A Public Trust at Risk: The Heritage Health Index Report on the State of America's Collections

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Heritage Health Index
a partnership between Heritage Preservation and
the Institute of Museum and Library Services

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Introduction and Acknowledgements

At this time a year ago, staff members of thousands of museums, libraries, and archives nationwide were breathing a sigh of relief as they finished the work of completing the Heritage Health Index survey. The scope of the survey, covering not only conservation and preservation but also security, budgets, emergency planning, and facilities, was such that several people at a single institution were often involved in answering the questions. Those of us who planned and managed the project extend our deepest thanks to all these survey participants; without their cooperation this report would not exist. The institutions that participated in the survey are listed in Appendix E.

The Heritage Health Index benefited greatly from the guidance of individuals who represented organizations on the Institutional Advisory Committee and from the professionals who served on Working Groups that developed the survey. We are grateful for the careful attention they gave to the many issues this project presented. They are listed in Appendices A and B.

The Heritage Health Index could not have happened without the strong commitment of the Board of Directors of Heritage Preservation. Every member of the board provided us with excellent advice. Supporting us as we developed the project and helping to raise funds from its conception through completion were three board chairs: Inge-Lise Eckmann, Dennis Fiori, and Debra Hess Norris. Each believed passionately in the importance of this project, and each made contributions that were vital to its success.

The Institute of Museum and Library Services was Heritage Preservation's partner in this project. In addition to funding, staff of this federal agency contributed their extensive expertise with museums and libraries. Robert Martin, who was director of IMLS until July 2005, was a wise and stalwart supporter of the project. We are also grateful to Beverly Black Sheppard, who was Acting Director of IMLS when the project was launched and recognized its potential value to the field. Other members of the IMLS staff whose support of the project deserves recognition are Mary Chute, Schroeder Cherry, Mary Estelle Kenelly, Joyce Ray, Mamie Bittner, Eileen Maxwell, Christine Henry, and Elizabeth Lyons.

A number of foundations joined the IMLS in funding the project, and the counsel of their staffs helped us immensely. We would like to thank especially Deborah Marrow, Joan Weinstein, Antoine Wilmering, and Jack Myers of the Getty Foundation, Ellen Holtzman of The Henry Luce Foundation, Marilyn Perry and Lisa Ackerman of The Samuel H. Kress Foundation, Frederick Bay and Robert Ashton of The Bay and Paul Foundations, Frederick Schaen of the Peck Stacpoole Foundation, and David Stam of the Gladys Krieble Delmas Foundation.

The Heritage Health Index benefited from the work of numerous professionals who were retained to work on the project. M. Christine Dwyer, Kim Streitburger, and Erika Soucy of RMC Research Corporation provided the professional skill to conduct the survey and tabulate and analyze its results. Doug DeNatale of Cultural Logic designed the Web-based survey. Tamara Starke and Mark Rudzinski of Aeffect, Inc., advised us in developing and testing the survey. Lee-Ann Hayek provided valued advice on statistical analysis. Lynne Heiser of in2it Creative designed the summary report and Web site. Anne Edgar advised us on how to disseminate the results to the media and the public.

The talented project staff included Nadina Gardner, Rich Vidutis, Rory House, Rashan Clark, Yael Meirovich, Daria Gasparini, and Mary Rogers, each of whom made substantial contributions to the success of the Heritage Health Index at different stages of its progress. Linda Budhinata and Lucy Kurtz provided sustained support for the project. Communications Manager Diane Mossholder and Vice President for External Affairs Moira Egan spent untold hours on the project from the time it was a gleam in our eye through the announcement of its findings at a New York news conference and dissemination of the report.

Kristen Overbeck Laise has been everything one could want in a project director. Organized,

tenacious, intelligent, precise, prescient, and humorous, she led this project from start to finish and never flagged in her commitment. The success of this project is due in large part to her leadership.

Lawrence L. Reger
President
Heritage Preservation

December 6, 2005

Executive Summary

The Heritage Health Index is the first comprehensive survey ever conducted of the condition and preservation needs of all U.S. collections held in the public trust. The project was conceived and implemented by Heritage Preservation, a national nonprofit organization, in partnership with the Institute of Museum and Library Services, an independent federal agency.

The survey was planned with the advice of 35 associations and federal agencies that serve collecting institutions. The questionnaire was developed in consultation with 66 leading collections professionals. In August 2004, the Heritage Health Index survey was distributed to more than 14,500 archives, libraries, historical societies, museums, archaeological repositories, and scientific research collections[1], which included institutions of all sizes from every U.S. state and territory. There was a 24% response rate overall and a 90% response rate from 500 of the nation's largest and most significant collections. From a sampling frame of more than 35,000 potential institutions, the final study population was established to be 30,827 institutions. The Heritage Health Index data has a margin of error of +/- 1.5%. Results analyzed by institutional type, size, or geographic region have a slightly higher margin of error.

The Heritage Health Index asked institutions to report on all aspects of conservation and preservation and to estimate the quantity and condition of the collections for which they have a preservation responsibility. The survey results provide the first data on all the holdings of U.S. collecting institutions. More than 4.8 billion artifacts are being cared for nationwide, including rare books and manuscripts, photographs, documents, sound recordings, moving images, digital materials, art, historic and ethnographic objects, archaeological artifacts, and natural science specimens. The survey reports that U.S. collections are visited 2.5 billion times a year.

The information the Heritage Health Index collected on the condition of collections supplies baseline data that will be useful in measuring future preservation efforts. It is significant that for collections of almost every type, about 30% of artifacts are in unknown condition. In the case of bulk cataloged archaeological collections, recorded sound collections, and moving image collections, more than 40% are in unknown condition. Of collections known to be in need[2], unbound sheets cataloged by item rather than linear feet, such as ephemera, broadsides, philatelic and numismatic paper artifacts, have the highest percentage at 54%. The percentages of collections types in need are as follows:

Unbound Sheets, cataloged in items	54%
Historic Objects	28%
Unbound Sheets, cataloged in linear feet	24%
Natural Science Specimens	23%
Art Objects	22%
Archaeological Collections, bulk cataloged in cubic feet	21%
Photographic Collections	21%
Archaeological Collections, individually cataloged	19%
Books/Bound Volumes	16%
Digital Materials	15%
Recorded Sound Collections	14%
Moving Image Collections	12%
Microfilm/Microfiche	7%
Online Files	5%

However, because such significant percentages are in unknown condition, the amount of collections in need is likely to be much higher.

The Heritage Health Index data points to environmental and storage conditions, emergency planning, staffing, and funding as the aspects of collections stewardship with the greatest needs. If these are not addressed, many collections are at higher risk for damage or loss.

The most urgent preservation need at U.S. collecting institutions is environmental control. The Heritage Health Index documents that 26% of institutions have *no* environmental controls to

1. Referred to in this report as "collecting institutions" or "institutions."
2. Defined as in need of treatment to make the collections items stable enough for use or in need of improved housing or environment to reduce the risk of damage or deterioration.

mitigate damage from temperature, humidity, and light. Highlighting the importance of protecting collections from environmental factors are the findings that 59% of institutions have had their collections damaged by light, 53% by water or moisture, and 47% by airborne pollutants.

At 59% of U.S. collecting institutions, storage space to accommodate all collections safely and appropriately is lacking. At 65% of institutions, collections are in need of treatment due to improper storage. Nearly one-third have an urgent need for additional storage facilities, renovated storage facilities, or new and/or improved storage furniture.

One of the most alarming Heritage Health Index statistics is that 80% of collecting institutions do not have an emergency or disaster plan that includes collections, with staff trained to carry it out. Because of this, more than 2.6 billion items are at risk. Only 26% of institutions have copies of vital collections records stored off-site in case of emergency. It is essential that a collecting institution experiencing a disaster have a record of its holdings.

Only 20% of institutions have paid staff—whether full-time or part-time—dedicated to conservation or preservation responsibilities. Instead, many institutions depend on assigning collections care duties to other staff as needed, to volunteers, or to external providers. Staff training for conservation and preservation is needed at 70% of institutions, the most common need cited in the Heritage Health Index survey. Due in part to inadequate staffing levels, basic information about the content and condition of collections is incomplete: 39% of institutions have a significant backlog in cataloging their collections and 70% have no current assessment of the condition of their collections.

The instability of preservation funding is another issue that the Heritage Health Index details. Less than a quarter of institutions specifically allocate funds for preservation in their annual budgets; 36% rely on other budget lines to fund preservation; 40% do not allocate for preservation. Only 13% of institutions have access to permanent funds, such as an endowment, for preservation. Despite the survey's broad definition that included any expenses related to collections care, 68% report that less than $3,000 was budgeted for preservation in their most recently completed fiscal year. Only 2% of the total annual budgets of U.S. collecting institutions was spent on preservation in the last fiscal year.

Based on the findings of the Heritage Health Index, Heritage Preservation recommends that:

- Institutions must give priority to providing safe conditions for the collections they hold in trust.
- Every collecting institution must develop an emergency plan to protect its collections and train staff to carry it out.
- Every institution must assign responsibility for caring for collections to members of its staff.
- Individuals at all levels of government and in the private sector must assume responsibility for providing the support that will allow these collections to survive.

A summary of the Heritage Health Index results has been published in *A Public Trust at Risk: The Heritage Health Index Report on the State of America's Collections*, an illustrated booklet. A full report with graphs and tables is available at www.heritagehealthindex.org. *A Public Trust at Risk* and the Web site feature case studies that describe the conservation challenges and successes of institutions throughout the U.S.

A Public Trust at Risk has been provided to all survey participants, as well as members of Congress, foundations, and national and state associations and government agencies that support the work of archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations.

Chapter 1: Heritage Health Index Development

History

An important impetus for the Heritage Health Index project was *Creative America*: *A Report to the President* by the President's Committee on the Arts and the Humanities. Issued in 1997, the report looked at conditions affecting the arts and humanities and made recommendations for sustaining their future health. One of its six major recommendations was:

> *The President's Committee calls upon public agencies and the private sector to support a national assessment of the nation's preservation needs and a plan to protect our cultural legacy.*

This recommendation affirmed a need that Heritage Preservation and professional organizations representing collecting institutions have also recognized. Every profession, whether in the educational, medical, technical, or industrial fields, tracks indicators, measures growth, benchmarks challenges, and predicts future trends—but no such information exists about the preservation of U.S. collections. Funding programs and initiatives have been launched in the past two decades, and progress has been made on numerous fronts, but no instrument exists for monitoring the status of the nation's cultural, historical, and scientific collections. When dealing with inquiries from the media, government officials, private donors, or the public, collecting institutions and allied organizations have typically explained preservation issues using anecdotal evidence, which, though powerful, has reached the limits of its effectiveness. Reliable statistics and evidence on current conditions and preservation needs are important to document the work that U.S. collecting institutions are doing to care for our nation's collections and to illuminate where additional efforts are required. This data is needed to guide future preservation planning and programs, facilitate cooperative approaches to address challenges, and inform the wise allocation of limited resources.

Heritage Preservation's members—libraries, archives, museums, historical societies, and preservation organizations—rely on it for conservation information and advocacy. Because the care of collections is central to Heritage Preservation's mission, it was the ideal organization to conduct a survey on the condition and preservation needs of U.S. collections. In its more than 30 years of experience, Heritage Preservation has built all its preservation efforts on a foundation of assessment and data gathering. The Washington, D.C., based nonprofit organization has issued more than 20 research reports, which have resulted in refined professional practices, reordered institutional priorities, and increased funding for preservation. To address the immense task of measuring the condition and needs of all U.S. collections, Heritage Preservation also drew on its extensive experience in building partnerships and alliances.

Heritage Preservation initiated a discussion about a national collections needs assessment at its 1999 annual meeting, *Charting a New Agenda for a New Century*. The meeting's presentations discussed the major issues facing the preservation field in the twenty-first century, and all asserted the need for better data. Heritage Preservation staff and board members began to develop a plan to conduct such an assessment—the Heritage Health Index—that would include all collections held in the public trust by archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations. To maintain a tight focus on an already ambitious project, the survey does not include historic structures or living heritage, such as performing arts, or living collections in institutions such as zoos, aquariums, and botanical gardens. The Heritage Health Index was conceived to be a periodic national survey, conducted every four years, so that sets of data can measure trends and benchmark progress.

