to obtain funding to support your digitization activities?	60.9%	39.1%	_	19.5%	51.8%	28.6%

Note: Data are based on responses to survey questions 1 and 18; respondents were asked to select only one option.

# 3.4 Sources of Funding for Technology

For those public libraries that had funding for their technology activities, the top three sources were the same in 2001 as they were in 2004: city, county, or other local government funds; institutional operating funds; and State funds.

FIGURE 29. FUNDING FOR TECHNOLOGY		
	Survey	Year
Source of Funding	2001 (n=227)	2004 (n=192)
Endowment funds	13.7%	7.8%
Foundation grants	34.8%	24.0%
Gifts from donors	30.4%	20.8%
Grants from Federal agencies	37.8%	12.5%
Institutional operating funds	65.6%	32.8%
State funds	56.4%	31.8%
City, county, or other local government funds	71.8%	53.1%
Other sources	20.3%	10.9%

Note: Data are based on responses to survey question 1; respondents were asked to select all that apply.

## 3.5 Sources of Funding for Digitization Activities

The top three sources of funding for digitization activities in 2001 were as follows:

- Institutional operating funds: 46.3 percent of libraries identified this as a top source.
- Grants from Federal agencies: 37.3 identified this as a top source.
- Gifts from donors: 25.4 percent identified this as a top source.

In 2004, the top three sources were as follows:

- City, county, or other local government funds: 37.0 percent of libraries identified this as a top source.
- Institutional operating funds: 33.3 percent identified this as a top source.
- Gifts from donors and grants from Federal agencies: 22.2 percent identified both of these categories as top sources of funding.

FIGURE 30 FUNDING FOR DIGITIZATION ACTIVITIES				
	Surve	y Year		
Source of Funding	2001 (n=67)	2004 (n=27)		
Endowment funds	10.4%	14.8%		
Foundation grants	23.9%	11.1%		
Gifts from donors	25.4%	22.2%		
Grants from Federal agencies	37.3%	22.2%		
Institutional operating funds	46.3%	33.3%		
State funds	19.4%	14.8%		
City, county, or other local government funds	20.9%	37.0%		
Other sources	4.5%	0.0%		

Note: Data are based on responses to survey question 18; respondents were asked to select all that apply.

# 3.6 Digitization Policies

In general, the percentage of public libraries that have digitization policies in place or in development (versus "not in place or in development/don't know") increased from 2001 to 2004. However, even in 2004, the majority of public libraries did not have policies in place or in development.

FIGURE 31 DIGITIZATION POLICIES								
	Survey Year							
		2001 (n=22		1001	2004 (n=218	8)		
Policy	Policies in place	No policies in place or in Policies in development/ Policies Policies in development						
Access	1.3%	7.5%	91.2%	20.6%	7.8%	71.6%		
Best practices	0.9%	3.5%	95.6%	10.7%	5.1%	84.2%		
Conversion of digital files to next-generation formats	0.4%	3.5%	96.0%	0.5%	7.0%	92.6%		
Digital format (e.g., TIFF, GIF, PAL)	2.2%	4.8%	92.9%	4.7%	6.5%	88.8%		
Evaluation	1.3%	4.4%	94.3%	5.1%	7.0%	87.9%		
Intellectual property issues	0.9%	7.9%	91.2%	9.8%	7.0%	83.2%		
Materials to be digitized	2.6%	10.1%	87.2%	2.3%	11.7%	86.0%		
Priorities for digitization	2.2%	11.0%	86.8%	3.3%	10.7%	86.0%		

FIGURE 31 DIGITIZATION POLICIES						
			Survey	Year		
		2001 (n=22	7)		2004 (n=218	3)
Policy	Policies in place				Policies in development	No policies in place or in development/ Don't know
Preservation	0.4%	6.2%	93.4%	4.2%	11.2%	84.6%
Quality control	1.3%	5.3%	93.4%	6.0%	8.4%	85.6%
Standards	0.4%	7.0%	92.5%	7.5%	8.4%	84.1%
Other	4.0%	1.3%	94.7%	1.2%	2.4%	96.3%

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply.

# 3.7 Top Goals for Digitization Projects

The top three goals for digitization activities in 2001 were as follows:

- Preserve materials of importance or value: 37.4 percent of libraries identified this as a goal.
- Increase interest in the institution: 32.5 percent of libraries identified this as a goal.
- Provide access to materials via the Web: 26.7 percent of libraries identified this as a goal.
- In 2004, the top three goals for digitization activities were as follows:
- Preserve materials of importance or value: 42.2 percent of libraries identified this as a goal.
- Increase access to collections/materials/files: 32.2 percent of libraries identified this as a goal.
- Minimize damage to original materials: 23.2 percent of libraries identified this as a goal.

FIGURE 32. GOALS FOR DIGITIZATION ACTIVITIES				
Goal	Survey Year			
Goal	2001 (n=206)	2004 (n=211)		
Preserve materials of importance or value	37.4%	42.2%		
Increase access to collections/materials/files	4.9%	32.2%		
Minimize damage to original materials	24.3%	23.2%		
Provide access to materials via the Web	26.7%	22.7%		
Increase interest in the institution	32.5%	7.1%		
Save space in the institution	10.7%	5.7%		
Present more of the collection than is on display at any one time	3.9%	1.4%		
Save costs by eliminating duplication of materials	0.5%	1.9%		
Encourage cooperation among institutions to increase the number and variety of materials available	10.7%	1.4%		
Provide greater information about the institution's collections to artists, scholars, students, teachers, and the public	0.0%	2.8%		
Increase access to state services	3.4%	0.9%		
Support educational programs	1.0%	1.4%		

FIGURE 32.				
GOALS FOR DIGITIZATION ACTIVITIES				
Goal	Survey	Survey Year		
Goai	2001 (n=206)	2004 (n=211)		
Other (please list)	0.0% 0.5			
Don't know/Not applicable	35.0%	48.6%		

Note: Data are based on responses to survey question 31; respondents were asked to select their institution's top three goals.

# **Academic Libraries**

In this chapter, we provide an overview of the academic library data, a detailed description of certain survey question responses by academic library size, and a summary of comparisons with data from the 2001 survey.

# 1. Academic library Overview

# 1.1 Technology Overview

- Availability of funding: Of the academic libraries surveyed, 95.6 percent report having received funding for technology in the past 12 months, and 88.1 percent expect to have funding in the next 12 months.
- Adequacy of technology funding: Half of academic libraries indicate that more than 75 percent of their technology needs are adequately funded. More than one-fourth (28.0%) of medium libraries report that their technology needs are fully (100%) met. However, 26.9 percent of large libraries indicate that 50 percent or less of their technology needs are adequately funded.
- Maintaining and adding technologies: All academic libraries, regardless of size, agree
  that their institutions are able to maintain their current levels of technology but are
  neutral on their institutions' ability to add new uses of technology to meet evolving
  needs.
- *Technology capacity:* More than two-thirds of academic libraries (70.7%) either currently have the technology capacity necessary to meet their needs or almost have enough capacity to meet their needs. Overall, 29.3 percent of the libraries indicated that their technology capacity is short of meeting their mission or does not meet their mission.
- Technologies in use: E-mail, desktop computers, office productivity software, institutional Web site, and computerized catalogs of library or other collections are used by nearly all academic libraries. Other technologies widely used include the following:
  - o Broadband Internet connections, used by 90.8 percent of academic libraries.
  - o Local area networks (LANs), used by 87.7 percent.
  - o Integrated library system, used by 84.6 percent.
  - o Multimedia services or collections, used by 78.5 percent.
  - o Accounting/payroll/human resources software, used by 76.9 percent.
  - Software to manage public-access computers and printing, used by 66.7 percent.
- Staff capabilities: Overall, 71.4 percent of academic libraries report that they do not have enough skilled staff to accomplish their technology activities. This is particularly

true among small academic libraries, of which 83.3 percent do not have sufficient numbers of skilled staff.

• *Needs assessment:* Overall, 43.8 percent of academic libraries conduct assessments of user or visitor needs for technology-supported services, including 53.8 percent of large and 41.7 percent of small academic libraries.

# 1.2 Digitization Overview

- *Digitization policies:* Among all academic libraries, regardless of size, the most common policies in place include access (30.6% of academic libraries), digital format (23%), and intellectual property issues (19.7%). Large academic libraries are generally stronger in each of these categories (40.0, 36.0, and 28.0%, respectively).
- Funding for digitization activities: Overall, 29.0 percent of academic libraries had digitization funds in the past 12 months, including 40.0 percent of large libraries. However, the majority of academic libraries (54.8%) did not have funding for this period.
- *Digitization priorities:* Digitizing historical documents/archives is a top priority for 38.7 percent of all academic libraries; digitizing course material is important to 33.9 percent; and digitizing photographs is a top priority for 24.2 percent of all academic libraries.
- Materials and images digitized: In the past 12 months, 45.0 percent of all academic libraries created 1 to 500 digital images. Overall, large academic libraries digitized more than small and medium ones did. No digital images were created by 40.0 percent of all academic libraries, including 60.0 percent of small and 50.0 percent of medium libraries.
- *Materials or images still to be digitized:* More that half (54.4%) of academic libraries of all sizes have between 1 and 10,000 items left to digitize, and 19.3 percent have more than 25,000 items left. Large academic libraries have the most items to digitize, with 66.6 percent having more than 5,000 items to digitize. Overall, 24.6 percent of the libraries report that they have no items to be digitized, including 44.4 percent of small academic libraries.
- *Undertaking digitization activities:* Across all academic libraries, 45.2 percent train current staff to perform digitization activities, 12.9 percent reassign staff to perform these activities, and 11.3 percent hire new staff to digitize materials.
- *Making digital images available:* The majority of large academic libraries (52.0%) make some of their digital image collections available to the public, while fewer small and medium academic libraries (27.3 and 23.2%, respectively) make their digital collections available. The majority (56.0%) of academic libraries make their digital

- collections available to the public via the Web, including 72.7 percent of large libraries. Access on-site is available in 20.0 percent of the academic libraries.
- Needs assessment: More than two-thirds of academic libraries (78.7%) do not conduct
  assessments of user or visitor needs for digitized materials and images in their
  institutions.
- *Collaboration:* Of all academic libraries, 21.3 percent report that they collaborate with other institutions through specific partnering agreements. When they collaborate, 69.2 percent turn to other academic libraries, 61.5 percent turn to universities and colleges, 61.5 percent turn to state library agencies, and 38.5 percent turn to historical societies.
- Capability for digitization activities: On average, academic libraries feel somewhat deficient in their capability to initiate, accomplish, and sustain digitization activities. Staff skills and expertise are the most highly rated capabilities; funding is the lowest.
- *Hindrances to digitization:* Overall, academic libraries (regardless of size) tend to agree most strongly that "lack of staff time," "lack of funds," and "other projects have higher priorities" are all hindrances to their digitization activities.

# 2. Academic library size analyses

This section highlights the differences between the small, medium, and large academic libraries that responded to the survey. It compares how issues related to technology and digitization differ among the three size categories. To determine the small, medium, and large categories, we used the academic library survey question D on academic library budget size.

FIGURE 1 ACADEMIC LIBRARY SIZE ANALYSES				
Size of Academic Library Annual Budget (2004)	Budget Category			
Less than \$250,000	Small			
\$250,001-\$500,000 \$500,001-\$750,000	Medium			
- \$750,001- \$1,000,000 \$1,000,001-\$5,000,000 \$5,000,001-\$10,000,000 \$10,000,001-\$25,000,000 More than \$25,000,000	- Large			

Note: Data are based on responses to survey question D; respondents were asked to select only one option.

### 2.1 Demographics

A total of 70 academic libraries participated in the survey. However, not all academic library participants responded to every question, so the sample sizes presented in the tables below might be slightly lower than 70. In addition, some tables are broken down by size of academic library while others are presented on the whole, which may result in different sample sizes for different tables.

### **Type of Academic Library**

Figure 2 shows the types of academic institutions participating in the survey. Almost half of all academic library respondents represented universities.

FIGURE 2 PERCENTAGE OF ACADEMIC LIBRARIES IN EACH TYPE OF INSTITUTION BY SIZE						
Small         Medium         Large         Total           Type         (n=15)         (n=28)         (n=26)         (n=69)						
- Two-year junior/community college	46.7%	35.7%	19.2%	31.9%		
Four-year college 33.3% 25.0% 7.7% 20.3°						
University (offers post-baccalaureate degrees	20.0%	35.7%	73.1%	46.4%		
Don't know/Not applicable	0.0%	3.6%	0.0%	1.4%		

Note: Data are based on responses to survey question C; respondents were asked to select only one option.

# **Budget**

Figure 3 shows the annual budget for academic libraries. Slightly more than a quarter of the academic libraries surveyed have budgets between \$1 million and \$5 million, although more than half of them have budgets of less than \$750,000.

FIGURE 3 PERCENTAGE OF ACADEMIC LIBRARIES WITH EACH SIZE ANNUAL BUDGET				
Budget Percent (n=69)				
Less than \$250,000	21.7%			
\$250,001-\$500,000	23.2%			
\$500,001-\$750,000	17.4%			
\$750,001-\$1,000,000	5.8%			
\$1,000,001-\$5,000,000	26.1%			
\$5,000,001-\$10,000,000	2.9%			
\$10,000,001-\$25,000,000	2.9%			
More than \$25,000,000	0.0%			

Note: Data are based on responses to survey question D; respondents were asked to select only one option.

# **Staff Size**

Figure 4 shows the number of full-time staff reported by academic libraries. Three-quarters of academic libraries report staff sizes of fewer than 25.

FIGURE 4 PERCENTAGE OF ACADEMIC LIBRARIES WITH EACH SIZE CURRENT PAID, FULL-TIME-EQUIVALENT STAFF				
Staff Size Percent (n=70)				
Less than 5	22.9			
6–10	28.6			
11–25	24.3			
26–75	15.7			
76–150	5.7			
151–250	1.4			
251–500	1.4			
501–1,000	0.0			
1,001–1,500	0.0			
More than 1,500	0.0			

Note: Data are based on responses to survey question E; respondents were asked to select only one option.

# 2.2 Technology

# **Technology Funding**

Almost all (95.6%) academic libraries had funding for technology in the past 12 months and 88.1 percent plan to have funding in the next 12 months.

FIGURE 5 FUNDING FOR TECHNOLOGY						
Small (n=15)         Medium (n=27)         Large (n=25)						
In the past 12 months, did your in	stitution have	funding for	technology?			
Yes	86.7%	96.3%	100.0%	95.6%		
No	13.3%	3.7%	0.0%	4.4%		
Don't know/Not applicable	0.0%	0.0%	0.0%	0.0%		
In the next 12 months, do you plan	n to have fun	ding for your	technology?			
Yes	80.0%	85.2%	96.0%	88.1%		
No	13.3%	11.1%	0.0%	7.5%		
Don't know/Not applicable	6.7%	3.7%	4.0%	4.5%		

Note: Data are based on responses to survey questions 1 and 2; respondents were asked to select only one option.

# **Adequate Funding of Technology Needs**

More than one-fourth of medium academic libraries report that 100 percent of their technology needs are adequately funded.

FIGURE 6 PERCENTAGE OF TECHNOLOGY NEEDS THAT ARE ADEQUATELY FUNDED							
Percent         Small (n=15)         Medium (n=25)         Large (n=26)         Total (n=66)							
0%	0.0%	0.0%	0.0%	0.0%			
1–25%	0.0%	8.0%	3.8%	4.5%			
26–50%	26.7%	8.0%	23.1%	18.2%			
51–75%	40.0%	16.0%	30.8%	27.3%			
76–99%	26.7%	40.0%	34.6%	34.8%			
100%	6.7%	28.0%	7.7%	15.2%			

Note: Data are based on responses to survey question 3; respondents were asked to select only one option.

### **Maintaining and Adding Technology**

Figure 7 shows the mean ratings of an institution's ability to maintain or add technology based on a 5-point scale, with "1" meaning strongly agree and "5" meaning strongly disagree. Therefore, ratings less than 2.5 indicate agreement, ratings between 2.5 and 3.5 indicate neither agreement nor disagreement, and ratings greater than 3.5 indicate disagreement.

All academic libraries agree that their institutions are able to maintain their current levels of technology, but they are neutral on their institutions' ability to add new uses of technology to meet evolving needs.

FIGURE 7					
CAPACITY TO MAINTAIN AND ADD TECHNOLOGY					
- My institution is able to:	Small (n=14)	Medium (n=26)	Large (n=26)	Total (n=66)	
Maintain its current level of technology		2.0	2.3	2.1	
Add new uses of technology to meet evolving needs	3.1	2.7	2.8	2.8	

Note: Data are based on responses to survey question 4. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

### **Extent of Technology Capacity**

More than two-thirds of academic libraries (70.7%) either currently have the technology capacity necessary to meet their mission, or their technology capacity almost meets their mission. On average, 29.3 percent of academic libraries report that their technology capacity is short of meeting their mission or does not meet their mission.

FIGURE 8							
TECHNOLOGY CAP	TECHNOLOGY CAPACITY TO MEET MISSION						
Small Medium Large Tota							
Response Option	(n=13)	(n=26)	(n=26)	(n=65)			
Currently meets our mission	23.1%	38.5%	23.1%	29.2%			
Almost meets our mission	38.5%	42.3%	42.3%	41.5%			
Is short of meeting our mission	30.8%	15.4%	26.9%	23.1%			
Does not meet our mission	7.7%	3.8%	7.7%	6.2%			

Note: Data are based on responses to survey question 5; respondents were asked to select only one option.

# **Technologies Used in Past 12 Months**

All academic libraries, regardless of size, used e-mail in the past 12 months, and almost all used desktop computers, office productivity software, and a Web site for their institutions.

FIGURE 9							
ACADEMIC LIBRARIES THAT USED							
THE FOLLOWING TECHNOLOGIES IN TI	THE FOLLOWING TECHNOLOGIES IN THE PAST 12 MONTHS						
Technology Small Medium Large To (n=12) (n=26) (n=26) (n=26)							
Accounting/payroll/human resources software	64.3%	70.6%	85.3%	76.9%			
Broadband Internet connection	78.6%	88.2%	97.1%	90.8%			
Computerized catalog of library or other collections	85.7%	100.0%	100.0%	96.9%			
Computerized collections management system	50.0%	29.4%	54.5%	46.9%			
Database software or system for membership development	21.4%	47.1%	51.5%	43.8%			
Desktop computers	100.0%	94.1%	100.0%	98.5%			
E-mail	100.0%	100.0%	100.0%	100.0%			
GIS (geographic information systems) applications	0.0%	11.8%	28.1%	17.5%			
Integrated library system (ILS)	50.0%	100.0%	91.2%	84.6%			

FIGURE 9							
ACADEMIC LIBRARIES THAT USED							
THE FOLLOWING TECHNOLOGIES IN THE PAST 12 MONTHS							
Technology	Small (n=12)	Medium (n=26)	Large (n=26)	Total (n=64)			
Intranet	53.8%	64.7%	71.9%	66.1%			
LAN (local area network)	92.9%	100.0%	79.4%	87.7%			
Marketing and promotion software and systems	0.0%	18.8%	18.8%	14.5%			
Meta- or federated searching in online collections and catalogs	14.3%	35.3%	36.4%	31.3%			
Modem (dial access) Internet connection	28.6%	29.4%	28.1%	28.6%			
Multimedia services or collections	57.1%	88.2%	82.4%	78.5%			
Notebook or tablet computers	50.0%	41.2%	59.4%	52.4%			
Office productivity software, including word processing, desktop publishing, and spreadsheets	100.0%	94.1%	100.0%	98.5%			
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	28.6%	29.4%	39.4%	34.4%			
Personal information management (PIM) software	14.3%	0.0%	12.5%	9.5%			
Point-of-sale software and systems	7.1%	17.6%	21.2%	17.2%			
RFID (radio frequency identification) in services or collections	0.0%	5.9%	0.0%	1.6%			
Software to manage public-access computers and printing	64.3%	64.7%	68.8%	66.7%			
Video tours	14.3%	23.5%	15.6%	17.5%			
Virtual reality tours	21.4%	5.9%	12.9%	12.9%			
Web portal or gateway for services or collections	64.3%	47.1%	68.8%	61.9%			
Web site for the institution	92.9%	100.0%	100.0%	98.5%			
Wireless network, including WiFi	14.3%	52.9%	76.5%	56.9%			
Other	0.0%	20.0%	33.3%	20.0%			

Note: Data are based on survey question 6; respondents were asked to select all that apply.

The majority of small academic libraries (58.3%) and medium academic libraries (57.7%) used between 11 and 15 technologies in the past 12 months, while the majority of large academic libraries (76.9%) used between 11 and 20 technologies.

FIGURE 10 PERCENTAGE OF ACADEMIC LIBRARIES THAT USED THE FOLLOWING NUMBER OF TECHNOLOGIES IN THE PAST 12 MONTHS								
Number	Small (n=12)							
0	0.0%	0.0%	0.0%	0.0%				
1–5	0.0%	0.0%	0.0%	0.0%				
6-10	16.7%	11.5%	7.7%	10.9%				
11–15	58.3%	57.7%	42.3%	51.6%				
16-20	25.0%	23.1%	34.6%	28.1%				
21 or more	more 0.0% 7.7% 15.4% 9.4%							

Note: Data are based on responses to survey question 6.

### **Staff Capabilities**

A greater number of small academic libraries (83.3%) report that they do not have the right number of skilled staff to accomplish their technology activities than either medium or large academic libraries (69.2 and 68.0%, respectively).

Overall, more than two-thirds of academic libraries (71.4%) do not have enough skilled staff to accomplish their technology activities.

FIGURE 11 EXTENT TO WHICH ACADEMIC LIBRARIES HAVE SUFFICIENT SKILLED STAFF TO ACCOMPLISH TECHNOLOGY ACTIVITIES							
Response Option Small (n=12) Medium (n=25) Total (n=63)							
We do not have enough skilled staff to accomplish our technology activities.	83.3%	69.2%	68.0%	71.4%			
We have the right amount of skilled staff to accomplish our technology activities.	16.7%	26.9%	24.0%	23.8%			
We have more than enough skilled staff to accomplish our technology activities.	0.0%	0.0%	0.0%	0.0%			
Other (please list)	0.0%	3.8%	8.0%	4.8%			
Don't know/Not applicable	0.0%	0.0%	0.0%	0.0%			

Note: Data are based on responses to survey question 10; respondents were asked to select only one option.

#### **Needs Assessments**

A greater number of small and large academic libraries (41.7 and 53.8%, respectively) conduct assessments of user or visitor needs for technology-supported services or experiences at their institutions than do medium academic libraries (34.6%).

FIGURE 12 NEEDS ASSESSMENTS						
FOR TECHNOLOGY-SUPPORTED SERVICES						
Response Option Small Medium Large Total (n=12) (n=26) (n=26) (n=64)						
Yes	41.7%	34.6%	53.8%	43.8%		
No	58.3%	46.2%	34.6%	43.8%		
Don't know/Not applicable 0.0% 19.2% 11.5% 12.5%						

Note: Data are based on responses to survey question 12; respondents were asked to select only one option.

# 2.3 Digitization

#### **Digitization Policies**

In general, a greater number of large academic libraries have digitization policies in place than medium or small academic libraries do. The most prevalent digitization policies among all academic libraries are those for access (30.6% of all libraries have such policies), digital format (23.0%), and intellectual property issues (19.7%). The least prevalent policies include

those for conversion of digital files to next-generation formats (1.7%), quality control (6.6%), and preservation (8.2%). Overall, the data show that even the most prevalent policies are in place in less than one-third of all academic libraries.

FIGURE 13 DIGITIZATION POLICIES IN PLACE						
Type of Policy	Small (n=11)	Medium (n=26)	Large (n=25)	Total (n=62)		
Access	18.2%	26.9%	40.0%	30.6%		
Best practices	9.1%	12.0%	8.0%	9.8%		
Conversion of digital files to next-generation formats	0.0%	4.0%	0.0%	1.7%		
Digital format (e.g., TIFF, GIF, PAL)	18.2%	12.0%	36.0%	23.0%		
Evaluation	9.1%	11.5%	12.5%	11.5%		
Institutional repository	9.1%	4.0%	16.0%	9.8%		
Intellectual property issues	18.2%	12.0%	28.0%	19.7%		
Materials to be digitized	9.1%	4.0%	24.0%	13.1%		
Priorities for digitization	9.1%	8.0%	16.0%	11.5%		
Preservation	0.0%	8.0%	12.0%	8.2%		
Quality control	0.0%	4.0%	12.0%	6.6%		
Standards	0.0%	12.0%	20.0%	13.1%		
Metadata	0.0%	8.0%	24.0%	13.1%		
Security	9.1%	4.0%	24.0%	13.1%		
Other	0.0%	0.0%	16.7%	6.7%		

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply.

### **Digitization Funding**

A greater number of large academic libraries (40.0%) had funding to support their digitization activities in the past 12 months than small and medium academic libraries (18.2 and 23.1%, respectively). A majority of small and medium academic libraries (72.7 and 57.7%, respectively) reported that they did not have funding to support their digitization activities in the past 12 months.

FIGURE 14							
FUNDING TO SUPPORT DIGITIZATION ACTIVITIES							
Response Option Small Medium Large Total (n=11) (n=26) (n=25) (n=62)							
Yes	18.2%	23.1%	40.0%	29.0%			
No	72.7%	57.7%	44.0%	54.8%			
Don't know/Not applicable	9.1%	19.2%	16.0%	16.1%			

Note: Data are based on survey question 18; respondents were asked to select only one option.

### **Materials for Digitization**

Course materials, photographs, and information on the institution were digitized by academic libraries more than any other materials. Overall, 13.1 percent of academic libraries digitized course materials, 8.3 percent digitized photographs, and 8.2 percent digitized information on their institutions.

FIGURE 15 MATERIALS THAT HAVE BEEN DIGITIZED IN THE PAST 12 MONTHS					
OR ARE CURRENTLY B	EING DIG	ITIZED			
Material	Small (n=11)	Medium (n=26)	Large (n=25)	Total (n=62)	
Correspondence, diaries, and other personal records	0.0%	0.0%	12.0%	4.9%	
Course material	0.0%	19.2%	12.0%	13.1%	
Education and training material about the collections	0.0%	4.0%	4.0%	3.3%	
Films, videotapes	0.0%	0.0%	8.0%	3.3%	
Government publications	0.0%	3.8%	0.0%	1.7%	
Historical documents/archives	9.1%	0.0%	12.0%	6.5%	
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	0.0%	0.0%	8.0%	3.3%	
Information on the institution	10.0%	3.8%	12.0%	8.2%	
Journals and other serials	0.0%	0.0%	4.0%	1.6%	
Manuscripts	0.0%	0.0%	12.0%	4.9%	
Maps	0.0%	0.0%	4.2%	1.7%	
Music and other recorded sound	0.0%	0.0%	0.0%	0.0%	
Newspapers	0.0%	0.0%	0.0%	0.0%	
Photographs	10.0%	3.8%	12.5%	8.3%	
Rare books	0.0%	0.0%	8.0%	3.3%	
Records about the collection	0.0%	0.0%	4.0%	1.6%	
Sheet music	0.0%	0.0%	4.2%	1.7%	
Special exhibits	0.0%	0.0%	16.0%	6.5%	
Theses and dissertations	10.0%	0.0%	4.2%	3.4%	
Other (please list)	0.0%	0.0%	0.0%	0.0%	

Note: Data are based on responses to survey question 20; respondents were asked to select all that apply.

# **Primary Digitization Priorities**

Of the academic libraries surveyed, the three highest digitization priorities were as follows:

- Historical documents/archives: a priority for 38.7 percent of all academic libraries.
- Course material: a priority for 33.9 percent of all academic libraries.
- Photographs: a priority for 24.2 percent of all academic libraries.

FIGURE 16 DIGITIZATION PRIORITIES							
Priority	Small (n=11)	Medium (n=26)	Large (n=25)	Total (n=62)			
Correspondence, diaries, and other personal records	0.0%	3.8%	28.0%	12.9%			
Course material	18.2%	42.3%	32.0%	33.9%			
Education and training material about the collections	18.2%	7.7%	0.0%	6.5%			
Films, videotapes	0.0%	0.0%	16.0%	6.5%			
Government publications	0.0%	0.0%	0.0%	0.0%			
Historical documents/archives	9.1%	34.6%	56.0%	38.7%			
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	9.1%	0.0%	8.0%	4.8%			
Information on the institution	9.1%	23.1%	16.0%	17.7%			

FIGURE 16 DIGITIZATION PRIORITIES						
Priority	Small (n=11)	Medium (n=26)	Large (n=25)	Total (n=62)		
Journals and other serials	18.2%	0.0%	0.0%	3.2%		
Manuscripts	0.0%	3.8%	12.0%	6.5%		
Maps	0.0%	3.8%	0.0%	1.6%		
Music and other recorded sound	0.0%	3.8%	4.0%	3.2%		
Newspapers	0.0%	3.8%	4.0%	3.2%		
Photographs	9.1%	23.1%	32.0%	24.2%		
Rare books	18.2%	0.0%	8.0%	6.5%		
Records about the collection	9.1%	0.0%	0.0%	1.6%		
Sheet music	0.0%	0.0%	4.0%	1.6%		
Special exhibits	18.2%	3.8%	4.0%	6.5%		
Theses and dissertations	0.0%	0.0%	20.0%	8.1%		
Other (please list)	0.0%	0.0%	4.0%	1.6%		
Don't know/Not applicable	54.5%	38.5%	16.0%	32.3%		

Note: Data are based on responses to survey question 22; respondents were asked to select their institution's top three priorities.

## **Number of Digital Materials Created in the Past 12 Months**

The majority of small academic libraries (60.0%) and half of medium academic libraries (50.0%) created no digital materials or images in the past 12 months, whereas the majority of large academic libraries (54.2%) created between 1 and 500 digital materials or images in the past 12 months.

FIGURE 17 NUMBER OF DIGITAL MATERIALS OR IMAGES CREATED IN THE PAST 12 MONTHS							
Number         Small (n=10)         Medium (n=26)         Large (n=24)         Total (n=60)							
0	60.0%	50.0%	20.8%	40.0%			
1–500	40.0%	38.5%	54.2%	45.0%			
501–1,000	0.0%	11.5%	4.2%	6.7%			
1,001-5,000	0.0%	0.0%	8.3%	3.3%			
5,001–10,000	0.0%	0.0%	8.3%	3.3%			
10,001–25,000	0.0%	0.0%	4.2%	1.7%			
More than 25,000	0.0%	0.0%	0.0%	0.0%			

Note: Data are based on survey question 23; respondents were asked to select only one option.

### Number of Additional Images Remaining to Be Digitized

Overall, 54.4 percent of all academic libraries have from 1 to 10,000 digital materials or images left to be digitized. However, almost one-fourth (24.6%) of all academic libraries report that they have no materials or images left to digitize.

FIGURE 18 Number of Digital Materials or Images Left to Be Created							
Number   Small   Medium   Large   Total   (n=9)   (n=24)   (n=24)   (n=57)							
0	44.4%	25.0%	16.7%	24.6%			
1–500	0.0%	16.7%	4.2%	8.8%			
501-1,000	22.2%	16.7%	0.0%	10.5%			
1,001-5,000	22.2%	12.5%	12.5%	14.0%			
5,001–10,000	0.0%	16.7%	33.3%	21.1%			
10,001–25,000	0.0%	4.2%	0.0%	1.8%			
More than 25,000	11.1%	8.3%	33.3%	19.3%			

Note: Data are based on responses to survey question 24; respondents were asked to select only one option.

## **Undertaking Digitization Activities**

Overall, academic libraries are more likely to undertake their digitization activities by training current staff to perform these activities.

Figure 19						
Undertaking Digit	<b>TIZATION</b>	ACTIVITIES	S			
		Bud	get			
Response Option	Small (n=11)	Medium (n=26)	Large (n=25)	Total (n=62)		
Contractual staff were hired to perform these activities in-house.	0.0%	3.8%	8.0%	4.8%		
New institutional staff were hired to perform these activities.	0.0%	11.5%	16.0%	11.3%		
Current staff were trained to perform these activities.	27.3%	42.3%	56.0%	45.2%		
Current staff were reassigned to perform these activities.	9.1%	11.5%	16.0%	12.9%		
Volunteers perform these activities.	9.1%	0.0%	4.0%	3.2%		
These activities are performed by commercial vendors off-site.	9.1%	0.0%	20.0%	9.7%		
Materials are digitized off-site at another institution's digitization center.	0.0%	7.7%	12.0%	8.1%		
Other (please list)	0.0%	3.8%	8.0%	4.8%		
Don't know/Not applicable	63.6%	38.5%	24.0%	37.1%		

Note: Data are based on responses to survey question 26; respondents were asked to select all that apply.

### The Availability of Digital Image Collections to the Public

Overall, 43.6 percent of academic libraries make some or all of their digital image collections available to the public. More academic libraries with large budgets (60%) make some or all of their digital image collections available to the public than academic libraries with small and medium budgets (36.4 and 30.8%, respectively).

FIGURE 20 PUBLIC AVAILABILITY OF DIGITAL IMAGE COLLECTIONS						
Response Option Small Medium Large Tota (n=11) (n=26) (n=25) (n=62)						
Yes, some of our digital image collections are available to the public.	27.3%	23.1%	52.0%	35.5%		
Yes, all of our digital image collections are available to the public.	9.1%	7.7%	8.0%	8.1%		
No, our digital image collections are not available to the public.	18.2%	26.9%	12.0%	19.4%		
Don't know/Not applicable	45.5%	42.3%	28.0%	37.1%		

Note: Data are based on responses to survey question 27; respondents were asked to select only one option.

## **How Digital Image Collections Are Made Available**

Of those large academic libraries that make their digital image collections available to the public, almost three-fourths of them (72.7%) make their collections available on the Web, while almost one-fourth (22.7%) make their collections available on the premises on their computer networks (LANs).

Of those small and medium academic libraries that make their digital image collections available to the public, almost one half (44.4 and 42.1%, respectively) make their collections available on the Web.

FIGURE 21 HOW DIGITAL IMAGE COLLECTIONS ARE MADE AVAILABLE						
Response Option Small Medium Large Total (n=9) (n=19) (n=22) (n=50)						
On the premises on our computer network (LAN)	11.1%	21.1%	22.7%	20.0%		
On the Web	44.4%	42.1%	72.7%	56.0%		
Through a third party	0.0%	5.3%	4.5%	4.0%		
Don't know/Not applicable	55.6%	57.9%	28.6%	44.9%		

Note: Data are based on responses to survey question 28; respondents were asked to select all that apply. The table includes only respondents who reported that they make some or all of their digital image collections available to the public.

#### **Needs Assessments**

More than two-thirds of academic libraries (78.7%), regardless of size, do not conduct assessments of user or visitor needs for digitized materials and images in their institutions.

FIGURE 22						
NEEDS ASSESSMENTS FOR DIGITIZED MATERIALS						
Response Option Small Medium Large Total (n=10) (n=26) (n=25) (n=61)						
Yes	10.0%	7.7%	12.0%	9.8%		
No	90.0%	69.2%	84.0%	78.7%		
Don't know/Not applicable	0.0%	23.1%	4.0%	11.5%		

Note: Data are based on survey question 35; respondents were asked to select only one option.

### Collaboration

21.3 percent of all academic libraries collaborate (through specific partnering agreements) with other institutions and organizations to digitize materials.

FIGURE 23. COLLABORATION TO DIGITIZE MATERIALS							
Response Option Small Medium Large Total (n=10) (n=26) (n=25) (n=61)							
Yes	10.0%	11.5%	36.0%	21.3%			
No	80.0%	76.9%	48.0%	65.6%			
Don't know/Not applicable	10.0%	11.5%	16.0%	13.1%			

Note: Data are based on responses to survey question 37; respondents were asked to select only one option.

Of those academic libraries that do collaborate to digitize materials, 69.2 percent turn to other academic libraries, 61.5 percent turn to state library agencies, and 61.5 percent turn to universities and colleges.

FIGURE 24. COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS						
Response Option	Small (n=1)	Medium (n=3)	Large (n=9)	Total (n=13)		
State library agencies	100.0%	66.7%	55.6%	61.5%		
Academic libraries	100.0%	66.7%	66.7%	69.2%		
Individual public libraries	100.0%	0.0%	22.2%	23.1%		
Private libraries	0.0%	0.0%	11.1%	7.7%		
Museums	0.0%	33.3%	33.3%	30.8%		
Consortia	100.0%	33.3%	22.2%	30.8%		
State archives	100.0%	33.3%	22.2%	30.8%		
- Special libraries	0.0%	0.0%	11.1%	7.7%		
Historical societies	100.0%	66.7%	22.2%	38.5%		
Federal government agencies or archives	100.0%	0.0%	0.0%	7.7%		
Other state government agencies	0.0%	0.0%	0.0%	0.0%		
City, municipal, or other local government agencies or archives	0.0%	0.0%	11.1%	7.7%		
Universities and colleges	100.0%	100.0%	44.4%	61.5%		
Community organizations	0.0%	0.0%	0.0%	0.0%		
Private companies	0.0%	0.0%	0.0%	0.0%		
Foundations	0.0%	0.0%	11.1%	7.7%		
State library associations	100.0%	33.3%	0.0%	15.4%		
State museum associations	0.0%	0.0%	0.0%	0.0%		
Other professional associations	0.0%	0.0%	0.0%	0.0%		
Other	0.0%	0.0%	22.2%	15.4%		

Note: Data are based on responses to survey question 37; respondents were asked to select all that apply.

### Capabilities in Initiating, Accomplishing, and Sustaining Digitization Activities

Overall, academic libraries rate their capability to initiate, accomplish, and sustain digitization activities between somewhat deficient and neutral in all areas. Medium academic libraries rated themselves the least capable, while small and large academic libraries rated themselves somewhat more capable.

Figure 25 shows the average ratings of an institution's capability to initiate, accomplish, and sustain digitization activities based on a 5-point scale, with "1" meaning deficient and "5" meaning fully capable. Therefore, ratings less than 2.5 tend to indicate deficiency and ratings greater than 2.5 tend to indicate capability.

FIGURE 25 CAPABILITY TO INITIATE, ACCOMPLISH, AND SUSTAIN DI	[GITIZA]	TION AC	TIVITIE	S
Capability	Small (n=10)	Medium (n=26)	Large (n=25)	Total (n=61)
Staff skills and expertise	2.4	2.2	2.9	2.5
Equipment and software	2.3	1.8	2.4	2.2
Funding	1.8	1.7	1.7	1.7
Established digitization plan	1.9	1.7	1.9	1.8
Established digitization policies	2.0	1.8	2.0	1.9
Established quality standards	2.1	1.8	2.3	2.1
Established procedures for preparation for creating digital images	2.1	1.8	2.6	2.2
Established procedures for the management of images and files	2.0	1.7	2.3	2.0
Other (please list)	0.0	1.0	1.0	1.0

Note: Data are based on responses to survey question 39; respondents were asked to rate each capability. The scale for this question was 1, meaning deficient, to 5, meaning fully capable.

### **Hindrances to Digitization Activities**

Overall, academic libraries cite "lack of staff time," "lack of funds," and "other projects have higher priorities" as the strongest hindrances to their digitization activities. "Not having collections worth digitizing," "security concerns," "management is unaware of the benefits of digitization," and "concern about intellectual property issues" are the least-cited hindrances.

FIGURE 26 HINDRANCES TO DIGITIZATION ACTIVITIES							
Response Options	Small (n=10)	Medium (n=26)	Large (n=25)	Total (n=61)			
Lack of staff time	1.3	1.5	1.4	1.4			
Lack of staff skills and expertise	2.0	1.8	2.5	2.1			
Lack of funds	1.3	1.5	1.5	1.5			
Lack of sufficient equipment and/or software	2.0	1.9	2.2	2.1			
Lack of an established digitization plan	1.8	1.9	2.2	2.0			
Lack of established digitization policies	1.9	2.0	2.3	2.1			
Lack of established quality standards	1.9	2.3	2.3	2.3			
Lack of established policies and procedures for preparation for materials for digitizing	2.0	2.2	2.5	2.3			

FIGURE 26 HINDRANCES TO DIGITIZATION ACTIVITIES								
Response Options    Small   Medium   Large   To   (n=10)   (n=26)   (n=25)   (n=25)								
Lack of established policies and procedures for the management of images and files	2.0	1.9	2.4	2.2				
Other projects have higher priorities	1.7	1.8	1.8	1.8				
Concern about intellectual property issues	2.9	2.5	2.8	2.7				
Security concerns	3.0	2.6	2.8	2.8				
Not having collections worth digitizing	3.4	3.3	3.9	3.6				
Concern about costs of preservation and management	2.1	2.1	2.5	2.2				
Management is unaware of the benefits of digitization	2.6	2.6	3.0	2.8				
Other (please list)	0.0	1.0	0.0	1.0				

Note: Data are based on responses to survey question 40; respondents were asked to rate each potential hindrance. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

## 3. Comparisons of the 2001 and the 2004 survey findings

This section highlights the differences in the following categories between the 2001 and the 2004 survey findings.