In summer 2001, the Institute of Museum and Library Services (IMLS) proposed a partnership with Heritage Preservation to develop and conduct the Heritage Health Index. Its participation in this project helps fulfill the agency's mandate

"to undertake projects designed to strengthen museum services."[1] Additional funding by the Getty Foundation granted in June 2001 made it possible to begin developing the survey. Over time, project funding also came from the Henry Luce Foundation, the Bay and Paul Foundations, the Samuel H. Kress Foundation, the Peck Stacpoole Foundation, and the Gladys Krieble Delmas Foundation.

Literature Review

Heritage Preservation's first task in developing the Heritage Health Index was to gather previous and ongoing conservation, preservation, museum, and library surveys to examine the data they collected and the approach, terminology, and methodologies they used. A bibliography of consulted surveys and relevant published reports may be found in Appendix G. Heritage Preservation discovered that there are more surveys related to preservation in libraries than in museums or historical societies. Surveys in the archival field were found to be instructive, as they usually deal with a variety of media and formats and involve several different institutional types. The literature review established that the Heritage Health Index would not duplicate any existing survey and revealed ways in which the Heritage Health Index could be designed to complement other preservation surveys. It also reinforced that no studies had addressed the breadth of U.S. collecting institutions and all the materials they hold. Previous studies have been limited to a small range of institutions, selected types of collections or media, or certain aspects of preservation. The review of questionnaire and survey formats informed the eventual design of the Heritage Health Index survey instrument.

Institutional Advisory Committee

Heritage Preservation established an Institutional Advisory Committee of 35 professional associations and federal agencies that represent collecting institutions (Appendix A) to advise on the development and implementation of the Heritage Health Index. Heritage Preservation convened the committee in October 2001 to discuss the goals for the survey, the universe of institutions the study intended to cover, the process for developing the survey instrument, and the audiences for the survey results. Heritage Preservation also solicited feedback on what preservation topics were of interest to the Institutional Advisory Committee's constituencies. Committee members gave their recommendations for collections professionals to serve on the Heritage Health Index Working Groups.

Since the initial meeting, Heritage Preservation has kept the committee updated on the progress of the Heritage Health Index. Institutional Advisory Committee members were instrumental in publicizing the survey to their constituents and encouraging their participation. Heritage Preservation asked organizations and agencies on the committee to list their names on the letterhead that accompanied the survey to demonstrate their involvement in and support of the project.

Survey Research and Statistical Consultants

Heritage Preservation obtained professional expertise to develop a survey methodology and implementation plan that would gather statistically valid results. In early 2002, Heritage Preservation hired the survey research firm Aeffect, Inc., of Deerfield, Illinois, to advise on survey methodology and questionnaire protocol and layout and to conduct a test of the survey instrument. In addition, Heritage Preservation worked with statistical consultant Lee-Ann Hayek, Chief Mathematical Statistician at the National Museum for Natural History, Smithsonian Institution. Dr. Hayek provided expertise on statistical sampling and analysis. In November 2002, Heritage Preservation distributed a Request for Proposals to 17 firms for the implementation phase of the survey. Heritage Preservation selected RMC Research Corporation of

1. P.L. 104-208, *Museum and Library Services Act of 1996*, Section 273 "Museum Service Activities." In the reauthorization, *H.R. 13 Museum and Library Services Act of 2003,* Section 210 "Analysis of Impact of Museum and Library Services," the agency's mandate for research was made more specific: "the Director shall carry out and publish analyses of the impact of museum and library services. Such analyses…shall identify national needs for, and trends of, museum and library services."

Portsmouth, New Hampshire, to finalize the survey sampling plan, print and distribute the survey, encourage response, tabulate and analyze the data, and produce a report on the survey methodology and analysis.

Survey Instrument Development

In February 2002, Heritage Preservation began convening Working Groups, each made up of about seven collections professionals. Each of the nine groups had representatives from each type, size, and geographical region of the institutions to be surveyed and comprised a diversity of collections professionals, including conservators, preservation administrators, archivists, librarians, curators, and registrars. The Working Groups addressed each of the following collections areas:

- Archaeological and ethnographic objects
- Books, manuscripts, records, maps, newspapers
- Decorative arts, sculpture, mixed media
- Electronic records and digital collections
- Furniture, textiles, historical objects
- Moving images and recorded sound
- Natural science specimens
- Paintings, prints, and drawings
- Photographic materials.

The Working Groups involved a total of 66 professionals (Appendix B). At each one-day Working Group meeting, Heritage Preservation staff presented the survey's goals, proposed methodology, and a draft questionnaire. Members carefully reviewed the questionnaire to ensure that the questions reflected the specific issues relevant to the collections under discussion. Because Working Groups involved a variety of professionals, the meetings served as focus groups about how different staff within an institution might answer the survey questions. They advised that the survey be sent to the director of the institution, who could authorize the appropriate staff time to complete the questionnaire. Working Group members also provided feedback on how institutions might use the survey results, which gave Heritage Preservation ideas about how to encourage participation.

The Working Groups recommended that Heritage Preservation make a special effort to include small institutions in the survey universe. The Working Groups' members had the opinion that surveys tend to capture the largest and most well-known institutions and that the Heritage Health Index presented an opportunity to move beyond counting the counted to capture data about issues facing small institutions. Especially in the areas of moving images, recorded sound, and digital materials, there was a desire to learn about collections and preservation conditions at small institutions. Working Group members urged Heritage Preservation to distribute the survey online to appeal to larger institutions and those in the academic and scientific fields, but to also distribute the questionnaire on paper so that it would be accessible to institutions that might not be comfortable with a Web-based survey.

Because Working Group members represented archives, libraries, historical societies, museums, and scientific research organizations, Heritage Preservation was able to build a consensus on neutral terminology that all types of institutions would understand. The survey avoided technical language and jargon to ensure that survey participants of any professional level would understand the questions. To minimize the respondents' effort, the survey used close-ended questions whenever possible. Each question had the option "don't know" to prevent institutions from leaving a question blank. The result of this deliberate collaboration with the Working Groups was a comprehensive, yet focused, survey questionnaire.

After the Working Group meetings concluded in May 2002, Heritage Preservation staff made final revisions to the questionnaire and convened a meeting with the chair of each Working Group, IMLS staff, Aeffect project consultants, and Dr. Hayek, the consulting statistician. This group made the final decisions on the length and scope of the survey instrument and discussed the steps for survey distribution.

Survey Instrument Testing

In the process of developing the questionnaire, Heritage Preservation and consultants with Aeffect, Inc., determined that, since such a wide variety of institutions and professionals would be asked to complete the survey, it would be prudent

to conduct two tests with two different groups. The first test gauged institutions' reactions to the questionnaire and evaluated their experience filling it out. In August 2002, Heritage Preservation asked 36 archives, libraries, historical societies, museums, and scientific research organizations, representing diverse institutional types, size, governance, and geographical locations, to complete the Heritage Health Index questionnaire. Aeffect, Inc., then conducted follow-up phone interviews with 18 institutions. The test confirmed that no one type of institution was more or less likely to respond to the survey. Respondents gauged that it took between one and three hours to fill out the questionnaire, and many felt that the benefits of the Heritage Health Index made it worth the time it took. Most respondents noted that it required the involvement of more than one staff person to complete the survey. Almost all institutions remarked that the questionnaire thoroughly covered all aspects of collections care. Several respondents specifically mentioned that the survey served as a self-study exercise that helped them think through funding requests, ways of presenting preservation needs to institutional leadership, and long-range planning. They also noted which questions were the most challenging to complete, and based on this feedback, Heritage Preservation made modifications to several questions.

On November 1, 2002, the revised questionnaire was sent to 202 randomly selected institutions to test the effectiveness of the survey distribution and follow-up plan that was proposed by Aeffect, Inc. The procedures included calling the institution to verify its contact person and address, mailing a letter from Heritage Preservation and IMLS confirming and encouraging participation, mailing the survey package with a return envelope, sending a reminder postcard, and sending a second copy of the survey package. Since this test achieved a response rate of 37%, which exceeded the projected response rate of 30%, the survey distribution methods were deemed successful. Since most responses to the test came in the last weeks of data collection, Aeffect, Inc., suggested that the data collection period be set at a minimum of eight weeks and conducted during a time of year when institution staff would have fewer conflicts (the test was distributed in November and December). The majority of test responses were valid, suggesting that the questions were understandable; however, several questions were further refined to encourage accurate response. The final survey questionnaire may be found in Appendix F.

Planning Survey Implementation

Heritage Preservation, in consultation with the Institutional Advisory Committee, Working Groups, and IMLS, determined that the survey would collect the most reliable results if it were distributed using two different sampling methods: selective sampling and random sampling. Previous studies have shown that the majority of U.S. collections are held by large institutions.[2] Therefore, Heritage Preservation identified approximately 500 of the largest collecting institutions and some smaller institutions with highly significant collections to ensure that the Heritage Health Index data would include a large portion of U.S. collections.[3] The 500 targeted institutions were balanced by type and state of institution and included all state libraries, museums, archives, and historical societies as well as major federal collecting institutions such as the Library of Congress, all units of the National Archives and Records Administration, and the Smithsonian Institution. More than 80 individuals, including Heritage Preservation board members, Institutional Advisory Committee representatives, and Working Group members, vetted this list; Heritage Preservation amended it per their suggestions.

It was necessary to limit the 1st Target Group to 500 because Heritage Preservation staff and board members planned to stay in close contact with each institution to encourage 100% response. However, in developing the 1st Target Group, Heritage Preservation identified another 900 institutions, such as mid-sized academic libraries and museums, that were important to

2. American Association of Museums' *Data Report from the 1989 National Museum Survey* (January 1992) reported that 7.3% of U.S. museums were large and that large museums held 74.8% of the total number of objects or specimens.
3. Referred to in this report as "1st Target Group."

include in the survey sample because of the significance of their collections. While it was not possible to give this 2nd Target Group the same level of personal follow-up as the first targeted group, it was decided to include the 900 in the selected sample. By intentionally selecting approximately 1,400 institutions to participate in the survey, Heritage Preservation made certain that the largest and most significant collections would have the opportunity to be included in the results. To accurately represent the remaining 34,000 institutions for each type of institution and location across the country, a stratified random sample was drawn to yield approximately 14,000 institutions (Methodology, p. 11).

During the development phase of the Heritage Health Index, Heritage Preservation considered how the survey should physically be distributed. Some Working Group members advised that the survey be distributed on paper so as not to create a bias against institutions that would not have access to a computer or would not be comfortable using a computer, such as small institutions. However, other Working Group members recommended that Heritage Preservation offer a Web-based survey because it would encourage participation in some segments of the survey population, such as academic libraries, university collections, and scientific collections. In the follow-up interview of the first test, respondents were asked if they would have been more likely to complete the survey if it had been online. Most expressed a preference to complete the survey on paper and said if it were only offered on the Web, they would likely print a paper copy. When given the option of saving Web survey responses so a survey participant could work on it in more than one sitting, the interest in using a Web survey increased. Several interviewees mentioned that they might use the paper version as a worksheet and then submit the final survey electronically. Therefore, Heritage Preservation decided to distribute the survey in hard copy to all participants and offer a Web survey as an alternative way to respond (Methodology, p. 12).

Another aspect of the survey implementation that Heritage Preservation carefully considered was the confidentiality of individual responses. The Institutional Advisory Committee and Working Group members warned that some institutions could be reluctant to participate or reply honestly that their collection conditions were less than ideal. To combat the perception that the survey could expose negligence and to follow survey ethics, the Heritage Health Index questionnaire included this confidentiality statement: "RMC Research Corporation will keep your individual responses, whether submitted online or on paper, completely confidential. Only the aggregate data will be reported; your individual responses will never be published or identified by Heritage Preservation, the Institute of Museum and Library Services (IMLS), or any organization cooperating in this project." Respondents were given an opportunity to remain anonymous by not releasing their name as a participant in the study. RMC tracked responses by numeric code rather than the name of the institution, and all data was reported in aggregate. Participants in the tests stated that they trusted the questionnaire's confidentiality statement.