- Top technologies used
- Funding for technology and digitization
- Sources of funding for digitization activities
- Digitization policies
- Top goals for digitization projects

Because of some differences between the 2001 and 2004 survey questions, comparisons are made only where applicable.

#### 3.1 Overview

- Technologies used in the past 12 months: Overall, technology use for basic operations became more pervasive among academic libraries. The percentage of academic libraries using e-mail went up from 98.7 percent in 2001 to 100 percent in 2004; the percentage of those using desktop computers went up from 93.7 percent to 98.5 percent; office productivity software use went up from 91.1 percent to 98.5 percent; and the percentage of academic libraries with Web sites went up from 94.4 percent in 2001 to 98.5 percent in 2004. The use of accounting/payroll/human resources software increased, as well: 58.2 percent of academic libraries used these technologies in 2001, compared with 76.9 percent in 2004. Also, the percentage of intranet use went up from 57.0 percent to 66.1 percent.
- Goals for digitization projects: The academic libraries' primary goals for digitization activities changed from 2001 to 2004:
  - o Preserving materials of importance or value was identified as a primary goal by 40.8 percent of academic libraries in 2001, but this figure went down to 34.9 percent in 2004.
  - o Increasing access to collections/materials was an important goal to 16.9 percent in 2001, but this figure went up significantly to 42.9 percent by 2004.
  - Minimizing damage to original materials was identified as a primary goal by 35.2 percent of academic libraries in 2001, but this figure dropped to 12.7 percent in 2004.
  - o Providing access to materials via the Web was important to 23.9 percent in 2001; this number went up to 36.5 percent by 2004.
  - o Increasing interest in the institution was a primary goal to 31.0 percent of all academic libraries in 2001, but this number dropped to 11.1 percent in 2004.

### 3.2 Top Technologies Used

The three technologies most commonly used by academic libraries in 2001 and 2004 were email, Web sites for their institutions, and desktop computers. Additionally, in 2004, office

productivity software, including word processing, desktop publishing, and spreadsheets, was among the top technologies used.

FIGURE 27 TECHNOLOGIES USED IN THE PAST 12 MONTHS					
	Survey Year				
Technology	2001 (n=79)	2004 (n=65)			
Accounting/payroll/human resources software	58.2%	76.9%			
Computerized catalog of library or other collections	92.4%	96.9%			
Computerized collections management system	67.1%	46.9%			
Database software or system for membership development	19.0%	43.8%			
Desktop computers	93.7%	98.5%			
E-mail	98.7%	100.0%			
Intranet	57.0%	66.1%			
Marketing and promotion software and systems	8.9%	14.5%			
Notebook or tablet computers	48.1%	52.4%			
Office productivity software, including word processing, desktop publishing, and spreadsheets	91.1%	98.5%			
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	29.1%	34.4%			
Point-of-sale software and systems	5.1%	17.2%			
Video tours	7.6%	17.5%			
Virtual reality tours	8.9%	12.9%			
Web site for your institution	94.9%	98.5%			
Other	3.8%	20.0%			

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply

# 3.3 Funding for Technology and Digitization

The percentage of academic libraries that report they had funding in 2004 for both technology and digitization activities is lower than the percentage that reported funding in 2001.

FIGURE 28 FUNDING FOR TECHNOLOGY AND DIGITIZATION						
Survey Year						
Response Option		2001 (n=	<b>=79</b> )		2004 (n	n=69)
Response Option	Don't know/				Don't know/	
	Yes No Not applicable			Yes	No	Not applicable
Technology						
In the past 12 months, did your institution	100.0%	0.0%	_	95.7%	4.3%	0.0%
have funding for technology?	100.070	0.070	_	73.170	T.570	0.070
In the next 12 months, do you plan to				88.2%	7.4%	4.4%

FIGURE 28 FUNDING FOR TECHNOLOGY AND DIGITIZATION						
Survey Year						
Response Option		2001 (n=	<b>=79</b> )		2004 (n	<b>1=69</b> )
Response Option	Yes	No	Don't know/ Not applicable	Yes	No	Don't know/ Not applicable
Digitization						
In the past 12 months, did your institution have funding to support your digitization activities?	40.5%	59.5%	-	28.6%	54.0%	17.5%
In the next 12 months, do you plan to obtain funding to support your digitization activities?	66.2%	33.8%	-	33.3%	38.1%	28.6%

Note: Data are based on responses to survey questions 1, 2, 18, and 19; respondents were asked to select only one option. The sample size (n), and percentages differ slightly from Table 14 (Funding to Support Digitization Activities), where some respondents did not provide data on size of library which resulted in slightly smaller sample sizes.

## 3.4 Sources of Funding for Technology

The top three funding sources for technology did not change from 2001 to 2004; they were as follows:

- Institutional operating funds
- State funds
- Grants from Federal agencies.

FIGURE 29 FUNDING FOR TECHNOLOGY						
	Surve	y Year				
Source of Funding	2001 (n=78)	2004 (n=66)				
Endowment funds	21.8%	15.2%				
Foundation grants	23.1%	7.6%				
Gifts from donors	30.8%	13.6%				
Grants from Federal agencies	39.8%	18.1%				
Institutional operating funds	73.1%	90.9%				
State funds	64.1%	31.8%				
City, county, or other local government funds	15.4%	4.5%				
Other sources	16.7%	3.0%				

Note: Data are based on responses to survey question 1; respondents were asked to select all that apply.

## 3.5 Sources of Funding for Digitization Activities

For those academic libraries that had funding for their digitization activities, the top two sources were the same in 2004 as they were in 2001:

- Institutional operating funds
- Grants from Federal agencies

FIGURE 30 FUNDING FOR DIGITIZATION ACTIVITIES					
Source of Funding Survey Year 2001					
Endowment funds	(n=32) 25.0%	( <b>n=18</b> ) 16.7%			
Foundation grants	15.6%	16.7%			
Gifts from donors	25.0%	16.7%			
Grants from Federal agencies	50.0%	27.8%			
Institutional operating funds	62.5%	88.9%			
State funds	34.4%	0.0%			
City, county, or other local government funds	0.0%	0.0%			
Other sources	3.1%	0.0%			

Note: Data are based on responses to survey question 18; respondents were asked to select all that apply.

# 3.6 Digitization Policies

The number of digitization policies in place or in development (versus not in place or in development/don't know) has increased since 2001. However, even in 2004, the majority of academic libraries did not have policies in place or in development.

FIGURE 31 DIGITIZATION POLICIES								
Survey Year								
		2001			2004			
<b>-</b>		(n=79)			(n=63)			
Policy			No policies in			No policies in		
	D 11 1	D. 11	place or in	Policies	D. 11	place or in		
	Policies	Policies in	development/	in	Policies in	development/		
	in place	development	Don't know	place	development	Don't know		
Access	3.8%	7.6%	88.6%	30.2%	7.9%	61.9%		
Best practices	1.3%	6.3%	92.4%	9.7%	16.1%	74.2%		
Conversion of digital files to next-generation formats	2.5%	6.3%	91.2%	1.6%	24.6%	73.8%		
Digital format (e.g., TIFF, GIF, PAL)	3.8%	7.6%	88.6%	22.6%	12.9%	64.5%		
Evaluation	0.0%	3.8%	96.2%	11.3%	12.9%	75.8%		
Intellectual property issues	2.5%	10.1%	87.4%	19.4%	24.2%	56.5%		
Materials to be digitized	3.8%	8.9%	87.4%	12.9%	14.5%	72.6%		
Priorities for digitization	2.5%	7.6%	89.9%	11.3%	12.9%	75.8%		
Preservation	0.0%	12.7%	87.4%	8.1%	12.9%	79.0%		
Quality control	2.5%	5.1%	92.4%	6.5%	12.9%	80.6%		
Standards	2.5%	6.3%	91.2%	12.9%	9.7%	77.4%		
Other	6.3%	0.0%	93.7%	6.7%	0.0%	93.3%		

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply. The sample size (n), and percentages differ slightly from Table 13 (Digitization Policies in Place), where some respondents did not provide data on size of library which resulted in slightly smaller sample sizes.

## 3.7 Top Goals for Digitization Projects

The top three goals for digitization activities in 2001 were as follows:

- Preserve materials of importance or value: This was a goal for 40.8 percent of all academic libraries.
- Minimize damage to original materials: This was a goal for 35.2 percent.
- Increase interest in the institution: This was a goal for 31.0 percent.

In 2004, however, the top three goals were as follows:

- Increase access to collections/materials/files: This was a goal for 42.9 percent of all academic libraries.
- Provide access to materials via the Web: This was a goal for 36.5 percent
- Preserve materials of importance or value: This was a goal for 34.9 percent of academic libraries.

FIGURE 32 GOALS FOR DIGITIZATION ACTIVITIES							
Survey year							
Goal	2001 (n=71)	2004 (n=63)					
Preserve materials of importance or value	40.8%	34.9%					
Increase access to collections/materials/files	16.9%	42.9%					
Minimize damage to original materials	35.2%	12.7%					
Provide access to materials via the Web	23.9%	36.5%					
Increase interest in the institution	31.0%	11.1%					
Save space in the institution	2.8%	3.2%					
Present more of the collection than is on display at any one time	7.0%	0.0%					
Save costs by eliminating duplication of materials	2.8%	0.0%					
Encourage cooperation among institutions to increase the number and variety of materials available	9.9%	1.6%					
Provide greater information about the institution's collections to artists, scholars, students, teachers, and the public	0.0%	7.9%					
Increase access to state services	18.3%	0.0%					
Support educational programs	1.4%	14.3%					
Other (please list)	0.0%	1.6%					
Don't know/Not applicable	21.1%	30.2%					

Note: Data are based on responses to survey question 31; respondents were asked to select their institution's top three priorities.

# **Archives**

In this chapter, we provide an overview of the archives data and a detailed description of certain survey question responses by archives size.

### 1. Archives Overview

### 1.1 Technology Overview

- Availability of funding: Of all archives surveyed, 76.5 percent report having received funding for technology in the past 12 months, and 67.3 percent expect to receive funds for the next 12 months.
- Adequacy of technology funding: Overall, 51.8 percent of archives report that the majority of their technology needs are adequately funded; 30.9 percent report that 25 percent or less of their technology needs are adequately funded.
- *Maintaining and adding technologies:* All archives, regardless of size, agree that their institutions are able to maintain their current levels of technology, but they are neutral on their institutions' ability to add new uses of technology to meet evolving needs.
- *Technology capacity:* Overall, 54.8 percent of archives report that they have the capacity to meet or almost meet their missions.
- *Technologies in use:* Almost all archives use basic computer technologies: e-mail is used by 99.0 percent of all archives; office productivity software is used by 98.1 percent; and desktop computers are used by 96.2 percent. In addition, 95.2 percent of all archives have Web sites. Also used widely by all archives are the following:
  - o LANs (local area networks), used by 82.5 percent.
  - o Broadband Internet connections, used by 78.6 percent.
  - o Computerized catalog of library or other collections, used by 72.5 percent.
  - o Accounting/payroll/human resources software, used by 70.0 percent.
- Staff for technology activities: The majority of archives (79.4%), regardless of size, do not have enough skilled staff to perform their technology activities.
- *Needs assessment:* Only 14.7 percent of archives report that they conduct assessments of user or visitor needs for technology-supported services or experiences at their institutions. Among the archives that do conduct assessments, medium archives are the most active, with 19.2 percent conducting such assessments.

### 1.2 Digitization

• *Digitization policies*: Overall, fewer than half of all archives have digitization policies in place across the range of policy areas. Large archives demonstrate some strong

- policy efforts; 70.8 percent of large archives have policies in place related to access and 70.8 percent have policies relating to digital formats.
- Funding for digitization activities: Overall, 57.4 percent of archives had funding for digitization over the last 12 months. Three-quarters of all large archives (75.0%) had funding for digitization, whereas only 64.0 percent of medium and 46.2 percent of small archives did. In the next 12 months, 59.0 percent of all archives expect to receive funding for digitization activities.
- *Digitization priorities:* Digitizing photographs is a top priority for 65.0 percent of all archives surveyed; digitizing historical documents/archives is important to 59.0 percent of archives; and digitizing images of items in their collections is a top priority for 20.0 percent of archives.
- *Materials and images digitized:* Archives are active digitizers. Overall, 45.0 percent of archives digitized 1 to 500 items and 12.0 percent digitized more than 25,000 items in the past 12 months. Only 6.0 percent of archives report having digitized no items in the past 12 months.
- *Materials or images still to be digitized:* Across all archives, 64.2 percent report having more than 25,000 items left to digitize, including 95.7 percent of all large archives. Only 2.1 percent of archives report having no items still to digitize; these are all small archives.
- *Undertaking digitization activities:* Of all archives surveyed, 70.4 perform digitization activities by training current staff; 27.6 percent perform these activities by reassigning staff; 39.8 percent use volunteers to perform digitization activities; 16.3 percent use commercial vendors off-site; 14.3 percent hire new institutional staff; and 13.3 percent use contractual staff in-house.
- *Making digital images available:* The majority of archives (81.6%), regardless of size, make some or all of their digital image collections available to the public. Access is provided via the Web by 66.3 percent and on-site by 57.0 percent of archives. The top three target audiences for digital images among all archives are the general public who have Internet access (71.4%), other researchers and scholars (60.2%), and on-site visitors (44.9%).
- *Needs assessment:* The majority of archives (94.9%), regardless of size, do not conduct assessments of user or visitor needs for digitized materials and images in their institutions.
- *Collaboration:* When archives collaborate to perform digitization activities, 41.9 percent turn to State library agencies, 41.9 percent turn to academic libraries, and 25.8 percent collaborate with historical societies.

- Capability for digitization activities: On a scale of 1 (deficient) to 5 (fully capable), large archives rate themselves more capable than do small and medium archives. For large archives, "staff skills and expertise" and "equipment and software" (3.7) are the strongest categories. Among all archives, funding is the weakest category (1.9).
- *Hindrances to digitization:* Using a scale of 1 (strongly agree) to 5 (strongly disagree), archives rate "lack of staff time" (1.6), "lack of funds" (1.6), and "other projects have higher priorities" (2.0) as the strongest hindrances to their digitization activities.

## 2. Archives size analyses

This section highlights the difference between small, medium, and large archives based on their budget size and discusses issues related to technology and digitization comparing how these issues differ among the three size categories. To determine the small, medium, and large categories, we use the archives survey question C on archives annual budget size.

Figure 1 Archives Size Analyses						
Size of Archives' Annual Budget (2004)	Budget Category					
Less than \$250,000	Small					
\$250,001-\$500,000	Medium					
\$500,001-\$750,000	Medium					
\$750,001–\$1,000,000						
\$1,000,001-\$5,000,000						
\$5,000,001-\$10,000,000	Large					
\$10,000,001-\$25,000,000	]					
More than \$25,000,000						

Note: Data are based on responses to survey question C; respondents were asked to select only one option.

### 1.1 Demographics

A total of 117 archives participated in the survey. Two surveys were removed from the analyses due to a large amount of incomplete data, resulting in a final sample size of 115. However, not all archives participants responded to every question, so the sample sizes in the tables below might be slightly lower than 115. In addition, some tables are broken down by size of archives while others are presented on the whole, which may result in different sample sizes for different tables.

### **Type of Archival Institution**

Figure 2 shows the type of archives that responded to the survey. The majority of archives (58%) were not-for-profit.

FIGURE 2							
Type of Archival Institution							
Type   Small   Medium   Large   Tot   (n=59)   (n=27)   (n=27)   (n=1)							
Federal government archives	6.8%	0.0%	3.7%	4.4%			
State government archives	3.4%	29.6%	59.3%	23.0%			
Local government archives (e.g.,							
county, municipal)	18.6%	18.5%	0.0%	14.2%			
Not-for-profit	71.2%	51.9%	33.3%	57.5%			
For-profit	0.0%	0.0%	3.7%	0.9%			

Note: Data are based on responses to survey question A; respondents were asked to select only one option.

### **Affiliated Institutions**

Figure 3 shows the affiliation of the archives in the survey. More than one-third of archives report that they are affiliated with another type of organization, while almost one-quarter report that they are separate or independent archives, and about one-fifth report that they are affiliated with a historical society.

FIGURE 3 AFFILIATED INSTITUTIONS							
Affiliation	Small (n=58)	Medium (n=27)	Large (n=26)	Total (n=111)			
Affiliated with a college or university	1.7%	3.7%	3.8%	2.7%			
Affiliated with a museum	12.1%	11.1%	3.8%	9.9%			
Affiliated with a library	8.6%	7.4%	0.0%	6.3%			
Affiliated with a historical society	15.5%	25.9%	15.4%	18.0%			
Affiliated with other type of organization	43.1%	33.3%	38.5%	39.6%			
Separate/independent archives	19.0%	18.5%	38.5%	23.4%			

Note: Data are based on responses to survey question B; respondents were asked to select only one option.

## **Budget**

Figure 4 shows the annual budget reported by archives. More than half of the archives reported an annual budget of \$250,000 or less.

FIGURE 4 PERCENTAGE OF ARCHIVES WITH EACH SIZE ANNUAL BUDGET					
Budget Percent (n=115)					
Less than \$250,000	53.0%				
\$250,001-\$500,000	20.0%				
\$500,001-\$750,000	3.5%				
\$750,001-\$1,000,000	7.0%				
\$1,000,001-\$5,000,000	11.3%				
\$5,000,001-\$10,000,000	3.5%				
\$10,000,001-\$25,000,000	0.9%				
More than \$25,000,000	0.9%				

Note: Data are based on responses to survey question C; respondents were asked to select only one option.

#### **Staff Size**

Figure 5 shows the percentage of full-time staff reported by archives. The majority of archives (60.7%) report having fewer than five full-time staff.

FIGURE 5 PERCENTAGE OF ARCHIVES WITH EACH SIZE CURRENT PAID, FULL-TIME-EQUIVALENT STAFF					
Staff Size Percent (n=115)					
Less than 5	60.7%				
6–10	15.4%				
11–25	12.8%				
26–75	9.4%				
76–150	0.9%				
151–250	0.0%				
251–500	0.0%				
501-1,000	0.0%				
1,001–1,500	0.0%				
More than 1,500	0.9%				

Note: Data are based on responses to survey question D; respondents were asked to select only one option.

## 2.2 Technology

### **Technology Funding**

Seventy-seven percent of all archives report having funding for technology in the past 12 months, and 67.3 percent expect to receive funding for the next 12 months.

FIGURE 6 FUNDING FOR TECHNOLOGY							
Response Option	Small (n=60)	Medium (n=27)	Large (n=26)	Total (n=113)			
In the past 12 months, did your in	stitution have	funding for	technology?				
Yes	63.9%	88.9%	92.6%	76.5%			
No	31.1%	7.4%	7.4%	20.0%			
Don't know/Not applicable	4.9%	3.7%	0.0%	3.5%			
In the next 12 months, do you plan	n to have fun	ding for your	technology?				
Yes	60.0%	74.1%	76.9%	67.3%			
No	20.0%	3.7%	7.7%	13.3%			
Don't know/Not applicable	20.0%	22.2%	15.4%	19.5%			

Note: Data are based on responses to survey questions 1 and 2; respondents were asked to select only one option.

### **Adequate Funding of Technology Needs**

Across all archives, about one-third report that 1 to 25 percent of their technology needs are adequately funded. Almost one-quarter of small archives report that 100 percent of their

technology needs are adequately funded.

P	FIGURE 7 PERCENTAGE OF TECHNOLOGY NEEDS						
	THAT ARI	E ADEQUATE	LY FUNDED				
Percent         Small (n=59)         Medium (n=26)         Large (n=25)         Total (n=110)							
0%	8.5%	3.8%	0.0%	5.5%			
1–25%	33.9%	30.8%	24.0%	30.9%			
26–50%	13.6%	11.5%	8.0%	11.8%			
51–75%	13.6%	26.9%	24.0%	19.1%			
76–99%	8.5%	23.1%	36.0%	18.2%			
100%	22.0%	3.8%	8.0%	14.5%			

Note: Data are based on responses to survey question 3; respondents were asked to select only one option.

#### **Maintaining and Adding Technology**

Figure 8 shows the mean ratings of an institution's ability to maintain or add technology based on a 5-point scale, with "1" meaning strongly agree and "5" meaning strongly disagree. Therefore, ratings less than 2.5 indicate agreement, ratings between 2.5 and 3.5 indicate neither agreement nor disagreement, and ratings greater than 3.5 indicate disagreement.

All archives agree that their institutions are able to maintain their current levels of technology, but they are neutral about their institutions' ability to add new uses of technology to meet evolving needs.

FIGURE 8						
ABILITY TO MAINTAIN AND ADD TECHNOLOGY						
My institution is able to:    Small   Medium (n=56)   (n=25)				Total (n=105)		
Maintain its current level of technology	2.4	2.4	(n=24) 2.2	2.4		
Add new uses of technology to meet evolving needs	3.4	3.0	3.2	3.3		

Note: Data are based on responses to survey question 4. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

#### **Extent of Technology Capacity**

The majority of archives, regardless of size, either currently have the technology capacity necessary to meet their mission or have almost enough capacity to meet their mission. Forty percent (40.3%) report that their technology capacity is short of meeting their mission or does not meet their mission.

FIGURE 9 TECHNOLOGY CAPACITY TO MEET MISSION						
Response Option Small Medium Large Total (n=57) (n=25) (n=24) (n=106)						
Currently meets our mission	25.0%	22.6%	22.2%	23.7%		
Almost meets our mission	27.9%	35.5%	32.3%	31.1%		

Figure 9							
TECHNOLOGY CAPACITY TO MEET MISSION							
Response Option Small Medium Large Total (n=57) (n=25) (n=24) (n=106)							
Is short of meeting our mission 27.5% 35.5% 40.4% 32.89							
Does not meet our mission	10.3%	5.6%	4.0%	7.5%			
Don't know/Not applicable	9.3%	0.8%	1.0%	4.9%			

Note: Data are based on responses to survey question 5; respondents were asked to select only one option.

# **Technologies Used in Past 12 Months**

Almost all archives (99.0%), regardless of size, used e-mail in the past 12 months. In addition, 98.1 percent used office productivity software, 96.2 percent used desktop computers, and 95.2 percent had Web sites.

FIGURE 10 ARCHIVES THAT USED THE FOLLOWING TECHNOLOGIES IN THE PAST 12 MONTHS						
Technology	Small (n=55)	Medium (n=26)	Large (n=24)	Total (n=105)		
Accounting/payroll/human resources software	55.7%	85.7%	96.0%	70.0%		
Broadband Internet connection	71.4%	87.5%	91.7%	78.6%		
Computerized catalog of library or other collections	62.3%	73.3%	96.2%	72.5%		
Computerized collections management system	50.0%	70.6%	92.0%	63.7%		
Database software or system for membership development	46.8%	56.3%	70.8%	53.9%		
Desktop computers	93.7%	100.0%	100.0%	96.2%		
E-mail	98.4%	100.0%	100.0%	99.0%		
GIS (geographic information systems) applications	6.9%	25.0%	17.4%	12.4%		
Integrated library system (ILS)	10.5%	26.7%	45.8%	21.9%		
Intranet	45.8%	80.0%	75.0%	58.2%		
LAN (local area network)	73.8%	94.1%	96.0%	82.5%		
Marketing and promotion software and systems	6.8%	13.3%	34.8%	14.4%		
Meta- or federated searching in online collections and catalogs	13.3%	33.3%	33.3%	21.2%		
Modem-based Internet connection (dial-up access)	26.7%	25.0%	20.8%	25.0%		
Multimedia services or collections	30.5%	26.7%	56.5%	36.1%		
Notebook or tablet computers	35.0%	60.0%	72.0%	48.0%		
Office productivity software, including word processing, desktop publishing, and spreadsheets	96.8%	100.0%	100.0%	98.1%		
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	24.1%	13.3%	20.8%	21.6%		
Personal information management (PIM) software	10.2%	13.3%	13.0%	11.3%		
Point-of-sale software and systems	11.7%	40.0%	33.3%	21.2%		
RFID (radio frequency identification) in services or collections	0.0%	0.0%	4.5%	1.1%		
Software to manage public-access computers and printing	10.3%	20.0%	58.3%	23.7%		
Video tours	6.9%	6.7%	4.2%	6.2%		
Virtual reality tours	3.6%	6.7%	4.2%	4.2%		
Web portal or gateway for services or collections	22.4%	60.0%	75.0%	41.2%		
Web site for your institution	92.1%	100.0%	100.0%	95.2%		
Wireless network, including WiFi	8.6%	42.9%	24.0%	17.5%		
Other	0.0%	0.0%	50.0%	8.0%		

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

The majority of small archives (56.4%) used between 6 and 10 technologies in the past 12 months, while all medium and large archives used between 6 and 20 technologies.

FIGURE 11 PERCENTAGE OF ARCHIVES THAT USED THE FOLLOWING NUMBER OF							
	_	IN THE PA		_			
		Bud	lget				
Number	Small (n=55)						
0	0.0% 0.0% 0.0% 0.0%						
1–5	12.6% 0.0% 0.0% 6.7						
6–10	56.4%	30.8%	8.3%	39.0%			
11–15	25.5%	38.4%	37.5%	31.4%			
16-20	5.5%	30.8%	54.2%	22.9%			
21 or more	0.0%	0.0%	0.0%	0.0%			

Note: Data are based on responses to survey question 6.

### **Staff Capabilities**

Overall, more than three-fourths of archives (79.4%) report that they do not have enough skilled staff to accomplish their technology activities.

FIGURE 12 EXTENT TO WHICH ARCHIVES HAVE SUFFICIENT SKILLED STAFF TO ACCOMPLISH TECHNOLOGY ACTIVITIES							
Response Option  Small   Medium   Large   Tota   (n=52)   (n=26)   (n=24)   (n=10)							
We do not have enough skilled staff to accomplish our technology activities.	80.8%	76.9%	79.2%	79.4%			
We have the right amount of skilled staff to accomplish our technology activities.	15.4%	19.2%	12.5%	15.7%			
We have more than enough skilled staff to accomplish our technology activities.	0.0%	0.0%	0.0%	0.0%			
Other (please list)	1.9%	3.8%	8.3%	3.9%			
Don't know/Not applicable	1.9%	0.0%	0.0%	1.0%			

Note: Data are based on responses to survey question 10; respondents were asked to select only one option.

### **Needs Assessments**

More medium and large archives (19.2 and 16.7%, respectively) conduct assessments of user or visitor needs for technology-supported services or experiences at their institutions than small archives (11.5%).

FIGURE 13 CONDUCT NEEDS ASSESSMENTS FOR TECHNOLOGY-SUPPORTED SERVICES					
Response Option	Small (n=52)         Medium (n=26)         Large (n=24)         T (n=24)				
Yes	11.5%	19.2%	16.7%	14.7%	
No	86.5%	73.1%	83.3%	82.4%	
Don't know/Not applicable	1.9%	7.7%	0.0%	2.9%	

Note: Data are based on responses to survey question 12; respondents were asked to select only one option.

## 2.3 Digitization

### **Digitization Policies**

In general, a greater number of large archives have digitization policies in place than medium or small archives. The most prevalent digitization policies among all archives are those for access (45.5% of archives), digital format (40.4%), and security (26.5%). The least prevalent policies include those for evaluation (9.2% of archives) and conversion of digital files to next-generation formats (11.1%). Overall, the data show that even the most prevalent policies are in place in fewer than half of all archives.

FIGURE 14 DIGITIZATION POLICIES IN PLACE					
Type of Policy	Small (n=49)	Medium (n=26)	Large (n=24)	Total (n=99)	
Access	36.7%	38.5%	70.8%	45.5%	
Best practices	10.4%	30.8%	29.2%	20.4%	
Conversion of digital files to next-generation formats	8.2%	11.5%	16.7%	11.1%	
Digital format (e.g., TIFF, GIF, PAL)	28.6%	34.6%	70.8%	40.4%	
Evaluation	0.0%	16.0%	20.8%	9.2%	
Institutional repository	14.3%	25.0%	16.7%	17.5%	
Intellectual property issues	10.2%	23.1%	37.5%	20.2%	
Materials to be digitized	8.2%	19.2%	33.3%	17.2%	
Priorities for digitization	14.6%	19.2%	34.8%	20.6%	
Preservation	22.4%	26.9%	20.8%	23.2%	
Quality control	10.2%	23.1%	50.0%	23.2%	
Standards	10.2%	19.2%	50.0%	22.2%	
Metadata	8.2%	15.4%	41.7%	18.2%	
Security	18.8%	26.9%	41.7%	26.5%	
Other	0.0%	0.0%	0.0%	0.0%	

Note: Data are based on response to survey question 16; respondents were asked to select all that apply.

## **Digitization Funding**

A greater number of large archives (75.0%) had funding to support their digitization activities in the past 12 months than medium and small archives (64.0 and 46.2%, respectively).

FIGURE 15 FUNDING TO SUPPORT DIGITIZATION ACTIVITIES							
Response Option	Small (n=51)	Medium (n=25)	Large (n=24)	Total (n=100)			
In the past 12 months, did your institution have funding to support your digitization activities?							
Yes	46.2%	64.0%	75.0%	57.4%			
No	46.2%	32.0%	25.0%	37.6%			
Don't know/Not applicable	7.7%	4.0%	0.0%	5.0%			
In the next 12 months, do you plan to obtain f	funding to su	pport your di	gitization act	ivities?			
Yes	45.1%	80.0%	66.7%	59.0%			
No	29.4%	4.0%	12.5%	19.0%			
Don't know/Not applicable	25.5%	16.0%	20.8%	22.0%			

Note: Data are based on responses to survey questions 18 and 19; respondents were asked to select only one option.

# **Materials for Digitization**

Photographs, historical documents/archives, and manuscripts are the three kinds of materials that archives most commonly digitize. Of all archives surveyed, 17.5 percent report having digitized photographs, 11.6 percent report having digitized historical documents/archives, and 7.4 percent report having digitized manuscripts.

FIGURE 16 MATERIALS THAT HAVE BEEN DIGITIZED IN THE PAST 12 MONTHS							
OR ARE CURRENTLY B			2 MONTH	8			
Material Small Medium Large Te (n=51) (n=25) (n=24) (n=24)							
Correspondence, diaries, and other personal records	4.2%	4.2%	14.3%	6.5%			
Course material	2.2%	0.0%	0.0%	1.1%			
Education and training material about the collections	2.1%	0.0%	4.5%	2.2%			
Films, videotapes	6.5%	4.2%	9.1%	6.5%			
Government publications	0.0%	0.0%	4.5%	1.1%			
Historical documents/archives	12.5%	8.0%	13.6%	11.6%			
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	8.2%	4.3%	4.8%	6.5%			
Information on the institution	4.2%	8.3%	4.8%	5.4%			
Journals and other serials	0.0%	0.0%	0.0%	0.0%			
Manuscripts	8.3%	4.0%	9.5%	7.4%			
Maps	4.3%	8.3%	10.0%	6.6%			
Music and other recorded sound	0.0%	4.3%	4.8%	2.2%			
Newspapers	2.2%	0.0%	0.0%	1.1%			
Photographs	20.4%	20.0%	8.7%	17.5%			
Rare books	0.0%	0.0%	0.0%	0.0%			
Records about the collection	2.1%	4.2%	4.5%	3.2%			

FIGURE 16 MATERIALS THAT HAVE BEEN DIGITIZED IN THE PAST 12 MONTHS OR ARE CURRENTLY BEING DIGITIZED							
Material Small Medium Large Tota (n=51) (n=25) (n=24) (n=10							
Sheet music	2.1%	0.0%	4.8%	2.2%			
Special exhibits	6.3%	4.2%	9.1%	6.4%			
Theses and dissertations	0.0%	0.0%	0.0%	0.0%			
Other (please list)	0.0%	0.0%	25.0%	5.0%			

Note: Data are based on responses to survey question 20; respondents were asked to select all that apply.

## **Primary Digitization Priorities**

The top two digitization priorities for all archives, regardless of size, are as follows:

- Photographs: 65.0 percent of all archives considered this a digitization priority.
- Historical documents/archives: 59.0 percent identified this category as a digitization priority.
- Images of items in the collections are the third highest digitization priority for small archives, while maps are the third highest digitization priority for medium and large archives.

FIGURE 17					
DIGITIZATION P	RIORITIES				
Priority	Small (n=51)	Medium (n=25)	Large (n=24)	Total (n=100)	
Correspondence, diaries, and other personal records	9.8%	12.0%	12.5%	11.0%	
Course material	2.0%	8.0%	4.2%	4.0%	
Education and training material about the collections	7.8%	0.0%	8.3%	6.0%	
Films, videotapes	9.8%	12.0%	12.5%	11.0%	
Government publications	0.0%	4.0%	0.0%	1.0%	
Historical documents/archives	56.9%	64.0%	58.3%	59.0%	
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	29.4%	8.0%	12.5%	20.0%	
Information on the institution	13.7%	8.0%	0.0%	9.0%	
Journals and other serials	7.8%	8.0%	0.0%	6.0%	
Manuscripts	15.7%	16.0%	16.7%	16.0%	
Maps	9.8%	28.0%	29.2%	19.0%	
Music and other recorded sound	5.9%	4.0%	4.2%	5.0%	
Newspapers	5.9%	16.0%	4.2%	8.0%	
Photographs	58.8%	80.0%	62.5%	65.0%	
Rare books	3.9%	0.0%	0.0%	2.0%	
Records about the collection	15.7%	16.0%	4.2%	13.0%	
Sheet music	2.0%	0.0%	0.0%	1.0%	
Special exhibits	2.0%	8.0%	8.3%	5.0%	
Theses and dissertations	0.0%	4.0%	0.0%	1.0%	
Other (please list)	5.9%	0.0%	16.7%	7.0%	
Don't know/Not applicable	7.8%	0.0%	4.2%	5.0%	

Note: Data are based on responses to survey question 22; respondents were asked to select their institution's top three priorities.

## **Number of Digital Materials Created in the Past 12 Months**

The majority of small archives (56.9%) created between 1 and 500 digital materials or images in the past 12 months, whereas the majority of medium and large archives (56.0 and 54.2%, respectively) created between 1 and 1,000 digital materials or images in the past 12 months.

FIGURE 18 NUMBER OF DIGITAL MATERIALS OR IMAGES CREATED IN THE PAST 12 MONTHS						
Number         Small (n=51)         Medium (n=25)         Large (n=24)         Total (n=100)						
0	7.8%	4.0%	4.2%	6.0%		
1–500	56.9%	36.0%	29.2%	45.0%		
501–1,000	11.8%	20.0%	25.0%	17.0%		
1,001-5,000	7.8%	12.0%	20.8%	12.0%		
5,001–10,000	3.9%	8.0%	4.2%	5.0%		
10,001–25,000	0.0%	4.0%	8.3%	3.0%		
More than 25,000	11.8%	16.0%	8.3%	12.0%		

Note: Data are based on responses to survey question 23; respondents were asked to select only one option.

## **Number of Additional Images Remaining to Be Digitized**

Overall, 64.2 percent of all archives have more than 25,000 digital materials or images left to be digitized. Among small archives, 4.1 percent report that they have no materials or images to digitize.

FIGURE 19 Number of Digital Materials or Images Left to Be Created							
Number   Small   Medium   Large   Total   (n=49)   (n=23)   (n=23)   (n=95)							
0	4.1%	0.0%	0.0%	2.1%			
1-500	6.1%	8.7%	4.3%	6.3%			
501-1,000	8.2%	0.0%	0.0%	4.2%			
1,001-5,000	14.3%	8.7%	0.0%	9.5%			
5,001–10,000	16.3%	0.0%	0.0%	8.4%			
10,001–25,000	8.2%	4.3%	0.0%	5.3%			
More than 25,000	42.9%	78.3%	95.7%	64.2%			

Note: Data are based on responses to survey question 24; respondents were asked to select only one option.

### **Undertaking Digitization Activities**

More than two-thirds of archives undertake their digitization activities by training current staff to perform these activities; 39.8 percent of them use volunteers.

FIGURE 20 UNDERTAKING DIGITIZATION ACTIVITIES						
CIDERTARING DIGI	IZATION	Bud				
Response Option	Small (n=49)         Medium (n=25)         Large (n=24)         Control (n=24)					
Contractual staff were hired to perform these activities in-house.	6.1%	20.0%	20.8%	13.3%		
New institutional staff were hired to perform these activities.	10.2%	16.0%	20.8%	14.3%		
Current staff were trained to perform these activities.	67.3%	76.0%	70.8%	70.4%		
Current staff were reassigned to perform these activities.	26.5%	28.0%	29.2%	27.6%		
Volunteers perform these activities.	49.0%	20.0%	41.7%	39.8%		
These activities are performed by commercial vendors off-site.	20.4%	8.0%	16.7%	16.3%		
Materials are digitized off-site at another institution's digitization center.	4.1%	8.0%	4.2%	5.1%		
Other (please list)	2.0%	8.0%	12.5%	6.1%		
Don't know/Not applicable	8.2%	4.0%	0.0%	5.1%		

Note: Data are based on responses to survey question 26; respondents were asked to select all that apply.

### The Availability of Digital Image Collections to the Public

Overall, 81.6 percent of archives make some or all of their digital image collections available to the public.

FIGURE 21 PUBLIC AVAILABILITY OF DIGITAL IMAGE COLLECTIONS					
Response Option Small Medium Large To (n=49) (n=25) (n=24) (n=24)					
Yes, some of our digital image collections are available to the public.	57.1%	64.0%	58.3%	59.2%	
Yes, all of our digital image collections are available to the public.	20.4%	20.0%	29.2%	22.4%	
No, our digital image collections are not available to the public.	10.2%	12.0%	12.5%	11.2%	
Don't know/Not applicable	12.2%	4.0%	0.0%	7.1%	

Note: Data are based on responses to survey question 27; respondents were asked to select only one option.

## **How Digital Image Collections Are Made Available**

Of the large archives that make their digital image collections available to the public, almost all make their collections available on the Web, while almost half make their collections available on the premises on their computer networks (LANs).

Of the small and medium archives that make their digital image collections available to the public, slightly more make them available on the premises on their computer networks (LANs) than on the Web.

FIGURE 22 HOW DIGITAL IMAGE COLLECTIONS ARE MADE AVAILABLE						
Response Option Small Medium Large Total (n=43) (n=22) (n=21) (n=86						
On the premises on our computer network (LAN)	55.8%	68.2%	47.6%	57.0%		
On the Web	53.5%	63.6%	95.2%	66.3%		
Through a third party	7.0%	9.1%	9.5%	8.1%		
Don't know/Not applicable	16.3%	4.5%	0.0%	9.3%		

Note: Data are based on responses to survey question 28; respondents were asked to select all that apply. Table only includes respondents who reported that they make some or all of their digital image collections available to the public.

### **Target Audience**

Of all archives surveyed, 71.4 percent identified the general public who have Internet access as their target audience for access to digital images, 60.2 percent identified other researchers and scholars as their target audience, and 44.9 percent identified on-site visitors as their target audience for access to digital images.

FIGURE 23						
TARGET	AUDIENCE	E				
		Budget				
Response Option	Small (n=49)         Medium (n=25)         Large (n=24)         Total (n=98)					
General public who have Internet access	67.3%	60.0%	91.7%	71.4%		
On-site visitors at our institution	44.9%	64.0%	25.0%	44.9%		
Members (e.g., library card holders, museum members)	22.4%	28.0%	8.3%	20.4%		
Our staff	44.9%	48.0%	29.2%	41.8%		
Consortia/partners	6.1%	4.0%	4.2%	5.1%		
Researchers/scholars at our institution	28.6%	20.0%	20.8%	24.5%		
Faculty at our institution	4.1%	0.0%	0.0%	2.0%		
Educators not part of our institution	6.1%	8.0%	20.8%	10.2%		
Students at our institution	6.1%	4.0%	0.0%	4.1%		
Students at affiliated institutions	4.1%	8.0%	0.0%	4.1%		
Alumni	2.0%	0.0%	0.0%	1.0%		
Other researchers and scholars	57.1%	56.0%	70.8%	60.2%		
Other	0.0%	0.0%	16.7%	4.1%		
Don't know/Not applicable	0.0%	0.0%	0.0%	0.0%		

Note: Data are based on responses to survey question 33; respondents were asked to select their institution's top three target audiences.