Publicizing the Heritage Health Index

The library, archival, and museum communities are each heavily surveyed by organizations in their fields, and in the summer and fall of 2004 when the Heritage Health Index was released, at least four other major surveys had been distributed to the field. To alert possible survey participants to the importance of the Heritage Health Index, publicity began along with the development of the survey instrument in July 2001. Heritage Preservation publicized the Heritage Health Index through press releases distributed through the IMLS press list of professional archive, library, and museum associations and publications. Heritage Health Index survey announcements appeared in at least 50 professional newsletters and electronic announcements from July 2001 to December 2004. During this time, Heritage Preservation staff made 15 presentations at professional association meetings and sent flyers publicizing the survey to more than 60 meetings. To gear up for the distribution date of the survey and to encourage response, press releases were issued in April 2004 and July 2004. Heritage Preservation also sent packages containing the press release, a sample newsletter

article, and an illustrated public service announcement to the associations and agencies on the Institutional Advisory Committee and encouraged them to publicize the survey to their constituents.

Identifying the Study Population

The institutional population for the Heritage Health Index included archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations that hold their collections in the public trust. Within that group, Heritage Preservation identified a "study population" that was most appropriate for the survey. The survey instructed institutions to "complete the questionnaire for collections that are a permanent part of your holdings or for which you have accepted preservation responsibility," which would apply to collections at most archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations. Exceptions included elementary and secondary school and two-year college libraries, since they do not hold rare, special, or archival collections. Likewise, branch public libraries, hospital libraries, and prison libraries were not included, unless the *American Library Directory* specified special collections were in their holdings. Record centers, such as county clerk offices, were not included in the survey population because their collections have not been through a decision-making process about long-term archival record retention. For-profit organizations, such as law firm, newspaper, corporate, and engineering firm libraries, were excluded from the Heritage Health Index survey population. Although the questionnaire did not include questions about living collections, arboretums, aquariums, botanical gardens, nature centers, and zoos were included in the study population because they often have non-living collections.

Heritage Preservation quickly realized that obtaining a list of all the institutions in the study population would be a considerable challenge because no one source exists. The mailing lists available through directories and professional associations were also inconsistent from one segment of the study population to another. In some cases, directories had to be culled to remove institutions not applicable to the Heritage Health Index (e.g., international institutions and for-profit organizations). Other lists needed to be augmented to ensure that all types of collections were represented in the population, such as audio-visual, digital material, and scientific research collections. A special effort was made to include tribal libraries and museums. Having an accurate count of the institutions in the Heritage Health Index survey population was crucial to determining the number of institutions that should be included in the sample to yield statistically valid results about all U.S. collections.

In identifying potential participants for the survey, Heritage Preservation also had to consider relationships of units to parent organizations. Institutions were instructed to include all subsidiary collecting units in their responses. For example, a museum with a library was to complete the survey for its museum and library collections. Systems of collecting institutions that have central collections control and preservation practices, such as a library system within a university, were sent one survey with instructions to complete the questionnaire for the main library and departmental libraries. However, professional schools are often outside such library systems, and so a university's business school, medical school, or law school were identified individually in the study population. University museums and departmental collections, such as in archaeology or the sciences, are often not centralized in administration and were also identified individually. Historical societies frequently maintain multiple historic sites. Generally, if the parent historical society manages more than five sites around the state, the institution was instructed to complete the questionnaire only for its central facility, and the satellite sites were included on the mailing list for possible selection. Archives posed a considerable challenge, as they are often subsidiaries to libraries, historical societies, and museums. In these cases, archives were not identified individually and their parent institutions were instructed to include them. Through a question on the survey, institutions with a primary purpose as archives were identified, as well as institutions that have archives as a secondary function. By analyzing data from

both sets of institutions, Heritage Preservation is able to form a fuller picture of archival conditions and needs.

Appendix D lists the sources used to identify institutions for the Heritage Health Index study population. Two extensive lists formed the basis for the mailing list; they were crosschecked against many other sources, and additions or changes were made as necessary. The central sources included a database provided by IMLS of more than 18,000 museums and historical societies compiled from state and regional museum association lists. IMLS has cleaned this list and, as a partner in the Heritage Health Index, allowed Heritage Preservation one-time use of the mailing list for the Heritage Health Index survey. Heritage Preservation also purchased a mailing list from DM2 that included library contacts used in creating the *American Library Directory.* This electronic list came with a license for one-year use for the Heritage Health Index. After reviewing and culling the list, the Heritage Health Index used approximately 14,000 entries.

Heritage Preservation invested significant time in the creation of the Heritage Health Index sampling frame, which grew to about 35,000 entries. Because of the age and uncertain reliability of various sources Heritage Preservation used to compile the list, the first step after sample collection, telephone verification, proved to be an important task. Aeffect, Inc., proposed that the survey implementation include a telephone call to alert participants that they had been selected to participate, so when the Heritage Health Index arrived it would not be treated as just another piece of mail. Another way to ensure that the survey was noticed was to address it to the institution's director, and the phone call included confirmation of the director's name. Phone verification also confirmed addresses and obtained e-mail addresses for later follow-up. This process revealed institutions that were no longer in operation, were not eligible for the survey because they had no collections, or had been duplicated on the list. Phone verification resulted in changes or corrections to 36% of the screened sample (Methodology, p. 11). In distributing the survey, additional out of operation or non-eligible institutions were identified, resulting in adjustments to the final Heritage Health Index study population. The Heritage Health Index data is based on a total population of 30,827 institutions (Methodology, p. 20).

Chapter 2: Heritage Health Index Methodology

prepared with RMC Research Corporation

Sampling Frame and Sample Selection

Heritage Preservation supplied RMC Research Corporation (RMC) with a sampling frame of over 35,000 collecting institutions (Heritage Health Index Development, p. 9). Heritage Preservation categorized each institution into one of five institution types: archives, libraries, historical societies, museums, or archaeological repositories/ scientific research collections. In addition, Heritage Preservation designated each institution into one of three sample groups (Heritage Health Index Development, p. 6). The 1st Target Group included the largest and most significant collecting institutions of all types and in all U.S. states and territories; the 2nd Target Group included additional large or mid-sized institutions with important collections; and the Random Sample group included all remaining institutions to be sampled. The institutions in the 1st and 2nd Target Groups were sampled at 100%, whereas the type of institution was used as the primary stratum for drawing the sample from the Random Sample group. Institutions in this group were selected proportionately within type and within the state by zip code. The sampling strategy was designed to yield approximately 15,300 institutions.

Figure 2.1 shows the number of institutions in the sampling frame, the sampling rates applied, and the resulting number of sampled institutions within sample group and institution type.

Phone Verification

During the test of the Heritage Health Index, researchers found that direct phone contact with institutions to verify specific addresses, confirm appropriate contact names, and alert institutions about receiving the Heritage Health Index survey improved the likelihood of the survey getting to the right person in the institution and improved response rates. Heritage Preservation handled phone calls to all 1st Target Group institutions to verify contact information and brief the institutions on the intent and importance of the study.

RMC subcontracted with RKM Research and Communication in Portsmouth, New Hampshire, to verify contact information and eligibility for each institution in the 2nd Target and Random Sample Groups. Phone calls were made from July 11, 2004, to August 9, 2004. Phone verification resulted in the exclusion of 211 (1.5%) Random Sample institutions because of duplicate entries or the lack of collections. These institutions, along with those from the Random Sample that

Fig. 2.1 Sampling Rates and Number of Sampled Institutions (by sample group and type)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL SAMPLE n=
1st Target Group						
Sampling Rate	100%	100%	100%	100%	100%	
n=	70	179	39	163	35	486
2nd Target Group						
Sampling Rate	100%	100%	100%	100%	100%	
n=	42	449	16	306	60	873
Random Sample						
Population N=	429	14,010	4,288	12,154	1,897	
Sampling Rate	100%	35%	51%	35%	100%	
n=	429	4,908	2,204	4,273	1,897	13,711
TOTAL SAMPLE						
n=	541	5,536	2,259	4,742	1,992	15,070

asked not to participate in the study,[1] were removed from the survey mailing list. Seventeen of the 2nd Target Group institutions asked not to participate; however, Heritage Preservation wrote a letter asking them for their participation since they had been specifically selected and represented significant collections.

Figure 2.2 shows the numbers and percent of institutions found to be non-eligible for the study and the resulting number of institutions by sample group and type included in the survey mailing.

Web-based Survey Design

It was Heritage Preservation's intent to make participation in the Heritage Health Index study as easy and accessible as possible. A paper survey was designed along with an identical online Web-based survey. A consultant from Cultural Logic in Medford, Massachusetts, was contracted to design the Web survey and provide technical assistance during the data collection phase. Institutions were assigned unique passwords for access to their survey and to ensure data security. Cultural Logic and Heritage Preservation worked together to identify a comprehensive set of dynamic validation checks for online data entry. Consistency checks were developed across questions, and possible out-of-range values were defined for the numeric responses (e.g., operating budgets, number of units in a collection). Error and warning messages were programmed into the online survey to ensure data integrity.

Information gathered from the Heritage Health Index test phase indicated that many institutions needed to gather information for the survey from several people or departments within their institution. With this in mind, the online survey was designed to allow for data entry over more than one online session, and indicators were built into the online system so users were aware of the section-by-section status of completion. Additional features included allowing respondents to print out the completed survey before final submission of the data and giving respondents access to some preliminary survey results.

Survey Mailing and Administration

All institutions were mailed a Heritage Health Index survey package on August 16, 2004. This package included an introduction letter signed by Heritage Preservation President Lawrence L. Reger and IMLS Director Robert S. Martin, Ph.D, the questionnaire booklet (Appendix F), instruction and Frequently Asked Question sheets, a unique online password, a flyer about accessing the Heritage Health Index online, and a return postage-paid envelope for those choosing to submit the survey on paper. All institutions were given contact phone numbers and e-mail addresses at Heritage Preservation and RMC as resources for content or technical questions.

Fig. 2.2 Results of Phone Verification and Number of Institutions in the Survey Mailing (by sample group and type)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
Phone Verification						
Random Sample	429	4,908	2,204	4,273	1,897	13,711
Non-Eligible	- 9 (2%)	-28 (.6%)	-21 (1%)	-114 (3%)	-39 (2%)	-211 (1.5%)
Survey Mailing						
1st Target Group	70	179	39	163	35	486
2nd Target Group	42	449	16	306	60	873
Random Sample[1]	400	4,772	2,134	4,103	1,826	13,235
TOTAL	512	5,400	2,189	4,572	1,921	14,594

1. Surveys were not sent to Random Sample Group institutions that asked not to participate during phone verification.

Institutions were asked to submit data by October 12, 2004.

Contact information for mailed surveys that returned to RMC with "no such address" or "no longer forwarding" were sent to Heritage Preservation for further investigation. When possible, surveys were sent out a second time with the corrected contact or address.

A month after the surveys were mailed, reminder/thank-you postcards were sent to all institutions. Heritage Preservation made personal reminder calls to all 1st and some 2nd Target Group institutions. The survey was administered using all the steps tested by Aeffect, Inc., and Heritage Preservation (Heritage Health Index Development, p. 5). However, because of budget limitations and to encourage as many online survey responses as possible, a second copy of the paper survey was not distributed. Instead, a personal reminder letter that included each institution's unique password was sent to all institutions that had not yet responded. Several weeks later, RMC sent out two final e-mail reminders to those who had not responded at all or who had online surveys in progress and for whom Heritage Preservation had e-mail addresses. Heritage Preservation allowed two extension dates, with a final cut-off of December 15, 2004.

Data was collected from mid-August 2004 until December 15, 2004, from online entries and from RMC staff who entered paper survey returns via the Web site. All data passed through the quality control data checks within the online data entry system. Almost three quarters (73%) of the institutions chose to submit data using the Web-based survey. Libraries were most likely (81%) to respond using the online survey and historical societies were the least likely (54%).