#### **Needs Assessments**

Most archives (94.9%) do not conduct assessments of user or visitor needs for digitized materials and images.

FIGURE 24 CONDUCT NEEDS ASSESSMENTS FOR DIGITIZED MATERIALS				
Response Option	Small (n=49)         Medium (n=25)         Large (n=24)         Total (n=98)			
Yes	2.0%	4.0%	4.2%	3.1%
No	95.9%	92.0%	95.8%	94.9%
Don't know/Not applicable	2.0%	4.0%	0.0%	2.0%

Note: Data are based on responses to survey question 35; respondents were asked to select only one option.

### Collaboration

Nearly one-third (32.7%) of all archives collaborate (through specific partnering agreements) with other institutions and organizations to digitize materials.

FIGURE 25 COLLABORATION TO DIGITIZE MATERIALS					
Response Option	Small (n=49)	Medium (n=25)	Large (n=24)	Total (n=98)	
Yes	20.4%	28.0%	62.5%	32.7%	
No	73.5%	68.0%	37.5%	63.3%	
Don't know/Not applicable	6.1%	4.0%	0.0%	4.1%	

Note: Data are based on responses to survey question 37; respondents were asked to select only one option.

Of the archives that do collaborate to digitize materials, 41.9 percent turn to State library agencies, 41.9 percent turn to academic libraries, and 25.8 percent collaborate with historical societies.

Figure 26				
COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS				
Response Option	Small (n=9)	Medium (n=7)	Large (n=15)	Total (n=31)
State library agencies	33.3%	42.9%	46.7%	41.9%
Academic libraries	55.6%	28.6%	40.0%	41.9%
Individual public libraries	44.4%	14.3%	0.0%	16.1%
Private libraries	11.1%	14.3%	0.0%	6.5%
Museums	44.4%	14.3%	13.3%	22.6%
Consortia	0.0%	14.3%	26.7%	16.1%
State archives	22.2%	0.0%	6.7%	9.7%
- Special libraries	22.2%	0.0%	13.3%	12.9%
Historical societies	44.4%	28.6%	13.3%	25.8%
Federal government agencies or archives	0.0%	14.3%	13.3%	9.7%
Other state government agencies	0.0%	14.3%	26.7%	16.1%
City, municipal, or other local government agencies or archives	22.2%	14.3%	0.0%	9.7%
Universities and colleges	22.2%	14.3%	26.7%	22.6%
Community organizations	0.0%	0.0%	0.0%	0.0%

FIGURE 26 COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS				
Response Option	Small (n=9)	Medium (n=7)	Large (n=15)	Total (n=31)
Private companies	0.0%	0.0%	6.7%	3.2%
Foundations	0.0%	0.0%	13.3%	6.5%
State library associations	0.0%	0.0%	0.0%	0.0%
State museum associations	0.0%	14.3%	0.0%	3.2%
Other professional associations	0.0%	14.3%	0.0%	3.2%
Other	22.2%	28.6%	26.7%	25.8%

Note: Data are based on responses to survey question 37; respondents were asked to select all that apply.

### Capabilities in Initiating, Accomplishing, and Sustaining Digitization Activities

At initiating, accomplishing, and sustaining digitization activities, large archives rate themselves as capable in all areas except funding. Small archives rate themselves as deficient in most areas.

Figure 27 shows the average ratings of an institution's capability at initiating, accomplishing, and sustaining digitization activities based on a 5-point scale, with 1 meaning deficient and 5 meaning fully capable. Therefore, ratings less than 2.5 tend to indicate deficiency, and ratings greater than 2.5 tend to indicate capability.

FIGURE 27 CAPABILITY TO INITIATE, ACCOMPLISH, AND SUSTAIN DIGITIZATION ACTIVITIES				
Capability	Small (n=49)	Medium (n=25)	Large (n=24)	Total (n=98)
Staff skills and expertise	2.6	3.1	3.7	3.0
Equipment and software	2.4	2.8	3.7	2.8
Funding	1.7	1.8	2.3	1.9
Established digitization plan	1.9	2.3	2.7	2.2
Established digitization policies	1.9	2.5	3.0	2.3
Established quality standards	1.9	2.7	3.4	2.5
Established procedures for preparation for creating digital images	2.0	2.6	3.2	2.5
Established procedures for the management of images and files	2.2	2.8	3.2	2.6
Other (please list)	1.3	0.0	0.0	1.3

Note: Data are based on responses to survey question 39; respondents were asked to rate their institution's capability. The scale for this question was 1, meaning deficient, to 5, meaning fully capable.

#### **Hindrances to Digitization Activities**

Archives (regardless of size) most strongly agree that "lack of staff time," "lack of funds," and "other projects have higher priorities" are hindrances to their digitization activities. Small archives regard "lack of sufficient equipment and/or software" as a hindrance.

FIGURE 28					
HINDRANCES TO DIGITIZATION ACTIVITIES					
Response Option	Small (n=48)	Medium (n=25)	Large (n=24)	Total (n=97)	
Lack of staff time	1.7	1.6	1.7	1.6	
Lack of staff skills and expertise	2.0	2.8	3.0	2.5	
Lack of funds	1.5	1.6	1.8	1.6	
Lack of sufficient equipment and/or software	1.9	2.2	3.0	2.3	
Lack of an established digitization plan	2.2	2.5	2.6	2.4	
Lack of established digitization policies	2.3	2.7	3.0	2.6	
Lack of established quality standards	2.3	2.8	3.2	2.7	
Lack of established policies and procedures for preparation for materials for digitizing	2.4	2.8	3.1	2.7	
Lack of established policies and procedures for the management of images and files	2.4	2.7	2.8	2.6	
Other projects have higher priorities	1.9	2.0	2.4	2.0	
Concern about intellectual property issues	3.0	2.6	3.3	3.0	
Security concerns	3.1	3.0	3.6	3.2	
Not having collections worth digitizing	4.5	4.9	4.6	4.6	
Concern about costs of preservation and management	2.1	2.4	2.6	2.3	
Management is unaware of the benefits of digitization	3.7	3.8	4.2	3.9	
Other (please list)	0.0	0.0	1.0	1.0	

Note: Data are based on responses to survey question 40; respondents were asked to rate each potential hindrance. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

# **State Library Administrative Agencies**

In this chapter, we provide an overview of the state library administrative agency (SLAA) data and a summary of comparisons with the data from the 2001 survey.

#### 1. SLAA Overview

### 1.1 Technology Overview

- Availability of funding: Most SLAAs (97.5%) had funding for technology in the past 12 months, and all of them plan to obtain technology funding in the next 12 months.
- Adequacy of technology funding: Of the SLAAs surveyed, 84.6 percent report that the majority of their technology needs are adequately funded.
- Maintaining and adding technologies: All SLAAs agree that their institutions are able to maintain their current levels of technology, but they are less positive on their institutions' ability to add new uses of technology to meet evolving needs.
- *Technology capacity:* One-fifth of SLAAs (20.5%) indicate that their capacity currently meets their mission, and nearly half (46.2%) indicate that their capacity almost meets their mission.
- *Technologies in use:* All SLAAs used broadband Internet connection, computerized catalogs of library or other collections, desktop computers, e-mail, local area networks (LANs), and office productivity software in the past 12 months. In addition, all of them had Web sites in the past 12 months.
- *Staff for technology activities:* The majority of SLAAs (77.5%) do not have enough skilled staff to accomplish their technology activities.
- *Needs assessment:* Of the SLAAs surveyed, 45.0 percent conduct assessments of user and visitor needs, and 50.0 percent do not.

## 1.2 Digitization Overview

• Digitization policies: Overall, fewer than half of SLAAs have digitization policies in place across the range of policy areas. The three most common policies in place are related to the following: digital format, with 42.5 percent of SLAAs having these policies; metadata, with 38.5 percent having these policies; and access, with 37.5 percent having these policies. The three most common policies in development are related to the following: materials to be digitized, with 40.0 percent developing these policies; quality control, with 40.0 percent developing these policies; and institutional repository, with 35.0 percent developing these policies.

- Provide direct funding or services to other institutions for their digitization activities: The majority of SLAAs (70.7%) provide funding or services to other institutions for digitization. Of these, about three-fourths (75.9%) support cooperative digitization projects or partnerships; 72.4 percent support statewide digitization projects; 69.0 percent support digitizing special collections; and 58.6 percent support providing access to digital products like collections online.
- Funding for digitization activities: The majority of SLAAs (73.2%) had funding to support digitization in the past 12 months. In the next 12 months, 75.6 percent of SLAAs plan to obtain digitization funding.
- *Digitization priorities:* For all the SLAAs surveyed, the primary digitization priorities include historical documents/archives, government publications, and photographs. For 65.0 percent, digitizing historical documents/archives is a priority; for 52.5 percent, digitizing government publications is very important; and for 35.0 percent, digitizing photographs is a priority.
- *Materials and images digitized:* In the past 12 months, 42.5 percent of SLAAs digitized 1 to 500 items and 12.5 percent digitized 1,001 to 5,000 items. 22.5 percent reported no digitization activities in this period.
- *Materials or images still to be digitized:* Just more than one-half (51.3%) of SLAAs indicate that they have more than 25,000 items left to digitize, and 15.4 percent have none to digitize.
- *Undertaking digitization activities:* To perform digitization activities, 67.5 percent of SLAAs train current staff, 37.5 percent reassign current staff, and 20.0 percent digitize materials off-site at another institution's digitization center.
- *Making digital images available:* The majority of SLAAs (82.5%) make some or all of their digital images available to the public. Most SLAAs (79.5%) rely on the Web to make the images available, and 23.1 percent provide on-site access to these images.
- *Needs assessment:* Almost one-fourth (22.5%) of SLAAs conduct assessments of user or visitor needs for digitized materials and images in their institutions although most (72.5%) do not.
- *Collaboration:* The majority of SLAAs are active collaborators: 80.8% collaborate with academic libraries: 61.5 percent collaborate with state archives; 57.7 percent, with other state government agencies; 53.8 percent, with museums; 50.0 percent, with public libraries; and 50.0 percent collaborate with historical societies.

- Capability for digitization activities: SLAAs rate themselves strongest in "staff skills and expertise," "established procedures for preparation for creating digital images," and "established procedures for the management of images and files." "Funding" and "established digitization plan" were their weakest areas.
- *Hindrances to digitization:* Overall, SLAAs cite "lack of funds" and "lack of staff time" as the strongest hindrances to digitization.

# 2. SLAA analyses

This section highlights key survey findings for SLAAs.

# 2.1 Demographics

A total of 42 SLAAs participated in the survey. One survey was removed from the analyses due to a large amount of incomplete data, resulting in a final sample size of 41. However, not all SLAA participants responded to every question, so the sample sizes in the tables below might be slightly lower than 41.

#### **Budget**

Figure 1 shows the percentage of SLAAs by annual budget. All of the SLAAs report budgets of more than one million dollars.

Figure 1 SLAA Budget		
Budget	Percent (n=39)	
Less than \$250,000	0.0%	
\$250,001-\$500,000	0.0%	
\$500,001-\$750,000	0.0%	
\$750,001-\$1,000,000	0.0%	
\$1,000,001-\$5,000,000	41.0%	
\$5,000,001-\$10,000,000	12.8%	
\$10,000,001-\$25,000,000	30.8%	
More than \$25,000,000	15.4%	

Note: Data are based on responses to survey question D; respondents were asked to select only one option.

#### **Staff Size**

Figure 2 shows the staff size of the SLAAs surveyed. The majority of SLAAs (59.0%) report a staff size of 26 to 75.

FIGURE 2			
SLAA STAFF			
Staff	Percent (n=39)		
5 or fewer	2.6%		
6–10	0.0%		
11–25	7.7%		
26–75	59.0%		
76–150	20.5%		
151–250	7.7%		
251–500	0.0%		
501–1,000	0.0%		
1,001–1,500	2.6%		
More than 1,500	0.0%		

Note: Data are based on responses to survey question E; respondents were asked to select only one option.

The total number of SLAAs is small in comparison with other survey respondent groups (e.g., public libraries, museums), so we do not provide breakouts of the SLAA data by budget size because there would be too few respondents in each category to draw meaningful conclusions.

### 2.2 Technology

### **Technology Funding**

Almost all (97.5%) SLAAs had funding for technology in the past 12 months and all of them plan to obtain technology funding in the next 12 months.

FIGURE 3			
FUNDING FOR TECHNOLOGY	Percent (n=40)		
In the past 12 months, did your institution have funding for technology?			
Yes	97.5%		
No	2.5%		
Don't know/Not applicable	0.0%		
In the next 12 months, do you plan to have funding for your technology?			
Yes	100.0%		
No	0.0%		
Don't know/Not applicable	0.0%		

Note: Data are based on responses to survey questions 1 and 2; respondents were asked to select only one option.

## **Adequate Funding of Technology Needs**

Most SLAAs (84.6%) report that the majority of their technology needs are adequately funded.

FIGURE 4 PERCENTAGE OF TECHNOLOGY NEEDS THAT ARE ADEQUATELY FUNDED		
Percent (n=39)		
0%	0.0%	
1–25%	7.7%	
26–50%	7.7%	
51–75%	48.7%	
76–99%	25.6%	
100%	10.3%	

Note: Data are based on responses to survey question 3; respondents were asked to select only one option.

### **Maintaining and Adding Technology**

Figure 5 shows the mean ratings of an institution's ability to maintain or add technology based on a 5-point scale, with "1" meaning strongly agree and "5" meaning strongly disagree. Therefore, ratings less than 2.5 indicate agreement, ratings between 2.5 and 3.5 indicate neither agreement nor disagreement, and ratings greater than 3.5 indicate disagreement. All SLAAs agree that their institutions are able to maintain their current levels of technology, but they are less positive on their institutions' ability to add new uses of technology to meet evolving needs.

FIGURE 5 ABILITY TO MAINTAIN AND ADD TECHNOLOGY		
My institution is able to:	Average Rating (n=40)	
Maintain its current level of technology	2.2	
Add new uses of technology to meet evolving needs	3.1	

Note: Data are based on responses to survey question 4. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

#### **Extent of Technology Capacity**

One-fifth of SLAAs (20.5%) currently have the technology capacity necessary to meet their mission, and nearly half of them (46.2%) report that their technology capacity almost meets their mission.

FIGURE 6 TECHNOLOGY CAPACITY TO MEET MISSION		
Response Option	Percent (n=39)	
Currently meets our mission	20.5%	
Almost meets our mission	46.2%	
Is short of meeting our mission	28.2%	
Does not meet our mission	5.1%	
Don't know/Not applicable	0.0%	

Note: Data are based on responses to survey question 5; respondents were asked to select only one option.

#### **Technologies Used in the Past 12 Months**

Every SLAA (i.e., 100% of all those surveyed) used the following seven technologies in the past 12 months:

- Broadband Internet connection
- Computerized catalog of library and other collections
- Desktop computers
- E-mail
- LAN (local area network)
- Office productivity software
- Web site for its institution

FIGURE 7 SLAAS THAT USED THE FOLLOWING TECHNOLOGIES			
IN THE PAST 12 MONTHS			
Technology	Percent (n=40)		
Accounting/payroll/human resources software	87.5%		
Broadband Internet connection	100.0%		
Computerized catalog of library or other collections	100.0%		
Computerized collections management system	70.0%		
Database software or system for membership development	41.0%		
Desktop computers	100.0%		
E-mail	100.0%		
GIS (geographic information systems) applications	47.4%		
Integrated library system (ILS)	95.0%		
Intranet	77.5%		
LAN (local area network)	100.0%		
Marketing and promotion software and systems	20.5%		
Meta- or federated searching in online collections and catalogs	46.2%		
Modem (dial access) Internet connection	16.2%		
Multimedia services or collections	56.4%		
Notebook or tablet computers	74.4%		
Office productivity software, including word processing, desktop publishing, and spreadsheets	100.0%		
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	70.0%		
Personal information management (PIM) software	21.6%		
Point-of-sale software and systems	0.0%		
RFID (radio frequency identification) in services or collections	7.7%		
Software to manage public-access computers and printing	56.4%		
Video tours	2.6%		
Virtual reality tours	2.6%		
Web portal or gateway for services or collections	70.0%		
Web site for your institution	100.0%		
Wireless network, including WiFi	42.5%		
Other	7.1%		

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

Almost two-thirds of SLAAs (65.0%) used 16 or more technologies in the past 12 months.

FIGURE 8 PERCENTAGE OF SLAAS THAT USED THE FOLLOWING NUMBER OF TECHNOLOGIES IN THE PAST 12 MONTHS		
Number Percent (n=40)		
0	0.0%	
1–5	0.0%	
6–10	2.5%	
11–15	32.5%	
16–20	62.5%	
21 or more	2.5%	

Note: Data are based on responses to survey question 6.

#### **Staff Capabilities**

More than three-fourths of SLAAs (77.5%) report that they do not have enough skilled staff to accomplish their technology activities.

FIGURE 9 EXTENT TO WHICH SLAAS HAVE SUFFICIENT SKILLED STAFF TO ACCOMPLISH TECHNOLOGY ACTIVITI	ES		
Response Option			
We do not have enough skilled staff to accomplish our technology activities.	77.5%		
We have the right amount of skilled staff to accomplish our technology activities.	20.0%		
We have more than enough skilled staff to accomplish our technology activities.	0.0%		
Other (please list)	2.5%		
Don't know/Not applicable	0.0%		

Note: Data are based on responses to survey question 10; respondents were asked to select only one option.

#### **Needs Assessments**

Forty-five percent of SLAAs conduct assessments of user and visitor needs, while 50 percent do not.

Figure 10.			
CONDUCT NEEDS ASSESSMENTS FOR			
TECHNOLOGY-SUPPORTED SERVICES			
Response Option	Percent (n=40)		
Yes	45.0%		
No	50.0%		
Don't know/Not applicable	5.0%		

Note: Data are based on responses to survey question 12; respondents were asked to select only one option.

#### 2.3 Digitization

#### **Digitization Policies**

As a group, the SLAAs surveyed have established or are developing digitization policies in all areas. However, for each type of policy, at least one-third of them either do not have digitization policies in place or in development or they responded "don't know/not applicable". The top three digitization policies that SLAAs have in place are for the following:

- Digital format, with 42.5 percent having such policies.
- Metadata, with 38.5 percent having such policies.
- Access, with 37.5 percent having such policies.

The top three digitization policies that SLAAs have in development are for the following:

- Materials to be digitized, with 40.0 percent having such policies.
- Quality control, with 40.0 percent having such policies.
- Institutional repository, with 35.0 percent having such policies.

FIGURE 11 DIGITIZATION POLICIES			
Type of Policy	Policies in place (n=40)	Policies in development (n=40)	No policies in place or in development/ Don't know (n=40)
Access	37.5%	30.0%	32.5%
Best practices	25.0%	22.5%	52.5%
Conversion of digital files to next-generation formats	12.8%	25.6%	61.5%
Digital format (e.g., TIFF, GIF, PAL)	42.5%	22.5%	35.0%
Evaluation	17.5%	30.0%	52.5%
Institutional repository	25.0%	35.0%	40.0%
Intellectual property issues	30.0%	17.5%	52.5%
Materials to be digitized	22.5%	40.0%	37.5%
Priorities for digitization	27.5%	32.5%	40.0%
Preservation	35.0%	27.5%	37.5%
Quality control	25.0%	40.0%	35.0%
Standards	30.0%	32.5%	37.5%
Metadata	38.5%	25.6%	35.9%
Security	30.8%	25.6%	43.6%
Other	0.0%	12.5%	87.5%

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply.

#### **Direct Funding to Other Institutions for Digitization**

Almost three-fourths of SLAAs (70.7%) provide direct funding or services to other institutions for their digitization activities. Of these, 75.9 percent support cooperative digitization projects or partnerships; 72.4 percent support statewide digitization projects; 69.0 percent support the digitization of special collections; and 58.6 percent support providing access to digital products like online collections.

FIGURE 12. DIRECT FUNDING TO OTHER INSTITUTIONS			
Response Option	Percent (n=41)		
Yes	70.7%		
No	26.8%		
Don't know/Not applicable	2.4%		

Note: Data are based on responses to survey question 17; respondents were asked to select only one option.

FIGURE 13 ACTIVITIES FUNDED BY DIRECT FUNDING			
Response Option	Percent (n=29)		
Digitizing library collections is funded by my institution.	31.0%		
Digitizing special collections (like rare books or historical documents) is funded by my institution.	69.0%		
Supporting cooperative digitizing projects or partnerships is funded by my institution.	75.9%		
Accessing digital products (e.g., historical collections online) is funded by my institution.	58.6%		
Supporting statewide digitizing projects, such as developing strategic plans, surveying collections, and implementing digitizing facilities, is funded by my institution.	72.4%		
Supporting interstate digitizing efforts, such as developing strategic plans, surveying collections, and implementing digitizing facilities, is funded by my institution.	3.4%		
Other	17.2%		

Note: Data are based on responses to survey question 17; respondents were asked to select all that apply.

#### **Digitization Funding**

Almost three-quarters of SLAAs (73.2%) had funding to support their digitization activities in the past 12 months.

FIGURE 14. FUNDING TO SUPPORT DIGITIZATION ACTIVITIES			
Response Option	Percent (n=41)		
Yes	73.2%		
No	24.4%		
Don't know/Not applicable	2.4%		

Note: Data are based on responses to survey question 18; respondents were asked to select only one option.

#### **Materials for Digitization**

The top three materials that SLAAs digitized in the past 12 months or are currently digitizing are as follows:

- Government publications, with 15.4 percent digitizing these materials.
- Correspondence, diaries, and other personal records, with 12.8 percent digitizing these materials.
- Maps, with 8.1 percent digitizing these materials.

The top three materials that SLAAs plan to digitize in the next 12 months are as follows:

- Historical documents/archives, with 12.8 percent digitizing these materials.
- Newspapers, with 10.5 percent digitizing these materials.
- Government publications, with 10.3 percent digitizing these materials.

FIGURE 15				
MATERIALS THAT HAVE BEEN DIGITIZED OR ARE PLANNED FOR DIGITIZATION				
Material	Digitized more than 12 months ago (n=40)	Digitized in last 12 months or currently digitizing (n=40)	Plan to digitize in next 12 months (n=40)	Plan to digitize more than 12 months from now (n=40)
Correspondence, diaries, and other personal records	17.9%	12.8%	2.6%	10.3%
Course material	5.4%	0.0%	0.0%	2.7%
Education and training material about the collections	8.1%	2.7%	0.0%	8.1%
Films, videotapes	5.3%	7.9%	5.3%	7.9%
Government publications	41.0%	15.4%	10.3%	12.8%
Historical documents/archives	35.9%	5.1%	12.8%	10.3%
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	11.1%	0.0%	0.0%	11.1%
Information on the institution	28.9%	5.3%	2.6%	7.9%
Journals and other serials	13.5%	2.7%	2.7%	2.7%
Manuscripts	20.5%	2.6%	7.7%	5.1%
Maps	27.0%	8.1%	0.0%	13.5%
Music and other recorded sound	5.4%	0.0%	2.7%	10.8%
Newspapers	7.9%	5.3%	10.5%	15.8%
Photographs	40.5%	2.7%	2.7%	8.1%
Rare books	15.4%	2.6%	2.6%	15.4%
Records about the collection	8.3%	2.8%	0.0%	11.1%
Sheet music	5.6%	0.0%	5.6%	0.0%
Special exhibits	18.9%	0.0%	2.7%	13.5%
Theses and dissertations	0.0%	0.0%	0.0%	2.7%
Other (please list)	20.0%	10.0%	0.0%	0.0%

Note: Data are based on responses to survey question 20; respondents were asked to select all that apply.

#### **Primary Digitization Priorities**

The top three digitization priorities for SLAAs are as follows:

- Historical documents/archives, with 65.0 percent indicating this priority.
- Government publications, with 52.5 percent indicating this priority.
- Photographs, with 35.0 percent indicating this priority.

FIGURE 16 DIGITIZATION PRIORITIES		
Priority	Percent (n=40)	
Correspondence, diaries, and other personal records	7.5%	
Course material	2.5%	
Education and training material about the collections	2.5%	

Figure 16 Digitization Priorities	
Priority	Percent (n=40)
Films, videotapes	5.0%
Government publications	52.5%
Historical documents/archives	65.0%
Images of items in the collections (e.g., art work, artifacts, furniture, plants, animals)	12.5%
Information on the institution	12.5%
Journals and other serials	5.0%
Manuscripts	5.0%
Maps	10.0%
Music and other recorded sound	0.0%
Newspapers	25.0%
Photographs	35.0%
Rare books	12.5%
Records about the collection	0.0%
Sheet music	0.0%
Special exhibits	7.5%
Theses and dissertations	0.0%
Other (please list)	5.0%
Don't know/Not applicable	7.5%

Note: Data are based on responses to survey question 22; respondents were asked to select their institution's top three priorities.

## **Number of Digital Materials Created in the Past 12 Months**

Most SLAAs created digital images in the past 12 months, including 42.5 percent that created 1 to 500 images. However, 22.5 percent of SLAAs report having created no images.

FIGURE 17 NUMBER OF DIGITAL MATERIALS OR IMAGES CREATED IN THE PAST 12 MONTHS	
Number	Percent (n=40)
0	22.5%
1–500	42.5%
501–1,000	5.0%
1,001–5,000	12.5%
5,001–10,000	2.5%
10,001–25,000	7.5%
More than 25,000	7.5%

Note: Data are based on responses to survey question 23; respondents were asked to select only one option.

#### Number of Additional Images Remaining to Be Digitized

The majority (51.3%) of SLAAs have more than 25,000 digital materials or images left to digitize.

FIGURE 18 NUMBER OF DIGITAL MATERIALS	
OR IMAGES LEFT TO BE CREATED Percent	
Number	(n=39)
0	15.4%
1-500	12.8%
501-1,000	2.6%
1,001-5,000	5.1%
5,001–10,000	7.7%
10,001-25,000	5.1%
More than 25,000	51.3%

Note: Data are based on responses to survey question 24; respondents were asked to select only one option.

## **Undertaking Digitization Activities**

SLAAs undertake their digitization activities by the following:

- Training current staff to perform these activities: 67.5 percent use this means.
- Reassigning current staff to perform these activities: 37.5 percent use this means.
- Digitizing their materials off-site at another institution's digitization center: 20.0 percent use this means.

FIGURE 19 MEANS OF UNDERTAKING DIGITIZATION ACTIVITIES	
Response Option	Percent (n=40)
Contractual staff were hired to perform these activities in-house.	12.5%
New institutional staff were hired to perform these activities.	15.0%
Current staff were trained to perform these activities.	67.5%
Current staff were reassigned to perform these activities.	37.5%
Volunteers perform these activities.	7.5%
These activities are performed by commercial vendors off-site.	10.0%
Materials are digitized off-site at another institution's digitization center.	20.0%
Other (please list)	7.5%
Don't know/Not applicable	15.0%

Note: Data are based on responses to survey question 26; respondents were asked to select all that apply.

#### The Availability of Digital Image Collections to the Public

More than three-fourths of SLAAs (82.5%) make some or all of their digital image collections available to the public.

FIGURE 20 PUBLIC AVAILABILITY OF DIGITAL IMAGE COLLECTIONS	
Response Option	
Yes, some of our digital image collections are available to the public.	37.5%
Yes, all of our digital image collections are available to the public.	45.0%
No, our digital image collections are not available to the public.	2.5%
Don't know/Not applicable	15.0%

Note: Data are based on responses to survey question 27; respondents were asked to select only one option.

#### **How Digital Image Collections Are Made Available**

More than three-fourths (79.5%) of the SLAAs make their digital image collections available to the public via the Web.

FIGURE 21 HOW DIGITAL IMAGE COLLECTIONS ARE MADE AVAILABLE	
Response Option	Percent (n=39)
On the premises on our computer network (LAN)	23.1%
On the Web	79.5%
Through a third party	20.5%
Don't know/Not applicable	15.4%

Note: Data are based on survey question 28; respondents were asked to select all that apply. Table only includes respondents who reported that they make some or all of their digital image collections available to the public.

## **Needs Assessments**

Only 22.5 percent of SLAAs conduct assessments of user or visitor needs for digitized materials and images in their institutions. Overall, however, almost three-fourths of them (72.5%) do not conduct assessments.

FIGURE 22 NEEDS ASSESSMENTS	
Response Option	Percent (n=40)
Yes	22.5%
No	72.5%
Don't know/Not applicable	5.0%

Note: Data are based on responses to survey question 35; respondents were asked to select only one option.

#### Collaboration

Almost two-thirds of SLAAs (65.0%) collaborate (through specific partnering agreements) with other institutions and organizations to digitize materials.

FIGURE 23	
COLLABORATION TO DIGITIZE MATERIALS	
Response Option	Percent (n=40)
Yes	65.0%
No	32.5%
Don't know/Not applicable	2.5%

Note: Data are based on responses to survey question 37; respondents were asked to select only one option.

When SLAAs collaborate to digitize materials, 80.8 percent turn to academic libraries; 61.5 percent turn to state archives; and 57.7 percent turn to other state government agencies.

FIGURE 24 COLLABORATION WITH OTHER INSTITUTIONS AND ORGANIZATIONS	
Response Option	Percent (n=26)
State library agencies	15.4%
Academic libraries	80.8%
Individual public libraries	50.0%
Private libraries	19.2%
Museums	53.8%
Consortia	30.8%
State archives	61.5%
<ul> <li>Special libraries</li> </ul>	23.1%
Historical societies	50.0%
Federal government agencies or archives	7.7%
Other state government agencies	57.7%
City, municipal, or other local government agencies or archives	19.2%
Universities and colleges	26.9%
Community organizations	3.8%
Private companies	3.8%
Foundations	3.8%
State library associations	15.4%
State museum associations	3.8%
Other professional associations	0.0%
Other	3.8%

Note: Data are based on responses to survey question 37; respondents were asked to select all that apply.

#### Capabilities in Initiating, Accomplishing, and Sustaining Digitization Activities

Overall, SLAAs rate themselves capable at initiating, accomplishing, and sustaining digitization activities in most areas. They rate themselves deficient at having established digitization plans and in funding.

Figure 25 shows the average ratings of an institution's capability at initiating, accomplishing, and sustaining digitization activities based on a 5-point scale, with "1" meaning deficient and "5" meaning fully capable. Therefore, ratings less than 2.5 tend to indicate deficiency and ratings greater than 2.5 tend to indicate capability.

FIGURE 25 CAPABILITY TO INITIATE, ACCOMPLISH, AND SUSTAIN DIGITIZATION ACTIVITIES	
Capability	Average Rating (n=40)
Staff skills and expertise	2.9
Equipment and software	2.6
Funding	1.8
Established digitization plan	2.2
Established digitization policies	2.5
Established quality standards	2.7
Established procedures for preparation for creating digital images	2.8
Established procedures for the management of images and files	2.8

Note: Data are based on responses to survey question 39; respondents were asked to rate each capability. The scale for this question was 1, meaning deficient, to 5, meaning fully capable.

#### **Hindrances to Digitization Activities**

Overall, SLAAs agree that "lack of funds," "lack of staff time," and "other projects have higher priorities" are the greatest hindrances to their digitization activities.

FIGURE 26 HINDRANCES TO DIGITIZATION ACTIVITIES	
Digitization activities in your institution are hindered by:	Average Rating (n=40)
Lack of staff time	2.0
<ul> <li>Lack of staff skills and expertise</li> </ul>	2.7
Lack of funds	1.9
Lack of sufficient equipment and/or software	2.3
<ul> <li>Lack of an established digitization plan</li> </ul>	2.8
Lack of established digitization policies	3.0
Lack of established quality standards	3.2
Lack of established policies and procedures for preparation for materials for digitizing	3.2
Lack of established policies and procedures for the management of images and files	3.1
Other projects have higher priorities	2.1
Concern about intellectual property issues	3.5
Security concerns	3.7

FIGURE 26 HINDRANCES TO DIGITIZATION ACTIVITIES	
Digitization activities in your institution are hindered by:	Average Rating (n=40)
Not having collections worth digitizing	4.5
Concern about costs of preservation and management	2.6
Management is unaware of the benefits of digitization	4.1

Note: Data are based on responses to survey question 40; respondents were asked to rate each potential hindrance. The scale for this question was 1, meaning strongly agree, to 5, meaning strongly disagree.

# 3. Comparisons of the 2001 AND the 2004 survey findings

This section highlights the differences in the following categories between the 2001 and the 2004 survey findings for SLAAs.

- Top technologies used
- Funding for technology and digitization
- Sources of funding for digitization activities
- Digitization policies
- Top goals for digitization projects

#### 3.1 Overview

- Technologies used in the past 12 months: SLAAs' use of technologies for day-to-day operations (e-mail, desktop computers, office productivity software, and institutional Web site) was pervasive in both surveys. In the 2004 survey, the following newer technologies were implemented in the past 12 months. (With the exception of PDAs, these technologies were not asked about in the 2001 survey.)
  - o Broadband Internet, used by 100 percent of all SLAAs.
  - Web portal or gateway for services or collections, used by 70.0 percent.
  - o Personal digital assistant handheld devices (e.g., Palm Pilots), used by 70.0 percent.
  - Software to manage public-access computers and printing, used by 56.4 percent.
  - o Geographic information systems (GIS), used by 47.4 percent.
  - o Meta- or federated searching in online collections and catalogs, used by 46.2 percent in the last 12 months, and expected to be acquired or implemented by 35.9 percent in the next 12 months.
  - o Wireless network, including WiFi, used by 42.5 percent.
- Goals for digitization projects: SLAAs report a change in emphasis in digitization project goals over the three-year period:
  - o Preserve information of importance or value: a goal for 64.9 percent in 2001 but for only 50.0 percent in 2004.
  - o Increase access to collections: a goal for 18.9 percent in 2001 but for 87.5 percent in 2004.
  - o Minimize damage to original materials: a goal for 40.5 percent in 2001 but for only 22.5 percent in 2004.
  - o Provide access to material via the Web: a goal for 24.3 percent in 2001 but for 72.5 percent in 2004.
  - o Increase interest in the institution: a goal for 43.2 percent in 2001 but for only 2.5 percent in 2004.

#### 3.2 Top Technologies Used

For almost all of the technologies that were asked about, the percentage of SLAAs that reported using a given technology in the past 12 months increased from 2001 to 2004. However, decreases in technology use of 5 to 20 percent were reported for notebook or tablet computers, point-of-sale software and systems, and video tours.

The largest differences in reported use from 2001 to 2004 are related to the following technologies:

- PDAs: Usage increased from 28.9 percent of SLAAs in 2001 to 70.0 percent in 2004.
- Database software or system for membership development: Usage increased from 18.4 percent of SLAAs in 2001 to 41.0 percent in 2004.
- Notebook or tablet computers: Usage decreased from 94.7 percent in 2001 to 74.4 percent in 2004.

FIGURE 27 TECHNOLOGIES USED IN THE PAST 12 MONTHS					
Technology	Survey 2001	y Year 2004			
a a	(n=38)	(n=40)			
Accounting/payroll/human resources software	86.8%	87.5%			
Computerized catalog of library or other collections	89.5%	100.0%			
Database software for collections management	55.3%	-			
Computerized collections management system	-	70.0%			
Database software or system for membership development	18.4%	41.0%			
Desktop computers	100.0%	100.0%			
E-mail	100.0%	100.0%			
Intranet	63.2%	77.5%			
Marketing and promotion software and systems	5.3%	20.5%			
Notebook or tablet computers	94.7%	74.4%			
Office productivity software, including word processing, desktop publishing, and spreadsheets	100.0%	100.0%			
PDAs (personal digital assistant handheld devices, e.g., Palm Pilots)	28.9%	70.0%			
Point-of-sale software and systems	7.9%	0.0%			
Video tours	7.9%	2.6%			
Virtual reality tours	2.6%	2.6%			
Web site for your institution	97.4%	100.0%			
Other	2.6%	60.0%			

Note: Data are based on responses to survey question 6; respondents were asked to select all that apply.

# 3.3 Funding for Technology and Digitization

The percentage of SLAAs that report they do <u>not</u> plan to obtain funding for digitization activities in the next 12 months (14.6%) is up from what was reported in 2001 (5.4%).

FIGURE 28 FUNDING FOR TECHNOLOGY AND DIGITIZATION										
		Survey Year								
Response Option		2001	(n=38)		2004 (r	1=41)				
	Yes	No	Don't know/ Not applicable	Yes	No	Don't know/ Not applicable				
Technology										
In the past 12 months, did your institution have funding for technology?	100.0%	0.0%	-	97.5%	2.5%	0.0%				
In the next 12 months, do you plan to have funding for your technology?	_	ı	_	100.0%	0.0%	0.0%				
Digitization										
In the past 12 months, did your institution have funding to support your digitization activities?	71.1%	28.9%	_	73.2%	24.4%	2.4%				
In the next 12 months, do you plan to obtain funding to support your digitizing activities?	94.6%	5.4%	_	75.6%	14.6%	9.8%				

Note: Data are based on responses to survey questions 1, 2, 18, and 19; respondents were asked to select only one option.

# 3.4 Sources of Funding for Technology

The top two sources of funding for technology in 2004 were the same as they were in 2001:

- Grants from federal agencies
- State funds

FIGURE 29 FUNDING FOR TECHNOLOGY					
Source of Funding	Survey Year 2001 2004 (n=37) (n=39)				
Endowment funds	5.4%	0.0%			
Foundation grants	5.4%	69.2%			
Gifts from donors	16.2%	10.3%			
Grants from Federal agencies	78.4%	97.4%			
Grants from other Federal agencies (e.g., Department of Education, National Endowment for the Humanities)	13.5%	12.8%			
IMLS Library Services and Technology Act State Program and Library National Leadership Grants	62.2%	79.5%			
IMLS Museum National Leadership Grants	2.7%	5.1%			
Institutional operating funds	37.8%	30.8%			
State funds	91.9%	87.2%			
City, county, or other local government funds	2.7%	0.0%			
Other sources	5.4%	2.6%			

Note: Data are based on responses to survey question 1; respondents were asked to select all that apply.

# 3.5 Sources of Funding for Digitization Activities

For the SLAAs that did receive funding for their digitization activities, the top three sources of funding in 2004 were the same as they were in 2001:

- IMLS Library Services and Technology Act State Program and Library National Leadership Grants
- State funds
- Institutional operating funds

FIGURE 30 FUNDING FOR DIGITIZATION ACTIVITIES						
Source of Funding	Surve	Survey Year				
Source of Funding	2001 (n=27)	2004 (n=30)				
Endowment funds	0.0%	0.0%				
Foundation grants	3.7%	13.3%				
Gifts from donors	7.4%	6.7%				
Grants from federal agencies	96.3%	76.6%				
Grants from other federal agencies (e.g., Department of Education, National Endowment for the Humanities)	14.8%	13.3%				
IMLS Library Services and Technology Act State Program and Library National Leadership Grants	74.1%	60.0%				
IMLS Museum National Leadership Grants	7.4%	3.3%				
Institutional operating funds	22.2%	16.7%				
State funds	63.0%	73.3%				
City, county, or other local government funds	0.0%	3.3%				
Other sources	3.7%	3.3%				

Note: Data are based on responses to survey question 18; respondents were asked to select all that apply.

# 3.6 Digitization Policies

The number of policies in place or in development (versus not in place or in development/don't know) increased from 2001 to 2004. With some exceptions, the majority of SLAAs do not have policies in place or in development in 2004.

FIGURE 31 DIGITIZATION POLICIES							
	Survey Year						
		2001 (n=37	7)		2004 (n=4	0)	
Policy			Policies in place	Policies in development	No policies in place or in development/ Don't know		
Access	10.8%	27.0%	62.1%	37.5%	30.0%	32.5%	
Best practices	16.2%	13.5%	70.2%	25.0%	22.5%	52.5%	
Conversion of digital files to next-generation formats	5.4%	16.2%	78.3%	12.8%	25.6%	61.5%	
Digital format (e.g., TIFF, GIF, PAL)	16.2%	21.6%	62.1%	42.5%	22.5%	35.0%	

FIGURE 31 DIGITIZATION POLICIES						
			Surve	y Year		
		2001 (n=37	7)		2004 (n=4	0)
Policy			No policies in			No policies in
	D 11 1	D 11 1 1	place or in	D 11 1	D 11 1	place or in
	Policies in place	Policies in development	development/ Don't know	Policies in place	Policies in development	development/ Don't know
Evaluation	5.4%	8.1%		17.5%	30.0%	52.5%
			86.4%			
Intellectual property issues	16.2%	18.9%	64.8%	30.0%	17.5%	52.5%
Materials to be digitized	16.2%	27.0%	56.7%	22.5%	40.0%	37.5%
Priorities for digitization	13.5%	32.4%	54.0%	27.5%	32.5%	40.0%
Preservation	8.1%	10.8%	81.0%	35.0%	27.5%	37.5%
Quality control	13.5%	24.3%	62.1%	25.0%	40.0%	35.0%
Standards	5.4%	27.0%	67.5%	30.0%	32.5%	37.5%
Other	27.0%	2.7%	70.2%	0.0%	12.5%	87.5%

Note: Data are based on responses to survey question 16; respondents were asked to select all that apply.