Final Dispositions and Response Rates

Since the original Heritage Health Index sampling frame was derived from mailing lists, cultural institutions and departments within an institution could appear on the list. The original sample unit was defined as a cultural institution's address or location. To encourage participation and obtain the most accurate data possible, the study allowed institutions to define their collection entity, which resulted in redefining the sample unit. In many cases, one institution was responsible for the preservation of collections both at their location and elsewhere. Sometimes it was easier for one institution to respond to the survey for itself and other affiliations. Institutions covered under another institution usually identified themselves to RMC by e-mail, written note, phone call, or online survey comments. The sampled institutions already represented in another sample unit were tracked and ultimately given the disposition of "non-sample." That is, they represent a percentage of institutions that should be removed from the study population.

Other "non-sample" institutions were also tracked; this included duplicate entities, institutions with no holdings for which they take a preservation responsibility, and institutions that had ceased operation. Heritage Preservation was able to identify every sampled institution in the 1st and 2nd Target Groups, whether they responded or not, by their sample eligibility. On the other hand, at the end of the data collection, it was unknown whether 75% of the Random Sample Group was eligible to be included in the sample. Using the eligibility findings for each of the five institutional types for the Random Sample, the unknown sample group was reduced by the non-eligible percent.

Figure 2.3 shows a) number of institutions mailed to; b) number of institutions with unknown eligibility after data collection; c) percent of institutions found to be non-eligible (applied to b) for sample reduction); and d) estimated number of eligible institutions in the sample. The revised eligible sample includes all respondents, any non-respondents known to be eligible, and the reduced number of non-respondents of unknown eligibility.

Over 3,600 institutions responded to the Heritage Health Index survey. However, after examining the data, 7% of those survey responses were not considered complete. The majority of those cases were from respondents who entered their data online but never returned to the survey to complete Section F on the quantity and condition of collections. Heritage Preservation and RMC decided to drop those cases from the response rates and from the analyses.

Of the 13,590 eligible institutions, 3,239 com-

Fig. 2.3 Final Dispositions from Survey Mailing (by sample group and type)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
1st Target Group						
a. Survey Mailing	70	179	39	163	35	486
b. Unknown Disposition	0	0	0	0	0	0
c. % Found Non-Eligible	(8.6%)	(6.1%)	0	0	(5.7%)	(3.9%)
d. Eligible Sample	64	168	39	163	33	467
2nd Target						
a. Survey Mailing	42	449	16	306	60	873
b. Unknown Disposition	0	0	0	0	0	0
c. % Found Non-Eligible	(2.4%)	(0.7%)	0	(1.3%)	0	(0.9%)
d. Eligible Sample	41	446	16	302	60	865
Random Sample						
a. Survey Mailing	400	4,772	2,134	4,103	1,826	13,235
b. Unknown Disposition	275	3,756	1,555	2,999	1,316	9,901
c. % Found Non-Eligible	(3%)	(4%)	(6%)	(11%)	(12%)	(2%)
d. Estimated Eligible Sample	387	4,594	2,016	3,657	1,604	12,258
TOTAL SAMPLE						
a. Survey Mailing	512	5,400	2,189	4,572	1,921	14,594
d. Estimated Eligible Sample	492	5,208	2,071	4,122	1,697	13,590

Fig. 2.4 Response Rates (by sample group and type of institution)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
1st Target	92%	90%	90%	90%	91%	90%
2nd Target	41%	39%	31%	54%	45%	45%
Random Sample	25%	18%	21%	20%	22%	20%
TOTAL	35%	22%	22%	25%	24%	24%

Fig. 2.5 Response Rates (by sample group and region)

	Northeast	Mid-Atlantic	Southeast	Midwest	Mountain-Plains	West	TOTAL
1st Target	92%	89%	88%	92%	94%	89%	90%
2nd Target	59%	39%	42%	50%	49%	35%	45%
Random Sample	20%	18%	19%	20%	20%	20%	20%
TOTAL SAMPLE	25%	23%	23%	23%	24%	24%	24%

pleted the Heritage Health Index survey, providing an overall response rate of 24%. The institutions within the 1st Target Group, which represent the largest collections in the country, had a 90% response rate. Figures 2.4 and 2.5 show that generally, the 1st Target Group and the Random Sample Group responded similarly across institutional types and geographic regions. However, the 2nd Target Group had over a 20% difference in response rates across types and regions.

Test Surveys and Volunteer Respondents

Heritage Preservation made all test surveys available to RMC. These surveys were added to the Heritage Health Index data file, along with 20 surveys from institutions that were not in the sample but asked to participate.

Figure 2.6 below shows the total number of participating institutions by sample group and tpe. The distributions across type are presented for the participants and the revised eligible sample. Note the participants closely represent the sample by within two percentage points.

Data Cleaning

The survey data was originally stored in an ACCESS database. It was imported into Statistical Package for the Social Sciences (SPSS); both data sources served as platforms for the data cleaning process.

RMC and Heritage Preservation reviewed any questionable data. Numeric outliers were checked and assigned as missing if left unresolved. Any question that allowed for "other" as a response was blindly reviewed by Heritage Preservation. Examining "other" responses to Section F on the

Fig. 2.6 Number of Participant and Sample Institutions (by sample group and type) and Percent of Participant and Sample Institutions (across type)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
1st Target	59	150	35	145	30	419
2nd Target	17	174	5	164	27	387
Random Sample	96	832	418	731	356	2,433
Test	7	37	13	43	11	111
Volunteers	1	3	5	5	6	20
TOTAL	180	1,196	476	1,088	430	3,370
Percent across Type	5%	36%	14%	32%	13%	100%
Estimated Eligible Sample	492	5,208	2,071	4,122	1,697	13,590
Percent across Type	4%	38%	15%	30%	13%	100%

quantity and condition of collections was a considerable task. Heritage Preservation made decisions to reassign "other" responses to the appropriate collections subcategories, created a new subcategory to capture the response, or approved the "other" response. Data had to be added, deleted, or readjusted for more than 500 responses. Heritage Preservation reviewed all comments made in the option question (G10) that asked institutions to explain their most pressing conservation/preservation needs and categorized the responses. RMC applied all data revisions to the SPSS data files.

Data Analysis

Heritage Preservation staff and RMC Research Corporation reviewed the Heritage Health Index data and made initial decisions regarding data tabulation. In March 2005, Heritage Preservation presented the findings to senior IMLS staff and discussed data analysis. In May 2005, Heritage Preservation convened a group of 14 conservators and other collections professionals for their feedback on analysis and input on identifying the survey's key findings. This group included members of the Heritage Health Index Working Groups that helped develop the survey instrument, individuals that completed the survey for their institution, and several individuals who did not have prior contact with the project and could provide a fresh perspective. From the close of data collection until the publication of this report (December 2004 to December 2005), Heritage Preservation staff consulted with its board members and Working Group members to discuss questions raised by the data analysis.

Assignment of Institution Type and Self-Reported Institution Type

For sampling purposes, Heritage Preservation categorized all institutions into one of five types: archives, libraries, historical societies, museums, and archaeological repositories/scientific research collections. For the most part, these assignments were made based on the institutions' names. The survey question B1 asked institutions to choose from 21 possible categories to best describe the primary function or service of their institution. All analyses performed used the self-identified institution type from the questionnaire.

Figure 2.7 compares the original type assignment and the self-reported type. Museums were the most likely to be misclassified while establishing the sampling frame, possibly because museum was in the organization's name but was not its primary function.

Subgroup—Institution Type

Heritage Preservation initially viewed the Heritage Health Index data by institutional type as defined by the list of 21 types of institutions in question B1, which asked participants to select their primary function or service. However, viewing the data by these many categories was cumbersome and, in the case of some groups (e.g., children's museums, arboretums, aquariums), insignificant because the data was based on few responses (Characteristics of Collecting Institutions in the United States, figure 3.1, p. 23). Heritage Preservation identified types of institutions that had similar findings and whose data could be aggregated. In consultation with IMLS staff, Heritage Preservation narrowed the list of

Fig. 2.7 Percent of Respondents for Assigned and Self-Identified (by type)

	Archive	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
Assigned Type						
n=3,370	5%	36%	14%	32%	13%	100%
Self-Identified Type						
n=3,370	6%	35%	11%	41%	7%	100%

21 institutional types to 10:

1. archives
2. public libraries
3. special libraries (e.g., law, hospital, and religious libraries and libraries for the blind and handicapped)
4. academic libraries
5. independent research libraries (includes national and state libraries)
6. historical societies
7. art museums
8. history museums/historic sites/other museums (includes historic houses/sites, history museums, living history museums, general museums, specialized museums, children's museums)
9. science museums/zoos/botanical gardens (includes natural history museums, science/technology museums, nature centers, planetariums, observatories, arboretums, botanical gardens, aquariums, zoos)
10. archaeological repositories/scientific research collections (institutions that would not be classified as museums by IMLS's definition).

Several survey questions included the answer choice of "other, please specify." These "other" responses were incorporated into existing answer categories. Doing so was particularly important in the case of question B1 on primary function since the survey data was to be reviewed by institutional type.

For a broader view by institutional type, Heritage Preservation grouped the institutions into the five groups by which the survey sample was stratified: archives, libraries, historical societies, museums, and archaeological repositories/scientific research collections. Viewing the data by five types of institution rather than ten types results in a lower margin of error, and so it is used most frequently in the Heritage Health Index reporting. In some instances, it is useful to view data by specific institutional type.

Subsidiary Functions: Archives and Libraries

Heritage Preservation grappled with how to capture data on archives, as they are often subsidiaries of other institutions. Survey participants were instructed to complete the survey for all collections at the institutions, and the example of a subsidiary archives or library was used. The questionnaire asked institutions to identify one primary function or service and to select as many secondary functions or services as applicable. Therefore, the Heritage Health Index data may be viewed by institutions that selected archives as a primary function (referred to in this report as "stand-alone archives") and by institutions that indicated archives as a primary or additional function.

Since the number of stand-alone archives in the Heritage Health Index survey population was small, this group was sampled at 100% in the stratified sample. In total, 180 stand-alone archives participated in the survey and their data has a margin of error of 5.5%, a slightly higher rate than data viewed by other types of institutions. Institutions that indicated archives as a secondary function totaled 44%, the most frequent secondary function. The second most common secondary function was "library," with 22% indicating they had this additional purpose. These subgroups are referenced in the report when they further illuminate Heritage Health Index findings.

Subgroup—Institution Size

Budget and collection size data were reviewed to categorize institutions by actual size. When available, Heritage Preservation adapted definitions of size from other professional associations' publications or surveys to make the Heritage Health Index as comparable to other studies as possible. The definitions were reviewed and approved by IMLS staff and other project advisors. As explained in the chart below, size definitions use different criteria based on type of institution.

Archives

The size of archives was based on the quantity of unbound sheets and other archival materials reported in the Heritage Health Index. For some archives, significant photographic, moving image, or recorded sound collections were taken into account as well as unbound sheets.

Large	-more than 5,000 linear feet of unbound sheets -institutional budgets that are appropriate for a larger institution

-all National Archives and Records Administration facilities and most state archives

Medium -1,000-4,999 linear feet of unbound sheets
-reasonable institutional budget size (unusually small budgets may have resulted in reclassification as small)
-remaining state archives

Small -fewer than 1,000 linear feet of unbound sheets

Academic and Independent Research Libraries

The size of academic and independent research libraries was based on the total volume holdings of respondents as reported in the 2004-2005 *American Library Directory.* Libraries reporting significant holdings in unbound sheets may have been moved to a larger category.

Large -more than 1,500,000 total volume holdings
-all members of the Association of Research Libraries
-most state libraries

Medium -250,000-1,499,999 total volume holdings
-all members of the Oberlin Group of Liberal Arts College Libraries
-remaining state libraries

Small - fewer than 250,000 total volume holdings

Public Libraries

The size of public libraries was based on the service populations of respondents as reported in the 2004-2005 *American Library Directory.* Definitions are based on those used by the Public Library Association.