### 3.7 Top Goals for Digitization Projects

The top three goals of SLAAs in terms of digitization activities in 2001 were as follows:

- Increase interest in the institution: a goal for 43.2 percent of all SLAAs.
- Minimize damage to original materials: a goal for 40.5 percent.
- Preserve materials of importance or value: a goal for 35.1 percent.

In 2004, the top three goals for digitization activities were as follows:

- Increase access to collections/materials/files: a goal for 87.5 percent of all SLAAs.
- Provide access to materials via the Web: a goal for 72.5 percent.
- Preserve materials of importance or value: a goal for 50.0 percent.

FIGURE 32. GOALS FOR DIGITIZATION ACTIVITIES					
Goal	Survey year				
Goai	2001 (n=37)	2004 (n=40)			
Preserve materials of importance or value	35.1%	50.0%			
Increase access to collections/materials/files	18.9%	87.5%			
Minimize damage to original materials	40.5%	22.5%			
Provide access to materials via the Web	24.3%	72.5%			
Increase interest in the institution	43.2%	2.5%			
Save space in the institution	2.7%	5.0%			
Present more of the collection than is on display at any one time	2.7%	2.5%			
Save costs by eliminating duplication of materials	0.0%	2.5%			
Encourage cooperation among institutions to increase the number and variety of materials available	13.5%	15.0%			
Provide greater information about the institution's collections to artists, scholars, students, teachers, and the public	18.9%	0.0%			
Increase access to state services	5.4%	15.0%			
Support educational programs	2.7%	0.0%			

FIGURE 32.					
GOALS FOR DIGITIZATION ACTIVITIES					
Goal Survey year					
Guai	2001 (n=37)	2004 (n=40)			
Other (please list)	0.0%	2.5%			
Don't know/Not applicable	8.1%	5.0%			

Note: Data are based on responses to survey question 31; respondents were asked to select their institution's top three goals.

# Afterword: Post-Survey Discussions with the Constituent Communities

At the conclusion of the 2004 survey, IMLS held facilitated telephone discussions with practitioners from the five constituent communities represented in the survey: museums, public libraries, academic libraries, archives, and state library administrative agencies.

The participants were asked about the needs of their individual organizations and of their fields in using technology and undertaking digitization to better serve the public. They were asked what issues the Institute should study to best serve them. The participants were asked whether the survey should be repeated in the future.

The views expressed in the discussions largely corresponded with and validated the survey findings. The groups pointed out ways the Institute can help address their needs. They concurred that the 2001 and 2004 surveys provided useful information, particularly about trends over time. They said that a third survey would be useful and suggested improvements toward that end.

# **Summary of the Participants' Comments and Suggestions**

- 1. There is a need for information appropriate to the institution's size and type about
  - developing models, guidelines, standards, policies, best practices, and effective business models for both technology and digitization activities;
  - successful collaborations and how they can be replicated;
  - hardware and software choices, including interoperability issues.
- 2. Institutions want to participate in sharing information about
  - ongoing projects utilizing a particular tool or method, or covering a particular topic;
  - successful projects and collaborations;
  - webcasts, webstreaming, and other electronic ways to participate in conferences.
- 3. Institutions would like information, training, and guidance on how to better assess user needs, including methods of collecting information about the characteristics of users, how they use an institution's technology and digitization services and products, and for what purpose. Those in the library field are particularly interested in information-seeking behaviors.
- 4. To be able to plan effective digitization and technology projects, institutions need
  - case studies, particularly business case studies;
  - models for project management;
  - information technology strategic planning models, training, and guidance.

- 5. Staff needs education and training in order to
  - keep current with technology and digitization developments;
  - learn project management skills;
  - perform needs assessments.
- 6. Respondents also requested assistance with
  - long-term preservation, especially of born-digital material and the sustainability of digital products;
  - staff management, training, and retention;
  - incorporating new technologies;
  - linking digitization projects within and across collections.

The participants suggested ways that IMLS could support them, including

- 1. Conducting studies on
  - user needs in both digital products and technology
  - technology use in services to the public, including the latest changes and the ability of technology to draw new audiences;
- 2. Conducting or sponsoring conferences on
  - how new technologies can change the way institutions do business, such as changes in integrated library systems
  - the lessons of successful projects, particularly digitization projects
  - digital archives;
- 3. Encouraging interoperability in software applications, such as integrated library systems and cross-collection searching of digital images;
- 4. Encouraging and supporting communities of practice that enable people to share information, expertise, and experience.

IMLS appreciates the contributions each of the participants and groups made to our understanding of their needs and thanks them for their suggestions for the Institute's continuing work on their behalf.

# Institute of Museum and Library Services Technology and Digitization Survey

This survey is designed to document the Status of Technology and Digitization in **Libraries**, **Museums**, **Archives and State Library Administrative Agencies (SLAAs)** in the United States. The Institute of Museum and Library Services (IMLS) is attempting to gather information to determine the needs of these institutions as they progress towards their technology and digitization goals.

Responses to these survey items will be compiled into a report and will be made publicly accessible so that libraries, museums, archives and SLAA's, as well as Congress, policy makers and other organizations, can see what progress has been made towards technology and digitization and where there are still shortcomings. The information you provide will only be reported in aggregate form. By looking at the results from this survey, IMLS hopes to identify current trends in digitization and technology and determine where to focus their funding efforts in the future

For purposes of this survey, **technology** refers to using and managing information in digital formats through use of computers (hardware and software), automated systems to support services, Internet and other network connections, Web sites and Web-based services, office productivity applications like word processing and e-mail, staff to support these activities, and the range of technologies that help staff and users search, access, and experience collections onsite and virtually. **Digitization** is the process of converting, creating, and maintaining books, art works, historical documents, photos, journals, etc. in electronic representations so they can be viewed via computer and other devices.

If your museum is part of a larger institution, please respond to the questions in this survey in reference to your museum only.

Please complete this survey and return it via fax to Farrasha Jones, 703-219-3777. If you have any questions regarding this survey, please send an e-mail to IMLSSurvey@caliber.com and we will get back to you as soon as possible. Thank you for your participation.

#### Burden Estimate and Request for Public Comments:

Public reporting burden for this collection of information is estimated to average 1 hour (60 minutes) per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Institute of Museum and Library Services, 1100 Pennsylvania Avenue, NW Room 223, Washington, DC 20506; and to the Office of Management and Budget, Paperwork Reduction Project (3137-0050), Washington, DC, 20503.

This survey is being conducted under OMB clearance number 3137-0054 expiring December 31, 2004.

# BACKGROUND ON MUSEUMS

A.	Select the type of museum that most closely describe option.)  O Aquarium O Arboretum or botanical garden O Art Museum O Children's museum O General Museum O Historic house/site	0 0 0 0	Natural history/anthropology museum Nature center Planetarium Science or technology center Zoological park Other (Please list):
В.	<ul> <li>→ History museum</li> <li>What is the size of your museum's annual budget?</li> <li>→ Less than \$250,000</li> <li>→ \$250,001 - \$500,000</li> <li>→ \$500,001 - \$750,000</li> <li>→ \$750,001 - \$1,000,000</li> <li>→ \$1,000,001 - \$5,000,000</li> <li>→ \$5,000,001 - \$10,000,000</li> <li>→ \$10,000,001 - \$25,000,000</li> <li>→ More than \$25,000,000</li> </ul>		
C.	What is the current size of your museum's paid, function one best option.)  O Less than 5  O 6-10  O 11-25  O 26-75  O 76-150  O 151-250  O 251-500  O 501-1,000  O 1,001-1,500  O More than 1,500	ll tin	me equivalent (FTE) staff? (Select the

This survey is designed to document the Status of Technology and Digitization in **Libraries**, **Museums**, **Archives and State Library Administrative Agencies (SLAAs)** in the United States. The Institute of Museum and Library Services (IMLS) is attempting to gather information to determine the needs of these institutions as they progress towards their technology and digitization goals.

Responses to these survey items will be compiled into a report and will be made publicly accessible so that libraries, museums, archives and SLAA's, as well as Congress, policy makers and other organizations, can see what progress has been made towards technology and digitization and where there are still shortcomings. The information you provide will only be reported in aggregate form. By looking at the results from this survey, IMLS hopes to identify current trends in digitization and technology and determine where to focus their funding efforts in the future.

For purposes of this survey, **technology** refers to using and managing information in digital formats through use of computers (hardware and software), automated systems to support services, Internet and other network connections, Web sites and Web-based services, office productivity applications like word processing and e-mail, staff to support these activities, and the range of technologies that help staff and users search, access, and experience collections on-site and virtually. **Digitization** is the process of converting, creating, and maintaining books, art works, historical documents, photos, journals, etc. in electronic representations so they can be viewed via computer and other devices.

If your archive is part of a larger institution, please respond to the questions in this survey in reference to your archive only.

Please complete this survey and return it via fax to Farrasha Jones, 703-219-3777. If you have any questions regarding this survey, please send an e-mail to IMLSSurvey@caliber.com and we will get back to you as soon as possible. Thank you for your participation.

#### Burden Estimate and Request for Public Comments:

Public reporting burden for this collection of information is estimated to average 1 hour (60 minutes) per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Institute of Museum and Library Services, 1100 Pennsylvania Avenue, NW Room 223, Washington, DC 20506; and to the Office of Management and Budget, Paperwork Reduction Project (3137-0050), Washington, DC, 20503.

This survey is being conducted under OMB clearance number 3137-0054 expiring December 31, 2004.

# **BACKGROUND ON ARCHIVES**

0	Your archive is which type of archival institution?  Federal government archive  State government archive  Local government archive (e.g., county, municipal)	0	lect the <u>one</u> best option.) Affiliated with a college or university Affiliated with a museum Affiliated with a historical society Separate/independent archive
000000	That is the size of your archive's annual budget? (\$\frac{9}{2}\) Less than \$250,000 \$\frac{9}{2}\) \$\frac{5}{2}\\$50,001 - \$\frac{5}{2}\\$500,000 \$\frac{5}{2}\\$500,001 - \$\frac{7}{2}\\$0,000 \$\frac{7}{2}\\$0,001 - \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,001 - \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,001 - \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,000	Selec	et the <u>one</u> best option.)
	What is the current size of your archive's paid, full one best option.)  Less than 5  6 - 10  11 - 25  26 - 75  76 - 150  151 - 250  251 - 500  501 - 1,000  1,001 - 1,500  More than 1,500	ll tim	ne equivalent (FTE) staff? (Select the

This survey is designed to document the Status of Technology and Digitization in **Libraries**, **Museums**, **Archives and State Library Administrative Agencies (SLAAs)** in the United States. The Institute of Museum and Library Services (IMLS) is attempting to gather information to determine the needs of these institutions as they progress towards their technology and digitization goals.

Responses to these survey items will be compiled into a report and will be made publicly accessible so that libraries, museums, archives and SLAA's, as well as Congress, policy makers and other organizations, can see what progress has been made towards technology and digitization and where there are still shortcomings. The information you provide will only be reported in aggregate form. By looking at the results from this survey, IMLS hopes to identify current trends in digitization and technology and determine where to focus their funding efforts in the future.

For purposes of this survey, **technology** refers to using and managing information in digital formats through use of computers (hardware and software), automated systems to support services, Internet and other network connections, Web sites and Web-based services, office productivity applications like word processing and e-mail, staff to support these activities, and the range of technologies that help staff and users search, access, and experience collections on-site and virtually. **Digitization** is the process of converting, creating, and maintaining books, art works, historical documents, photos, journals, etc. in electronic representations so they can be viewed via computer and other devices.

If your archive is part of a larger institution, please respond to the questions in this survey in reference to your archive only.

Please complete this survey and return it via fax to Farrasha Jones, 703-219-3777. If you have any questions regarding this survey, please send an e-mail to IMLSSurvey@caliber.com and we will get back to you as soon as possible. Thank you for your participation.

#### Burden Estimate and Request for Public Comments:

Public reporting burden for this collection of information is estimated to average 1 hour (60 minutes) per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Institute of Museum and Library Services, 1100 Pennsylvania Avenue, NW Room 223, Washington, DC 20506; and to the Office of Management and Budget, Paperwork Reduction Project (3137-0050), Washington, DC, 20503.

This survey is being conducted under OMB clearance number 3137-0054 expiring December 31, 2004.

# **BACKGROUND ON ARCHIVES**

0	Your archive is which type of archival institution?  Federal government archive  State government archive  Local government archive (e.g., county, municipal)	0	lect the <u>one</u> best option.) Affiliated with a college or university Affiliated with a museum Affiliated with a historical society Separate/independent archive
000000	That is the size of your archive's annual budget? (\$\frac{9}{2}\) Less than \$250,000 \$\frac{9}{2}\) \$\frac{5}{2}\\$50,001 - \$\frac{5}{2}\\$500,000 \$\frac{5}{2}\\$500,001 - \$\frac{7}{2}\\$0,000 \$\frac{7}{2}\\$0,001 - \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,001 - \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,001 - \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,000 \$\frac{1}{2}\\$0,000,000	Selec	et the <u>one</u> best option.)
	What is the current size of your archive's paid, full one best option.)  Less than 5  6 - 10  11 - 25  26 - 75  76 - 150  151 - 250  251 - 500  501 - 1,000  1,001 - 1,500  More than 1,500	ll tim	ne equivalent (FTE) staff? (Select the

# **TECHNOLOGY**

In this survey **technology** refers to using and managing information in digital formats through use of computers (hardware and software), automated systems to support services, Internet and other network connections, Web sites and Web-based services, office productivity applications like word processing and e-mail, staff to support these activities, and the range of technologies that help staff and users search, access, and experience collections on-site and virtually.

1.	In the past 12 months, did your institution have funding for technology? (Select the <u>one</u> best option.)  O No O Don't know/Not applicable O Yes (If yes, select all that apply below.)								
		Endowment funds Foundation grants, including Gates Library Initiative Gifts from donors IMLS Museum National Leadership Grants IMLS LSTA State Program and Library National Leadership Grants		Grants from other Federal agencies (e.g., Dept. of Ed., NEH) Institutional operating funds State funds City, county or other local government funds Corporate sponsors Other (Please list):					
2.	best option O No O Don't ki	12 months, do you plan to obtain funda.) now/Not applicable yes, select all that apply below.)	ding for you	ar technology? (Select the <u>one</u>					
		plan to obtain funds from: (Select all belo Endowment funds Foundation grants, including Gates Library Initiative Gifts from donors IMLS Museum National Leadership Grants IMLS LSTA State Program and Library National Leadership Grants		Grants from other Federal agencies (e.g., Dept. of Ed., NEH) Institutional operating funds State funds City, county or other local government funds Corporate sponsors Other (Please list):					
3.	What percedure best of 0% 0% 0% 0 1%-25% 0 26%-50 0 51%-75 0 76%-99 0 100%	% % %	eds are met	by current funding? (Select the					

4. Indicate the degree to which you agree with the following statements. (Select <u>one</u> in each row.) My institution is able to:					eh			
		.,,,	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
	a.	Maintain its current level of technology	0	0	•	0	0	0
	b.	Add new uses of technology to meet evolving needs	0	0	0	0	0	0
5.	opt O O O	what extent does your instance tivity, skills and expertion.) Our technology capa Currently meets our mission Almost meets our mission Is short of meeting our miss Does not meet our mission Don't know/Not applicable	tise, staf city:					
6.		nat technologies has your i onths, or plan to acquire or				e in each rov	-	12
				Used in past 12 months	Plan to acquire or implement in next 12 months	Plan to acquire of implemen more than months fro	t to acqu 12 imple	uire or ment/
	a.	Accounting/payroll software	e/HR	0	0	now O		)
	b.	Broadband Internet connect		Ŏ	ŏ	ŏ		
	c.	Computerized catalog of lib or other collections		0	0	0		_
	d.	Computerized collections management system		0	0	0		)
	e.	Database software or system membership development	n for	•	•	0		)
	f.	Desktop computers		0	0	0		
	g.	E-mail		•	•	0		)
	h.	GIS (geographic informatio systems) applications	n	0	•	0		)
	i.	Integrated library system (II	LS)	0	0	0		
	j.	Intranet		0	0	0		
	k.	LAN (local area network)		0	0	0		)
	1.	Marketing and promotion software and systems		•	•	0		)
	m.	Meta- or federated searchin online collections and catalogue and catalog		0	0	0		
	n.	Modem (dial access) Interneconnection	et	0	•	0		
	0.	Multimedia services or colle	ections	0	0	0		)
	p.	Notebook or tablet compute		0	0	0		

p. Notebook or tablet computers

		Used in past 12 months	Plan to acquire or implement in next 12 months	Plan to acquire or implement more than 12 months from now	Do not plan to acquire or implement/ Don't know
q.	Office productivity software, including word processing, desktop publishing and spreadsheets	0	0	0	0
r.	PDA (personal digital assistant handheld devices, e.g. Palm)	0	0	0	0
S.	Personal information management (PIM) software	0	0	0	0
t.	Point-of-sale software and systems	0	0	0	•
u.	RFID (radio frequency identification) in services or collections	0	0	0	0
V.	Software to manage public access computers and printing	0	0	0	0
W.	Video tours	0	0	0	0
Χ.	Virtual reality tours	•	•	•	•
y.	Web portal or gateway for services or collections	0	0	0	0
Z.	Web site for your institution	0	0	0	0
	Wireless network, including WiFi Other (Please list):	J	J	J	9
UU.	Other (1 lease list).	•	0	•	0

7. For which of the following purposes has your institution used technology to serve your community (i.e., users and visitors that your institution serves, supports, and engages) in the past 12 months, and for which purposes does your institution plan to start using technology to serve this community in the next 12 months? (Select one in each row.)

		Used in past 12 months	Plan to start using in next 12 months	Plan to start using more than 12 months from now	Do not plan to use for this purpose
a.	To disseminate research findings and publications by our institution's staff	0	•	•	0
b.	To orient and instruct users about available services	0	•	•	0
c.	To present educational programs	•	•	•	0
d.	To provide access to computers	0	•	0	•
e.	To provide access to the Internet	0	•	0	•
f.	To provide educational programs offered by our institution	0	•	•	0
g.	To provide information literacy instruction	0	0	0	0
h.	To provide orientation, introduction and educational information on exhibits	0	•	•	0

					in past onths	start in no	nn to using ext 12 nths	Plan to start using more than 12 months from now	Do not plan to use for this purpose
	i.	To provide user services (e.		of (	)	(	<b>O</b>	0	0
	j.	career, health, government i Other (Please list):	nformation)		_			•	2
	J.				)	(	3	0	0
8.		dicate the degree to which y.) Technology has been us	seful in your		_		ents. (Se		
			Strongly Agree	Agree	Neut	ral	Disagre	e Strongl Disagre	
	a.	Makes programs and exhibits more interactive	0	0	0	)	0	0	0
		Provides a richer educational experience	•	0	0	)	0	0	0
	C.	Increases the number of people who participate in programs	0	0	0	•	0	0	0
	d.	Increases access to institutional resources and services	0	0	0	•	0	0	0
	e.	Other (Please list):	0	0	0	•	0	0	0
9.	thi	hat are the primary hindran ree (3) hindrances from the Lack of staff time Lack of staff skills and expetack of funds Lack of necessary equipmer Concerns about intellectual Security concerns Technology is not appropriate Technology is not supported Other (Please list):	e list below.)  ertise  at, software an property issue  te for our collaby management	d/or netwo s ection and ent and/or	orking services	s or the	-		top
10.	(Sec. 0)	what extent do you have select the <u>one</u> best option.) We do not have enough skill. We have the right amount of We have more than enough Other (Please list): Don't know/Not applicable	led staff to acc	complish o	ur techn ish our t	ology echno	activities logy activ	vities	etivities?

Where in your institution's organizational structuresponsibilities (e.g., procurement, installation, remaintenance) placed? (Select all that apply.)  ☐ Management ☐ Separate Information Systems/Technology Departing Integrated within operational departments ☐ Other (Please list): ☐ Don't know/Not applicable	esource allocation, operations and				
Do you conduct needs assessments of user or visitor needs for technology supported services or experiences at your institution? (Select the <u>one</u> best option.)  O No (Please skip to question 14.) O Don't know/Not applicable O Yes					
Are you taking action based on the results of your assessments? (Select the <u>one</u> best option.)  O Yes O Don't know/Not applicable O No (If no, select all that apply below.)					
If no, because of: (Select all below that apply.)  □ Lack of staff time □ Lack of staff skills and expertise □ Lack of funds □ Lack of appropriate equipment, software and networking	<ul> <li>□ Not appropriate for our mission/goals</li> <li>□ Other (Please list):</li> </ul>				
<ul> <li>Which of the following statements best describes Directors or Trustees towards technology acquirent institution? (Select the one best option.)</li> <li>The Directors / Trustees of my institution general technology capabilities and they provide specific</li> <li>The Directors / Trustees of my institution general technology capabilities, but they provide little specific technology capabilities, but they provide little specific technology capabilities</li> <li>The Directors / Trustees of my institution are general technology capabilities</li> <li>The Directors / Trustees of my institution general technology capabilities</li> <li>Don't know/Not applicable</li> </ul>	ly promote expansion of my institution's guidance of these efforts ly promote expansion of my institution's ecific guidance of these efforts erally neutral on the subject of expanding my				

- 15. Which of the following statements best describes the attitudes of **the population served by your institution** towards technology acquisition and technology use by your institution? (Select the <u>one</u> best option.)
  - O The population served by my institution generally promotes expansion of my institution's technology capabilities and offers suggestions for these efforts
  - O The population served by my institution generally promotes expansion of my institution's technology capabilities, but provides few suggestions for these efforts
  - O The population served by my institution is generally neutral on the subject of expanding my institution's technology capabilities
  - O The population served by my institution generally opposes the expansion of my institution's technology capabilities
  - O Don't know/Not applicable

# **DIGITIZATION**

**Digitization** is the process of converting, creating, and maintaining books, art works, historical documents, photos, journals, etc. in electronic representations so they can be viewed via computer and other devices.

16. What digitization policies does your institution currently have in place or in development? (Select <u>one</u> in each row.)

Policies in place

No policies in

place or in

development/

Policies in

development

a.				Don't know			
	Access	•	•	•			
b.	Best practices	•	•	•			
c.	Conversion of digital files to next generation formats	•	0	•			
d.	Digital format (e.g., TIFF, GIF, PAL)	•	•	•			
e.	Evaluation	0	0	0			
f.	Institutional repository	0	0	0			
g.	Intellectual property issues	0	0	0			
h.	Materials to be digitized	0	0	0			
i.	Priorities for digitization	0	0	0			
j.	Preservation	0	0	0			
k.	Quality control	0	0	0			
1.	Standards	0	0	0			
m.	Metadata	0	0	0			
n.	Security	0	0	0			
0.	Other (Please list):	•	0	•			
	17. Do you provide direct funding or services to other institutions for their digitization activities?  (Select the one best option.)  O No O Don't know/Not applicable						
Ô	No						

collections and implementing digitizing facilities

Other (Please list):

activities?  O No O Don't ki	12 months, did your institution have funding (Select the <u>one</u> best option.)  now/Not applicable yes, select all that apply below.)	to s	upport your digitization
	Endowment funds Foundation grants Gifts from donors Grants from other Federal agencies (e.g., Dept of Ed, NEH) IMLS LSTA State Program and Library National Leadership Grants		IMLS Museum National Leadership Grants Institutional operating funds State funds City, County or other local government funds Corporate sponsors Other (Please list):
(Select the O No O Don't ki	12 months, do you plan to obtain funding to one best option.)  now/Not applicable yes, select all that apply below.)	supp	oort your digitizing activities?
	plan to obtain funds from: (Select all below that ap Endowment funds Foundation grants Gifts from donors Grants from other Federal agencies (e.g., Dept of Ed, NEH) IMLS LSTA State Program and Library National Leadership Grants		IMLS Museum National Leadership Grants Institutional operating funds State funds City, County or other local government funds Corporate sponsors Other (Please list):

20.	0. What materials has your institution digitized or imaged, and what additional materials is your institution planning to digitize or image? (Select <u>one</u> in each row.)						
			Began digitizing more than 12 months ago	Began digitizing in last 12 months or currently digitizing	Plan to begin	Plan to begin digitizing more than 12 months from now	Do not plan to digitize/ Don't know
	a.	Correspondence, diaries and other personal records	•	0	0	•	0
	b.	Course material	0	0	0	0	0
	c.	Education and training material about the collections	0	0	0	•	0
	d.	Films, videotapes	0	0	0	0	0
	e.	Government publications	0	0	0	0	0
	f.	Historical documents/archives	0	0	0	0	0
	g.	Items in the collections (e.g., art work, artifacts, furniture, plants, animals)	0	0	0	•	0
	h.	Information on the institution	0	0	0	0	0
	i.	Journals and other serials	0	0	0	0	0
	j.	Manuscripts	0	0	0	0	0
	k.	Maps	•	0	•	0	0
	l.	Music and other recorded sound	0	0	0	•	0
	m.	Newspapers	0	0	0	0	0
	n.	Photographs	0	0	0	0	0
	o.	Rare books	0	0	0	0	0
	p.	Records about the collection	0	0	0	0	0
	q.	Sheet music	0	0	0	0	0
	r.	Special exhibits	0	0	0	0	0
	S.	Theses and dissertations	0	0	0	0	0
	t.	Other (Please list):	•	0	0	•	0
21.	If y	you had the resources, which	of the follo	wing kinds	of materials v	vould you dig	gitize or
	ima	age? (Select your top three (3	) from the li	st below.)			
		Correspondence, diaries and oth	ner		Maps		
		personal records			Music and other	er recorded sou	und
		Course material			Newspapers		
		Education and training material	about		Photographs		
	_	the collections			Rare books		
		Films, videotapes			Records about	the collection	
		Government publications			Sheet music		
		Historical documents/archives			Special exhibit		
	Ц	Items in the collections (e.g., art			Theses and dis		
	_	artifacts, furniture, plants, anima	ais)		Other (Please l	ist):	
		Information on the institution					
		Journals and other serials					
	Ц	Manuscripts					

22.	Wł	hat are your institution's primary digitization pri	oritie	es? (Select your <b>top three (3)</b>
	pri	orities from the list below.)		
		Correspondence, diaries and other		Maps
		personal records		Music and other recorded sound
		Course material		Newspapers
		Education and training material about		Photographs
		the collections		Rare books
		Films, videotapes		Records about the collection
		Government publications		Sheet music
		Historical documents/archives		Special exhibits
		Items in the collections (e.g., art work,		Theses and dissertations
		artifacts, furniture, plants, animals)		Other (Please list):
		Information on the institution	_	3 1131 (1 1340).
		Journals and other serials		Don't know/Not applicable
		Manuscripts	_	2011 illio Wil to uppliouelo
	0000	1-500 501-1,000 1,001-5,000 5,001-10,000 10,001-25,000 More than 25,000		
24.	(Set	ow many more digital materials or images does yelect the <u>one</u> best option.)  0  1-500  501-1,000  1,001-5,000  5,001-10,000  10,001-25,000  More than 25,000	our:	institution have to digitize or image?

su	hat is your institution's obligation to me stain the digital materials or images, and ply, and at least one in each row.)					
0	We have no obligation to maintain digita question 26.)	al materials or	images or acce	ess to them. (Ple	ease skip to	
	question 20.)	Make digitized materials available	Sustain digitized materials	Sustain user access to digitized materials	Not Applicable	
a.	It is mandated by regulatory or legislative authority					
b.	It is mandated by organizational directives or by-laws					
c.	It is compelled by licensing agreements					
d.	It is compelled by membership participation					
e.	It is compelled by public expectation					
f.	It is compelled by consortia			П	П	
	commitment	_	_	_	_	
g.	Other (Please list):					
	Current staff were reassigned to perform Volunteers perform these activities These activities are performed by comm Materials are digitized off-site at anothe Other (Please list):	these activities form these act ese activities in these activities hercial vendors	s in-house ivities es s off-site		oly.)	
<u>on</u> O O	<ul> <li>27. Do you make some or all of your digital image collections available to the public? (Select the one best option.)</li> <li>Yes, some of our digital image collections are available to the public</li> <li>Yes, all of our digital image collections are available to the public</li> <li>No, our digital image collections are not available to the public (Please skip to question 29.)</li> <li>Don't know/Not applicable</li> </ul>					
			e? (Select all	that apply.)		

		Pays for access	Does not pay for access	Does not have access	Don't know/Not applicable
a.	General public who have Internet access	0	0	•	O
b.	Anyone who subscribes to a commercial agent that provides access (e.g., AMICO)	0	0	0	0
c.	Onsite visitors at your institution	0	0	•	0
d.	Members (e.g., library card holders, museum members)	0	•	0	0
e.	Your staff	0	•	•	0
f.	Consortia/partners	0	•	0	•
g.	Researchers/scholars at your institution	•	0	0	0
h.	Faculty at your institution	•	•	0	•
i.	Educators not part of your institution	•	0	0	0
j.	Students at your institution	•	•	0	•
k.	Students at affiliated institutions	0	•	0	•
1.	Alumni	•	•	0	•
m.	Outside researchers and scholars	0	•	0	•
n.	Other (Please list):	0	0	0	•

30. Are your digital materials or images listed in a digital registry (e.g., Association for Research Libraries' Digital Initiatives Database, UIUC OAI Metadata Harvesting Project)? (Select the

O Yes (Please list):

one best option.)

O Don't know/Not applicable

O No

29. Who can access some or all of your institution's digital image collections, and is there a

31.	Wh	nat are the primary goals for your institution's dig	itiz	ing activities? (Select your top three		
	(3) goals from the list below.)					
		Preserve materials of importance or value				
		Increase access to collections/materials/files				
		Minimize damage to original materials				
	☐ Provide access to material via the Web					
		Increase interest in the institution				
		Save space in the institution				
		Present more of the collection than is on display at a	ny c	one time		
		Save cost by eliminating duplication of materials				
		Provide access to materials for specific audiences (e.	g., 1	reserve room materials for students)		
		Encourage cooperation among institutions to increas	e th	e number and variety of materials		
		available				
		For distance or other e-learning programs				
		Provide greater information about the institution's co	llec	tions to artists, scholars, students,		
	_	teachers, and the public				
		Increase access to state services				
		For our institution's internal records				
		Support educational programs				
		Other (Please list):		<u> </u>		
		Don't know/Not applicable				
22	If.	you had no constraints why would you digitize	1/01	ur materials? (Salast your ton three		
32.		you had no constraints, why would you digitize	you	ii materiais! (Select your top till ee		
		from the list below.)		Engage as a separation among		
	_	Preserve materials of importance or value	_	Encourage cooperation among institutions to increase the number and		
	П	Increase access to		variety of materials available		
	_	collections/materials/files	П	Provide greater information about the		
	П	Minimize damage to original materials	_	institution's collections to artists,		
		Provide access to material via the Web		scholars, students, teachers, and the		
		Increase interest in the institution		public		
	<u> </u>	Save space in the institution		Increase access to state services		
	$\overline{\Box}$	Present more of the collection than is on		For our institution's internal records		
		display at any one time		Support educational programs		
		Save cost by eliminating duplication of		Other (Please list):		
		materials				
		Provide access to materials for specific		Don't know/Not applicable		
		audiences (e.g., reserve room materials		• •		
		for students)				
33.		no do you consider your primary target audiences		· ·		
		elect your top three (3) target audiences from the				
		General public who have Internet access		Educators not part of your institution		
		Onsite visitors at the institution		Students at your institution		
		Members (e.g., library card holders,		Students at affiliated institutions		
	_	museum members)		Alumni		
		Your staff		Outside researchers and scholars		
		Consortia/partners		Other (Please list):		
	_	Researchers/scholars at your institution	_			
	Ш	Faculty at your institution	Ш	Don't know/Not applicable		

34. <b>If you had no constraints</b> , for what audiences w	
<ul> <li>(Select your top three (3) target audiences from □</li> <li>□ General public who have Internet access</li> <li>□ Onsite visitors at the institution</li> <li>□ Members (e.g., library card holders, museum members)</li> <li>□ Your staff</li> <li>□ Consortia/partners</li> <li>□ Researchers/scholars at your institution</li> <li>□ Faculty at your institution</li> <li>□ Educators not part of your institution</li> </ul>	the list below.)  Students at your institution  Students at affiliated institutions  Alumni  Outside researchers and scholars  Other (Please list):  Don't know/Not applicable
<ul> <li>35. Do you conduct needs assessments of user or vision your institution? (Select the one best option.)</li> <li>O No (Please skip to question 37.)</li> <li>O Don't know/Not applicable</li> <li>O Yes</li> </ul>	itor needs for digitized materials and images
<ul> <li>36. Are you taking action to meet the needs of users (Select the <u>one</u> best option.)</li> <li>Yes</li> <li>Don't know/Not applicable</li> <li>No (If no, please select all that apply below.)</li> </ul>	based on the results of your assessments?
If no, because of: (Select all below that apply.)  □ Lack of staff time □ Lack of staff skills and expertise □ Lack of funds	<ul><li>□ Not appropriate for our mission/goals</li><li>□ Other (Please list):</li></ul>
<ul> <li>37. Does your institution actively collaborate (throug institutions and organizations to digitize material O No (Please skip to question 39.)</li> <li>O Don't know/Not applicable</li> <li>O Yes (If yes, please select all that apply below.)</li> <li>If yes, we collaborate with: (Select all below that apple O State library agencies O Academic libraries O Individual public libraries O Private libraries O Museums</li> </ul>	s? (Select the <u>one</u> best option.)
<ul> <li>□ Consortia</li> <li>□ State archives</li> <li>□ Special libraries</li> <li>□ Historical societies</li> <li>□ Federal government agencies or archives</li> <li>□ Other state government agencies</li> </ul>	☐ Foundations ☐ State library associations ☐ State museum associations ☐ Other professional associations ☐ Other (Please list):

	her institutions in digitization a By coordinating state-wide, regi consortial digitization activities By identifying the materials or collections to be digitized By providing financial support By providing staff, equipment of technical expertise for digitizatio projects By undertaking demonstration p on digitizing By providing a digitization cente which institutions send their mat for imaging	onal or on rojects		By setting digitizing, collections By provid Guidelines By provid libraries of management By encour projects By issuing	selecting its for digitized ing Best Properties ing consultar museums ent of digit raging coopers sub-grant		, zing
	ate on a scale from 1 to 5, with	1 being "De		Don't known of the being of the	**		
ca	pable your institution is in the f						ning
ca		Collowing ar  Deficient	eas for in	itiating, acc	complishir	ng and sustai Fully Capable	ning Not Applicable
ca di	spable your institution is in the figitization activities.	Collowing ar  Deficient  1	eas for in	itiating, acc	complishir 4	ng and sustai Fully Capable 5	Not Applicable
ca di a.	spable your institution is in the figitization activities.  Staff skills and expertise	Ollowing ar  Deficient  1  O	eas for in  2  O	itiating, acc	complishin  4  O	Fully Capable 5	Not Applicable
ca di a. b.	spable your institution is in the figitization activities.  Staff skills and expertise Equipment and software	Deficient  1  O	eas for in  2  O	3 O	eomplishir  4 O	Fully Capable 5 O	Not Applicable O
ca di a. b. c.	spable your institution is in the figitization activities.  Staff skills and expertise Equipment and software Funding	Deficient  1  O O O	eas for in  2  O  O	3 O O	4 O O	Fully Capable 5 O O	Not Applicable O O
ca di a. b.	spable your institution is in the figitization activities.  Staff skills and expertise Equipment and software Funding Established digitization plan Established digitization	Deficient  1  O	eas for in  2  O	3 O	eomplishir  4 O	Fully Capable 5 O	Not Applicable O
a. b. c. d.	spable your institution is in the figitization activities.  Staff skills and expertise Equipment and software Funding Established digitization plan Established digitization policies	Deficient  1  O  O  O  O	2 O O O	3 O O O	4 O O O O	Fully Capable 5 O O O	Not Applicable O O O O
a. b. c. d. e.	spable your institution is in the figitization activities.  Staff skills and expertise Equipment and software Funding Established digitization plan Established digitization policies Established quality standards	Deficient  1  O O O	2 O O	3 O O	4 O O O	Fully Capable 5 O O O	Not Applicable O O O
a. b. c. d.	spable your institution is in the figitization activities.  Staff skills and expertise Equipment and software Funding Established digitization plan Established digitization policies	Deficient  1  O  O  O  O	2 O O O	3 O O O	4 O O O O	Fully Capable 5 O O O	Not Applicable O O O O
a. b. c. d. e.	staff skills and expertise Equipment and software Funding Established digitization plan Established digitization policies Established quality standards Established procedures for preparation for creating	Deficient  1  O O O O O	2 O O O	3 O O O O	4 O O O O O	Fully Capable 5 O O O O	Not Applicable O O O O O

40. Indicate the degree to which you agree with the following statements. (Select <u>one</u> in each row.) Digitization activities in your institution are hindered by:

101	v.) Digitization activities	Strongly		•	D'	Strongly	Not
		Agree	Agree	Neutral	Disagree	Disagree	Applicable
a.	Lack of staff time	0	0	0	0	0	0
b.	Lack of staff skills and expertise	•	0	•	0	0	0
c. d.	Lack of funds Lack of necessary	0	0	0	0	0	0
	equipment and/or software	•	0	•	0	0	0
	Lack of an established digitization plan	•	0	•	0	0	0
f.	Lack of established digitization policies	0	0	0	0	0	0
g.	Lack of established quality standards	•	0	0	0	0	0
	Lack of established policies and procedures for preparation of materials for digitizing	0	0	0	0	0	0
i.	Lack of established policies and procedures for the management of images and files	0	0	0	0	0	0
j.	Other projects that have higher priorities	0	0	0	0	0	0
k.	Concern about intellectual property issues	•	0	0	0	0	0
1.	Security concerns	0	0	0	0	0	0
m.	Not having collections worth digitizing	0	0	0	0	0	0
n.	Concern about costs of preservation and management	•	0	0	0	0	0
0.	Management is unaware of the benefits of digitization	•	0	0	0	0	0
p.	Other (Please list):	0	0	0	0	0	0

\_\_\_\_\_

41. What are the primary hindrances of your in	stitution's digitization activities? (Select your top
three (3) hindrances from the list below.)	
☐ Lack of staff time	☐ Lack of established policies and
☐ Lack of staff skills and expertise	procedures for the management of
☐ Lack of funds	images and files
☐ Lack of necessary equipment and/or	Other projects have higher priorities
software	☐ Concern about intellectual property
☐ Lack of an established digitization plan	issues
☐ Lack of established digitization policies	☐ Security concerns
☐ Lack of established quality standards	☐ Do not have collections worth digitizing
☐ Lack of established policies and	☐ Concern about costs of preservation and
procedures for preparation of materials	management
for digitizing	Other (Please list):
	Don't know/Not applicable

# **IMLS ROLE**

42.	tec	hat are the top three (3) ways IMLS should support the implementation of appropriate hnologies in your institution? (Select your top three (3) from the list below.)  Identify the costs and resources required  Identify and provide information about models  Provide funding  Provide information on sources of funding  Identify and promote standards  Identify and promote technology best practices (e.g., cost effective technologies, efficient technology implementation)  Inform us about the advantages and challenges of implementing technology  Report on the current status of technology implementation  Provide referral information on projects, resources, standards, guidelines, etc.  Other (Please list):
		IMLS should not have a role in technology implementation
		Don't know/Not applicable
43.	ins	nat are the top three (3) ways IMLS should support <b>digitization activities</b> in your titution? (Select your <b>top three</b> (3) from the list below.)  Identify the costs and resources required
		Identify and provide information about models
		Provide funding
		Provide information on sources of funding
		Identify and promote standards
		Identify and promote best practices
		Inform us about the advantages and challenges of digitization
		Help with intellectual property issues
		Lead and promote national digitization efforts
		Provide referral information on projects, resources, standards, guidelines, etc.
		Other (Please list):
		IMLS should not have a role in digitization efforts
		Don't know/Not applicable