Large - service population 100,000 or greater

Medium - service population 25,000-99,999

Small - service population less than 25,000

Archaeological Repositories

The size of archaeological repositories was based on the quantity of individually and/or bulk cataloged archaeological collections as reported in the Heritage Health Index. If the collection size was not provided, decisions were made on institutional budget size, with large=more than $1,000,000, medium=$350,000-$999,999, small=less than $350,000, except in the case of labs that offered archaeological services, which often have larger budgets. In this case, additional research was done to determine number of holdings.

Large - more than 500,000 individually cataloged archaeological collections and/or more than 5,000 cubic feet of bulk archaeological collections

Medium - 5,000-499,999 individually cataloged archaeological collections and/or 1,000-4,999 cubic feet of bulk archaeological collections

Small - fewer than 5,000 individually cataloged archaeological collections and/or fewer than 1,000 cubic feet of bulk archaeological collections

Agency or university collection with scientific specimen artifact collections with herbarium and/or zoological focus

The size of these collections was based on the quantity of botanical specimens and/or zoological specimens as reported in the Heritage Health Index.

Large - more than 500,000 botanical specimens and/or zoological specimens

Medium - 50,001-500,000 botanical specimens and/or zoological specimens

Small - 50,000 or fewer botanical specimens and/or zoological specimens

Agency or university collection with scientific specimen artifact collections with geological or paleontological focus

The size of these collections was based on the quantity of geological or paleontological specimens as reported in the Heritage Health Index.

Large - more than 200,000 geological and/or paleontological specimens

Medium - 10,001-199,999 geological and/or paleontological specimens

Small - 10,000 or fewer geological and/or paleontological specimens

Museums

The size of museums was based on the institutional budget as reported in the Heritage Health

Index. Definitions are based on what the American Association of Museums had used in several reports, such as the 1989 *National Museum Survey* and the biennial AAM Museum Financial Information surveys (last used in the 1999 study). Dollar figures, not updated since 1989, have been adjusted for inflation. If institutional budget information was not provided for museums, the 2005 *Official Museum Directory* was consulted for staff size and used to place museums in size categories with large=more than 10 full time paid staff, medium=4-10 full time paid staff, and small=3 or fewer full time paid staff.

Aquariums, Zoos

Large - institutional budget more than $4,500,000
Medium - institutional budget $1,500,000-$4,500,000
Small - institutional budget less than $1,500,000

Arboretums, Botanical Gardens, Art Museums, Children's Museums

Large - institutional budget more than $1,500,000
Medium - institutional budget $300,000-$1,500,000
Small - institutional budget less than $300,000

General Museums, Historic House/Sites, History Museums, Historical Societies, Specialized Museums

Large - institutional budget more than $1,500,000
Medium - institutional budget $500,000-$1,500,000
Small - institutional budget less than $500,000

Natural History Museums

Large - institutional budget more than $1,500,000
Medium - institutional budget $350,000-$1,500,000
Small - institutional budget less than $350,000

Nature Centers, Planetaria

Large - institutional budget more than $1,200,000
Medium - institutional budget $350,000-$1,200,000
Small - institutional budget less than $350,000

Science/Technology Museums

Large - institutional budget more than $7,500,000
Medium - institutional budget $1,500,000-$7,500,000
Small - institutional budget less than $1,500,000

Subgroup—Region

The survey sample was stratified by state to ensure accurate geographical representation. However, even with a large survey sample (almost half the entire sampling frame), the relatively few number of institutions in some states would have

Fig. 2.8 Definitions of Region

Region	States and Territories Included
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Mid-Atlantic	District of Columbia, Delaware, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, U.S. Virgin Islands
Southeast	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia
Midwest	Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin
Mountain-Plains	Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming
West	Alaska, American Samoa, Arizona, California, Guam, Hawaii, Idaho, Nevada, Northern Mariana Islands, Oregon, Utah, Washington

required sampling at 100% and response rate of close to 100% to produce reliable data by state. Therefore, Heritage Preservation decided that obtaining results by state would not be feasible. Several states with large populations of collecting institutions did achieve response rates that allowed their data to be reported with relatively low margins of error, and this data could be further analyzed in the future. Additional data collection by state could also be done to produce Heritage Health Index results by state. In this report, geographic results are reported by region using definitions from the American Association of Museums' *Data Report from the 1989 National Museum Survey* (see figure 2.8).

Subgroup—Governance

The Heritage Health Index survey question B5 asked institutions to indicate the governance under which they operate. Responses included "college, university, or other academic entity," "nonprofit, non-governmental organization or foundation," "corporate/for-profit," "federal," "state," "local (county or municipal)," and "tribal." Institutions operated by an academic institution were asked to complete a follow-up question (B6) on the governance of the institution; answer choices were "private college or university," "state college or university," "county or municipal college or university," or "other, please specify." When analyzing the data by governance, private college/university results were combined with private nonprofit, state college/university were combined with state governance, and county/municipal college/university were combined with county or municipal governance. Data was also run by academic institutions alone, and these results are mentioned in the report when relevant.

The governance question identified that some corporate/for-profit institutions replied to the survey, although this type of institution was not included in identifying the Heritage Health Index survey population. While data from this group was not dropped, corporate/for-profit is not identified when results are viewed by governance since they represent only 1% of surveyed institutions.

Study Projections

The survey data has been weighted to produce estimates that reflect the defined population of U.S. collecting institutions, including types of institutions, sizes of institutions, and regional locations. There was no evidence to show that the non-respondents from the 2nd Target Group or the Random Sample Group have any characteristics different from the respondents. Since the responding institutions from the 1st Target Group differ widely in the types and sizes of collections they hold and because this group received a high response rate of 90%, it was decided not to include these non-respondents in the population projections. In addition, any collecting institution that did not appear in the original sampling frame would not be accounted for in the projected population. With this in mind, the population estimate is conservative and excludes 10% of the large institutions, which hold significant collections.

To produce correct population estimates for the Heritage Health Index, weights were applied to the sample data to compensate for the following:

Fig. 2.9 Percent and Number of Institutions for Survey Respondents and Estimated Population (by type)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
Sampled	6%	35%	11%	41%	7%	100%
Survey Respondents	n=206	n=1192	n=361	n=1384	n=227	n= 3,370
Estimated Population After Weighting	3% N=1,033	43% N=13,324	11% N=3,303	39% N=12,057	4% N=1,110	100% N=30,827

- Differential probabilities of sample selection for institutional types and sample groups; and
- Non-respondents in the 2nd Target Group and the Random Sample Group.

The base weight for each institution is equal to the reciprocal of its probability of selection for the sample group and institution type. The base weights were adjusted for non-respondents by subgroup to ultimately produce the study population of collecting institutions.

The sample surveys of 3,370 institutions represent nearly 31,000 collecting institutions. The proportion of sampled institutions by type has been adjusted by the weighting to accurately reflect the population proportions. The largest adjustment was made to the subgroup of sampled libraries, where they were underrepresented by eight percent. The results of the weighting scheme are presented in figure 2.9.

Overall Confidence Intervals

To describe the precision of institutional estimates made from the Heritage Health Index survey, a level of confidence (or margin of error) was calculated.[2] The 95 percent confidence level for all institutions is generally no greater than $^{+}/_{-}$ 1.5 percentage points around any given percent reported. Examining results by institution size produces margins of error less than 3.5 percentage points. Examining results by the five institutional types has confidence intervals ranging from 2.3 to 5.5 percentage points. The confidence intervals are larger around estimates for the smaller subgroups, such as by the ten institutional types or when data is reported by size *and* type of institution. The margins of error for the overall sample and by type, by size, and within type and size are presented in figure 2.10.

Methods for Weighting or Imputing Data

As with most surveys, both unit (institution) and item (question) non-response is unavoidable. Weighting adjustments were made for unit non-response as described previously. This section focuses on item non-response and the method used to compensate for missing responses to questions.

Annual Operating Budgets

To estimate total annual operating budgets, total budgets for conservation/preservation, and the percentages spent on preservation for the population, additional weights needed to be applied. The reporting of financial data had a higher level of non-response than other questions, and the additional weights compensate for those institutions not reporting. The variability in budgets is very high across all institutions but much smaller for subgroups when defined by size and type. Institutions were cross categorized by sizes (large, medium, small) and 10 types (archives, public libraries, academic libraries, independent research libraries, special libraries, historical societies, art museums, history museums/historic sites/other museums, science museums/zoos/botanical gardens, archaeological repositories/scientific research collections). Each institution with valid data for operating budget and conservation

Fig. 2. 10 Margins of Error (by type, by size, and within type and size)

	Archives	Libraries	Historical Societies	Museums	Archaeological Repositories/ Scientific Research Collections	TOTAL
Large	6.1	8.8	4.8	3.8	10.4	2.6
Medium	13.3	21.0	5.1	5.5	10.4	3.4
Small	9.2	5.0	3.6	3.2	7.1	2.0
TOTAL	5.5	4.6	2.6	2.3	5.2	1.5

2. The margin of error was calculated using the following formula: $1.96 \cdot \sqrt{[(.5 \cdot .5)/ n)] \cdot [(N - n) / N - 1)]}$ where n assumed 100% item response rate.

budget was weighted according to its cross classification and proportion of missing data.

Quantity and Condition of Collections

Institutions were asked to report on the number of collection items they hold and the condition of the items for more than 50 different types of collections. Many institutions reported holding specific types of collections but were unable to report on the quantity or did not respond to the conditions. Since one of the main objectives of the Heritage Health Index was to report on the conditions of all collection items in the United States, missing data was imputed with values from similar institutions.

The methods used for imputing quantity and condition data were generally the same. However, it was the median quantity and the mean condition that was imputed. The variance in quantity size was so large that imputing the mean quantity would result in skewing the population estimates. Each of the 58 types of collections was isolated, and only those institutions holding that collection were aggregated by institution size (large, medium, small) and 10 types (archives, public libraries, academic libraries, independent research libraries, special libraries, historical societies, art museums, history museums/historic sites/other museums, science museums/zoos/botanical gardens, archaeological repositories/scientific research collections). The median quantity of collection items and mean conditions were calculated for each possible subgroup. If a subgroup contained less than eight institutions contributing to the median or means, that subgroup was combined with another subgroup of the same size and similar type. For example, if there were fewer than eight small science museums reporting quantities of "art on paper," their responses would be combined with another subgroup like small history museums/historic sites/other museums or all small museums.

If an institution indicated holding a specific type of collection but reported the quantity unknown, the median value by subgroup was imputed. If an institution indicated holding a specific type of collection but did not report on the conditions of the collection, the mean conditions by subgroup was imputed. The percentage of a collection in unknown condition was considered a valid response.

Rounding

RMC reported data to the first decimal place. In the Heritage Health Index report, all data is rounded to the nearest whole number. For results less than 0.5%, the number is displayed as zero. Due to rounding, responses may add to 99% or 101% rather than 100%. Data will not add to 100% in questions where multiple responses were allowed, and this is noted when it occurs.

Chapter 3: Characteristics of Collecting Institutions in the United States

The Heritage Health Index had 3,370 respondents representing the full range of U.S. collecting institutions, large and small, from every state and U.S. territory. As explained in the methodology section, the responses were weighted to the estimated population of 30,827 archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations that hold collections in public trust (Methodology, p. 20). Throughout this report, data is presented for national totals and by five general types of institutions, ten specific types of institutions, size, region, and type of governance (Methodology, p. 16-20). Since the survey population includes such a wide range of institution types and sizes, it should be noted that national totals and averages are influenced by the characteristics described in this chapter.

Responding institutions were asked to select their primary function or service for the purpose of classifying them with their peers. Figure 3.1 shows the list of 21 options and the percentage of respondents in each category. Similar institution types that had comparable survey findings were combined to create a list of 10 types of institutions. Figure 3.2 shows the weighted responses by each of the 10 types. The categories by type were further condensed to five types; their weighted distribution is shown in figure 3.3. Over 80% of the collecting institutions are museums or libraries, but within those categories the non-art

Fig. 3.1 Heritage Health Index Respondents

Archives	4%
Public Library	23%
Academic Library	9%
Independent Research Library	1%
Special Library	7%
Historical Society	11%
Historic House/Site	9%
History Museum	11%
Art Museum	6%
Children's Museum	0.04%
Natural History Museum	2%
Science/Technology Museum	1%
General Museum	5%
Specialized Museum	5%
Archaeological Repository	1%
Scientific Research Collection	3%
Arboretum/Botanical Garden	1%
Aquarium	0.02%
Nature Center	1%
Planetarium	0%
Zoo	1%

Fig. 3.2 Representation by Specific Type of Institution

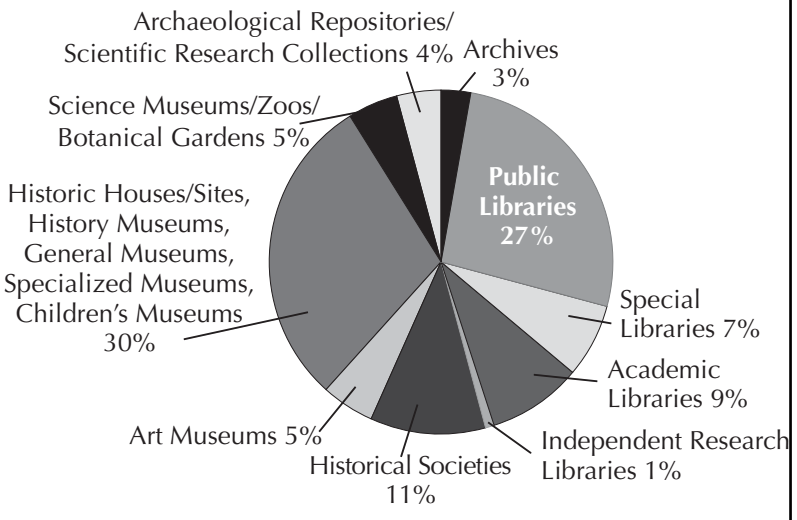


Fig. 3.3 Representation by Type of Institution

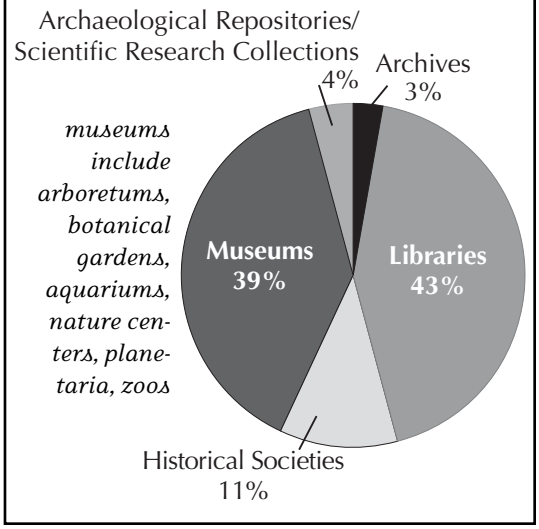


Fig. 3.4 Representation by Size

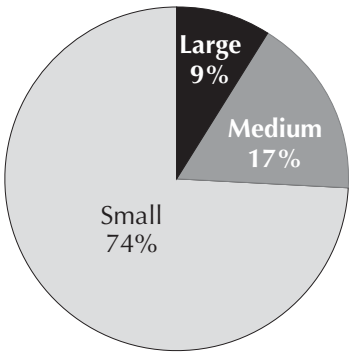
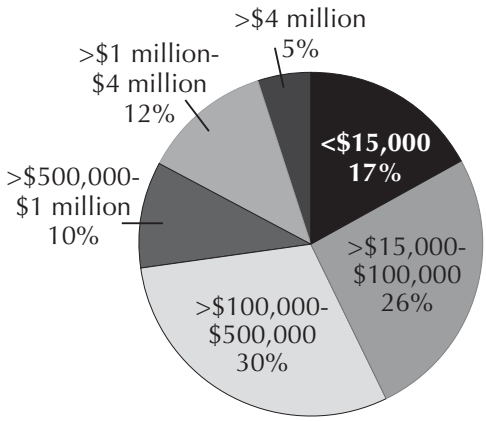


Fig. 3.5 Representation by Annual Operating Budget



and non-science museums and public (not academic) libraries are the most prevalent.

The estimated study population consists of 74% small institutions, 17% medium-sized institutions, and 9% large institutions (figure 3.4). Therefore, any overall national findings are significantly influenced by the fact that the majority of collecting institutions are considered small. Since size is usually determined by annual institutional budgets, it is useful to note that nearly three-quarters of institutions have annual operating budgets of less than $500,000 (figure 3.5).

Figure 3.6 indicates the average staff sizes by type of institution, showing that libraries are more likely to have larger, full-time paid staffs than historical societies or archaeological repositories/scientific research collections. This information is useful in keeping preservation staffing and activities in context. For example, historical societies may not have as many conservation/preservation staff or may not have addressed certain preservation issues, but on average, historical societies have 2 full-time paid staff, 2 part-time paid staff, and 14 part-time unpaid staff or volunteers.

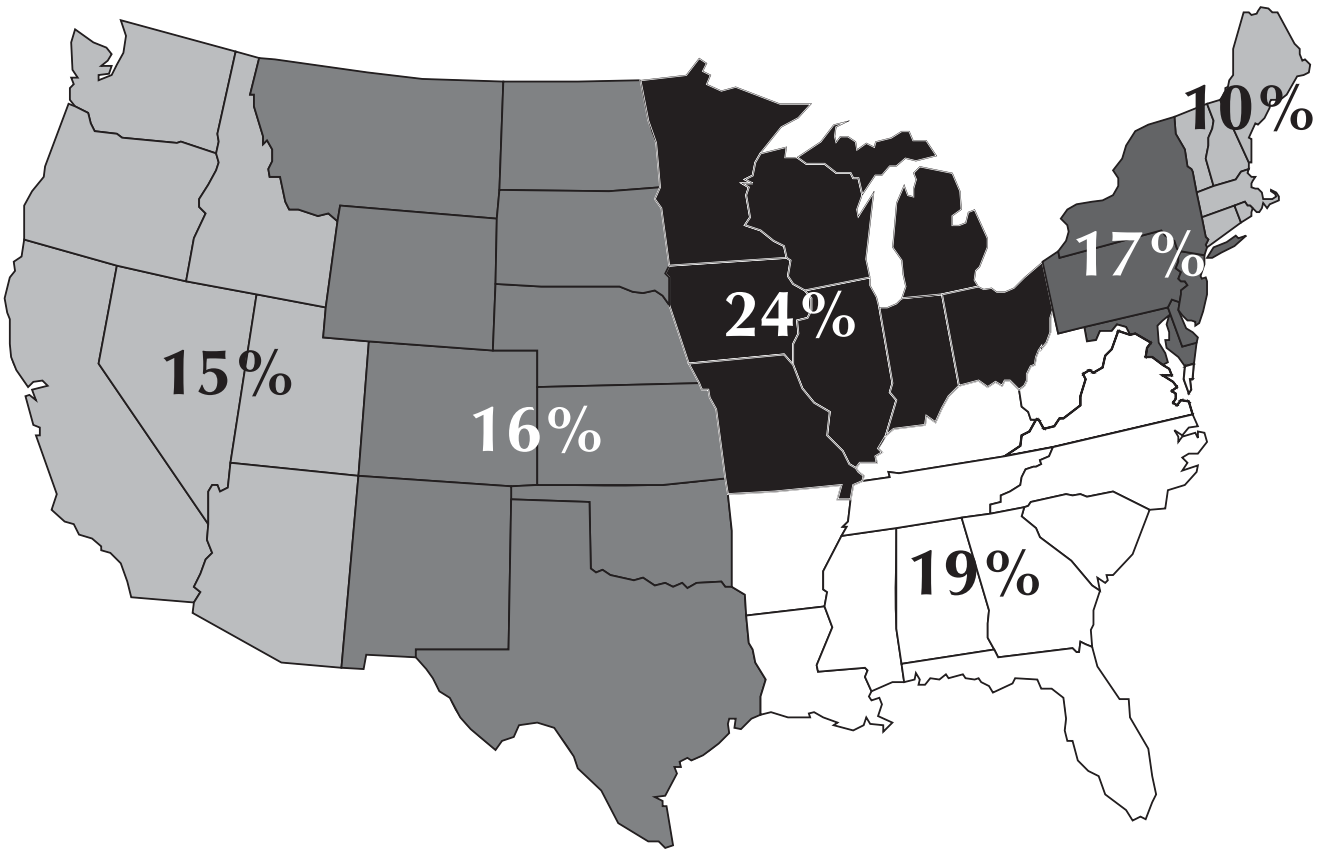
The distribution of institutions by region is shown in figure 3.7. The Midwest has the highest percentage of institutions in the U.S., which also includes the highest percentage of small institutions (25%), libraries (27%), and historical societies (32%). The Southeast contains the largest percentage of large (25%) and medium-sized (24%) institutions, along with having the most archives (24%), museums (22%), and archaeological repositories (26%).

The Heritage Health Index survey asked institutions to indicate any additional functions or services they provide. About one-third do not have any additional functions, but another third have at least one, and the remaining third have more than one (figure 3.8). Less than 1% have more than five additional functions. Archives is

Fig. 3.6 Average Staff Size (by type)

	Full-time paid staff	Part-time paid staff	Full-time unpaid staff	Part-time unpaid staff
Archives	8	3	0	4
Libraries	14	9	0	4
Historical Societies	2	2	0	14
Museums	10	7	0	34
Archaeological Repositories/ Scientific Research Collections	3	2	0	3

Fig. 3.7 Representation by Region



the most frequent secondary function (44%), followed by libraries (22%), historic house/sites (17%), and museums (15%) (figure 3.9). It is helpful to remember these additional functions when considering the data by type of institution. Historical societies, followed by museums, were the most likely to have more than three additional functions (47% and 25% respectively).

Responses to the question on governance of collecting institutions came from nonprofit institutions (42%), county/municipal governed institutions (28%), academic entities (17%), state institu-

Fig. 3.8 Institutions' Number of Additional Functions

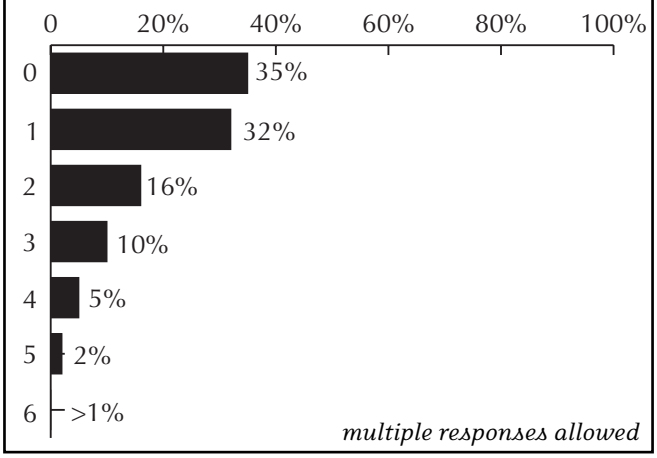


Fig. 3.9 Institutions' Additional Functions or Services

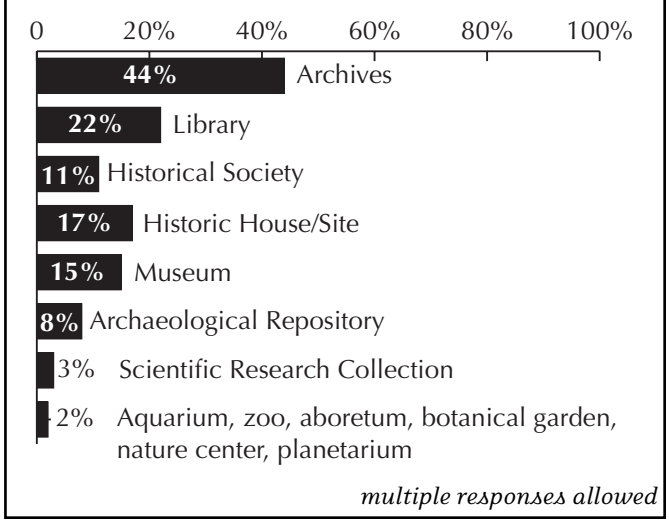


Fig. 3.10 Representation by Governance

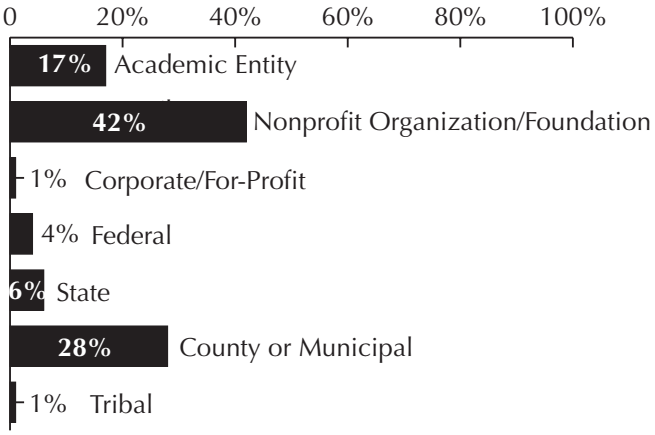


Fig. 3.11 Representation of Academic Institutions

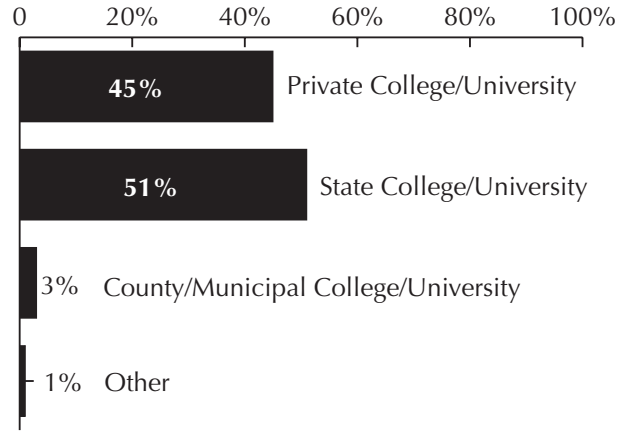
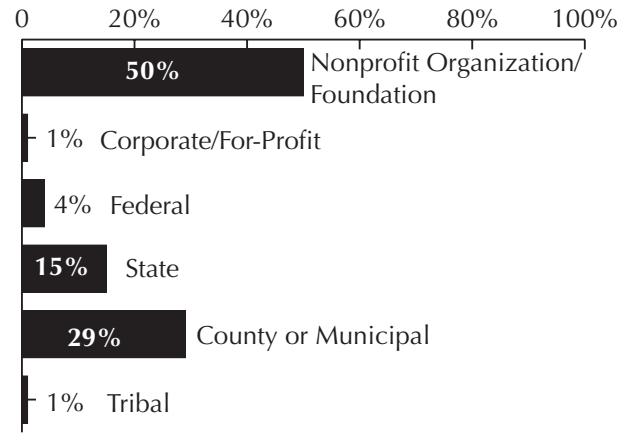


Fig. 3.12 Representation Including Academic Entities in Governance



tions (6%), and federal institutions (4%) (figure 3.10). Federal institutions account for 9% of large institutions but for only 3% of small or medium-sized institutions, indicating that large institutions are more prevalent in this type of governance. Viewing academic institutions alone, about half represents private college/universities and the other half represents state college/universities; only 3% of the academic institutions are from county/municipal college/universities and 1% from tribal-governed institutions (figure 3.11). When academic institutions' specific governance is incorporated with non-academic governance, the percentage of nonprofit organizations increases to 50% and state-run institutions to 15%. Figure 3.12 presents the revised distribution of governance used throughout this report.

It is interesting to note that the New England and Mid-Atlantic regions have the highest percentage of non-profit/foundation institutions; the Southeast has the highest percentage of state institutions; the Midwest and Mountain-Plains dominate in locally run institutions; and the West has the largest percent of federal institutions.

Chapter 4: Condition of Collections

To create a collection, to inherit one, or to be given oversight of a collection, is also to create, inherit, or accept a great responsibility. The challenge for collecting institutions is to meet the charge of stewardship and to assure that their valued collections, whether works of art, historical documents, scientific specimens, library collections, or other forms of material culture, are preserved for future generations.

—*Position Paper on Conservation and Preservation in Collecting Institutions*, American Institute for Conservation of Historic and Artistic Works, 2002

The Association supports the preservation of information published in all media and formats. The Association affirms that the preservation of information resources is central to libraries and librarianship.

—*American Library Association Preservation Policy*, American Library Association, 2001

Members of the Society for Historical Archaeology have a duty to encourage and support the long-term preservation and effective management of archaeological sites and collections…for the benefit of humanity.

—*The Society for Historical Archaeology Ethical Principles*, The Society for Historical Archaeology, 2003

Digital preservation is an essential aspect of all digital projects: it is imperative that the digital objects created remain accessible for as long as possible both to intended users and the wider community.

—*The NINCH Guide to Good Practice in the Digital Representation and Management of Cultural Heritage Materials*, National Initiative for a Networked Cultural Heritage, 2002-2003

The central purpose of the Heritage Health Index is to determine the condition of U.S. collections. The survey participants, including archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations, were asked to estimate the quantity of collections for which they take preservation responsibility. Working Groups specified 58 categories of collections and organized them in 11 general categories. Respondents provided data by specific collections type, and it was aggregated into the following general categories, which were ordered in the survey questionnaire by the likelihood that institutions would have such collections:

- Books and Bound Volumes
- Unbound Sheets, cataloged in linear feet
- Unbound Sheets, cataloged in items
- Microfilm/Microfiche
- Photographic Collections
- Moving Image Collections
- Recorded Sound Collections
- Digital Materials
- Online Files
- Art Objects
- Historic Objects
- Archaeological Collections, individually cataloged
- Archaeological Collections, bulk cataloged in cubic feet
- Natural Science Specimens.

For each type of collection, survey participants were instructed to indicate the percentage of their collections in "unknown condition,"[1] "no need,"[2] "need,"[3] or "urgent need"[4] of conservation/preservation. The categories of need were intentionally broad so that every institution, even those that have not done an assessment of their collections, could easily determine condition. The

1. Unknown condition: Material has not been recently accessed by staff for visual inspection and/or condition is unknown.
2. No need: Material is stable enough for use and is housed in a stable environment that protects it from long-term damage and deterioration.
3. Need: Material may need minor treatment or reformatting to make it stable enough for use, and/or the collection needs to be re-housed into a more stable enclosure or environment to reduce risk of damage or deterioration.
4. Urgent need: Material needs major treatment or reformatting to make it stable enough for use, and/or the material is located in an enclosure or environment that is causing damage or deterioration. For machine-readable collections, deterioration of media and/or obsolescence of play-back equipment or hardware/software threaten loss of content.

results of this question highlight what types of collections are in greatest need of immediate attention; however, significant percentages of each type of collections are in unknown condition, so the amount of collections in need is likely to be much higher. The subsequent chapters in this report elucidate specific needs facing collections and what institutions are doing to care for collections.[5]

Quantity of U.S. Collections Items

U.S. archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations care for an estimated 4.8 billion collections items (figure 4.1). Books and bound volumes account for the greatest portion of collections at 1.7 billion, followed by items of microfilm/microfiche at 1 billion. Archaeological collections cataloged in cubic feet are the lowest quantity at 2.6 million, but considering that these are measured in volume, this is a significant quantity. Digital materials on physical media such as disks or CDs are the next lowest quantity at 9 million.

Fig. 4.1 U.S. Institutions Have Taken Responsibility to Preserve 4.8 Billion Collections Items

Books/Bound Volumes	1.7 billion
Microfilm/Microfiche	1 billion
Natural Science Specimens	820.2 million
Photographic Collections	727.4 million
Archaeological Collections, individually cataloged	197.8 million
Unbound Sheets, cataloged in items	95.8 million
Online Files	54.6 million
Historic Objects	48.3 million
Recorded Sound	46.4 million
Unbound Sheets, cataloged in linear feet	43.6 million
Moving Images	40.2 million
Art Objects	21.2 million
Digital Materials	9 million
Archaeological Collections, cataloged in cubic feet	2.6 million

Given the extensive quantities of books and bound volumes and microfilm/microfiche, it is not surprising that libraries hold 63% of the total collections items in the U.S. (figure 4.2). Museums hold 20% of the items, followed by archaeological repositories/scientific research collections at 8%, archives at 7%, and historical societies at 2%. Figure 4.3 shows that 63% of items are held in large institutions, 22% in medium-sized institutions, and 15% in small institutions.

Institutions were instructed to complete the survey for the collections for which they take preservation responsibility. In the Frequently Asked Questions that accompanied the survey

Fig. 4.2 Collections Held by U.S. Institutions (by type)

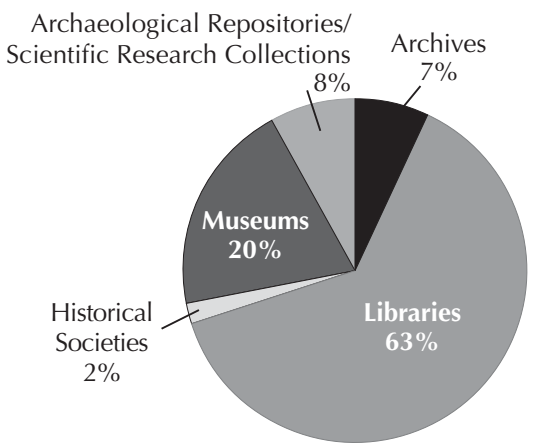
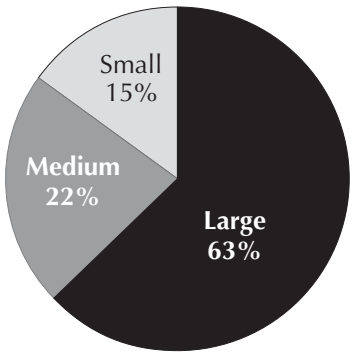


Fig. 4.3 Collections Held by U.S. Institutions (by size)



5. Care of collections is used as a general term throughout the report and combines conservation (the treatment of materials, aided by examination and research, and the study of the environment in which they are placed) and preservation (the protection of materials through activities that minimize chemical and physical deterioration and damage and/or that prevent loss of informational content).

(Appendix F), examples of collections for which an institution may not take a preservation responsibility include non-accessioned collections such as teaching collections or replicas, or collections that could be disposed of or replaced should they become lost or damaged, such as current books, magazines, video tapes, or sound recordings. Institutions with a small amount of collections for which they take preservation responsibility, such as public libraries and children's museums, were encouraged to complete the questionnaire so that the Heritage Health Index could truly capture the needs of all U.S. collections held in the public trust. Survey participants were instructed to include documentary evidence relating to object or scientific collections in the appropriate categories, such as archival records, photographic materials, and recorded sound materials. The questionnaire did not include any living collections or historic structures, even if they are accessioned collections. Survey participants were to include all subsidiary collections, such as an institution's library or archives, in their collections counts.

Each type of collection was to be recorded by item except for archival documents and archaeological artifacts, which asked for quantities in unit measurements. Since archival documents are frequently measured in linear feet or cubic feet, institutions were asked to record archival records/manuscripts and maps/oversized items in these units. For the purposes of data analysis, cubic feet are converted to linear feet, with one cubic foot equal to one linear foot. Ephemera, broadsides, philatelic and numismatic artifacts, and other paper artifacts were to be recorded by item. It is not possible to aggregate the two units of measurement, so data on unbound sheets is reported by linear feet and item. Some archaeological artifacts are cataloged in bulk in cubic feet, so institutions had the option of recording archaeological artifacts by item and/or by volume. Again, it is not possible to aggregate these responses, so they are reported individually. In determining the total number of collections being cared for in the U.S., one linear foot of archival records/manuscripts or maps/oversized items and one cubic foot of bulk cataloged archaeological material is treated as one item unit. The statistic that U.S. collecting institutions hold 4.8 billion artifacts would be dramatically higher if every individual item were included.

The response rates to the Heritage Health Index questions are between 97% and 100%, with the exception of preservation expenditures and funding (85%-88%) and the quantity and condition of collections. Chapter 10 discusses the lack of intellectual control and collections assessments, which explains why this information was so challenging for institutions to report in the survey. Of the institutions holding each type of collection, the response rates for quantity of collections items are:

Microfilm/Microfiche	64%
Art Objects	62%
Moving Image Collections	61%
Books and Bound Volumes	58%
Historic Objects	55%
Recorded Sound Collections	54%
Unbound Sheets, cataloged in linear feet	52%
Natural Science Specimens	50%
Photographic Collections	48%
Archaeological Collections, individually cataloged	46%
Online files	37%
Unbound Sheets, cataloged in items	36%
Archaeological Collections, bulk cataloged in cubic feet	33%
Digital Materials	31%

In the case of missing data, quantity of collections items was imputed by applying the median quantity of collections items from institutions of

Fig. 4.4 Institutions with a Written, Long-range Plan for the Care of the Collection

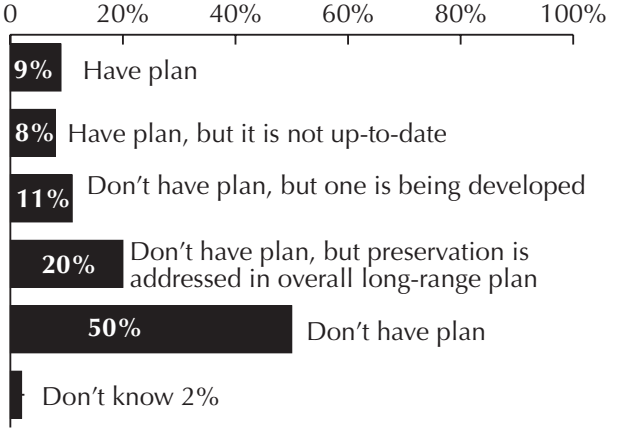
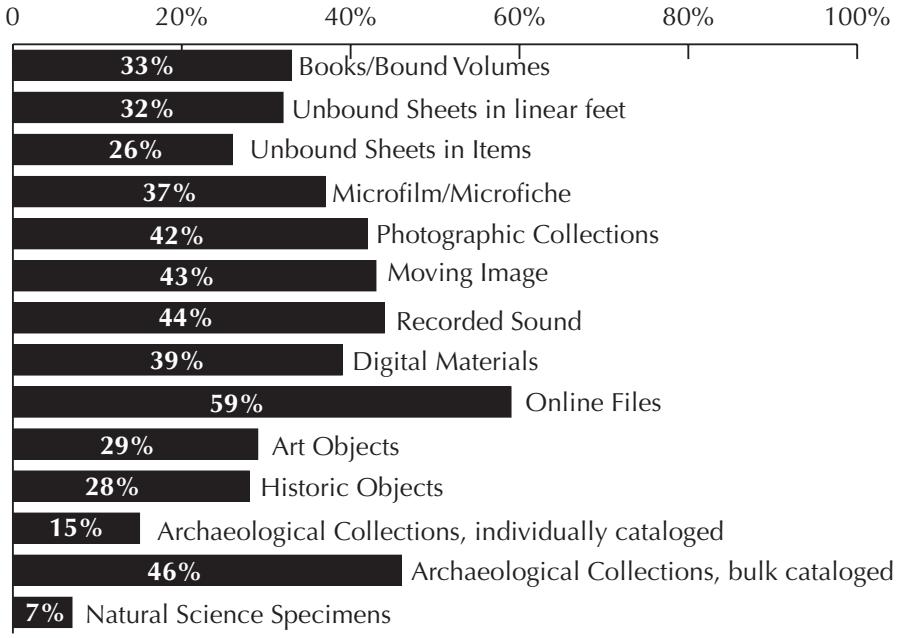
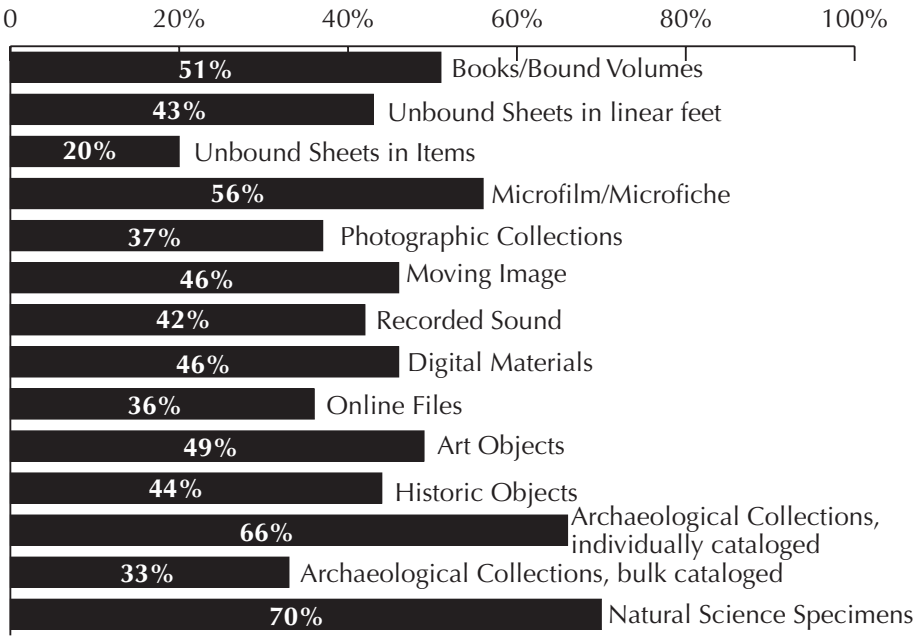


Fig. 4.5 Collections Items in Unknown Condition*



**Unknown condition: Material has not been recently accessed by staff for visual inspection and/or condition is unknown.*

Fig. 4.6 Collections Items in No Need*



**No need: Material is stable enough for use and is housed in a stable environment that protects it from long-term damage and deterioration.*

like type and size (Methodology, p. 22). The Heritage Health Index was not intended to be a census of U.S. collections; however, it was important to gather data on the number of collections to put condition of collections data in context.

Condition of U.S. Collections Items

Institutions were asked to estimate the percentage of collections items in "unknown condition," "no need," "need," or "urgent need." When viewing the results it is important to note the results to survey question D2 that half of U.S. collecting institutions do not have a long-range preservation plan for the care of collections (figure 4.4); 9% have such a plan; 8% have a plan, but it is not up-to-date; 11% have a plan in development; and 20% include collections in other institutional long-range plans. Developing a designated plan can be a first step for an institution making a commitment to changing the condition of its collections.

Of the 4.8 billion collection items in the U.S., more than 820 million are in need or urgent need; however, about 1.8 billion are in unknown condition. As seen in figure 4.5, at least one-third of most types of collections are in unknown condition. Natural science specimens (7%) and individually cataloged archaeological collections items (15%) have the lowest rates of unknown condition; online files (59%) and bulk cataloged archaeological collections (46%) have the highest. The high number of collections items in unknown condition is significant because items that have not been

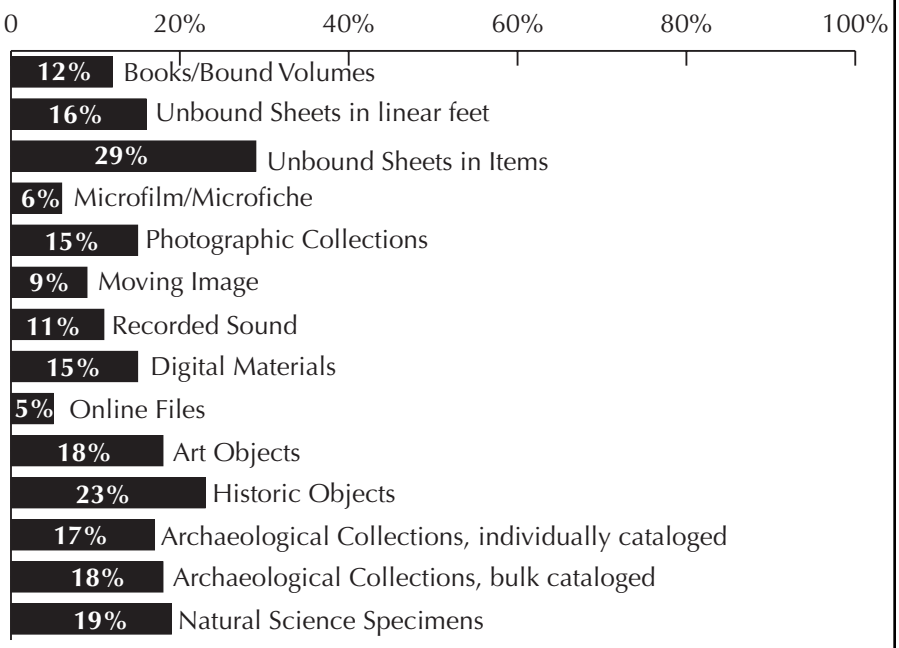
inspected are more likely to have suffered from neglect.

Collections items in no need vary from 70% of natural science specimens and 66% of individually cataloged archaeological collections items to 20% of unbound sheets cataloged by item and 33% of bulk cataloged archaeological collections (figure 4.6). The types of collections with the greatest percentage in no need are also the types that have the lowest percentage in unknown condition, which reinforces the accuracy of the "no need" statistic for these types of collections.

Unbound sheets cataloged by item are in the greatest need at 29%, followed by historic objects at 23% (figure 4.7). Online items (5%) and microfilm/microfiche (6%) have the lowest percentages in need. Urgent need (figure 4.8) follows a similar trend, with a quarter of unbound sheets cataloged by item and 5% of historic objects in urgent need. Eight percent of unbound sheets cataloged by linear feet are also in urgent need. Less than 1% of online files and digital materials and only 1% of microfilm/microfiche are in urgent need.

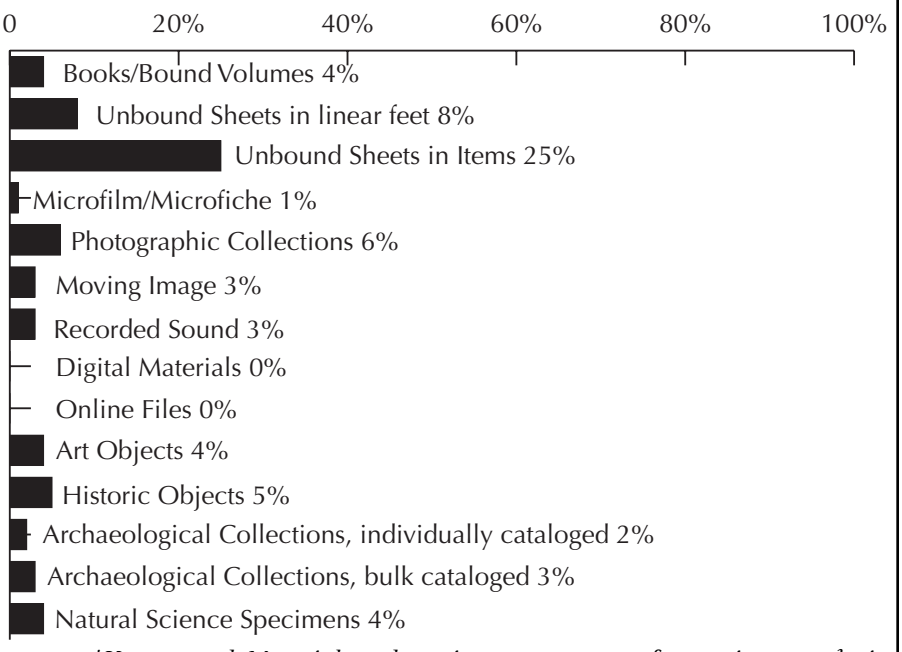
It is useful to combine the data for need and urgent need to understand the full scope of collections items in need (figure 4.9). Viewed this way, more than half of unbound sheets cataloged in items are in need, followed by 28% of historic objects, 24% of unbound sheets recorded in linear feet, and 22% of art objects. Online files (5%), microfilm/microfiche (7%), moving image collections (12%), recorded sound collections (14%), and digital materials

Fig. 4.7 Collections Items in Need*



**Need: Material may need minor treatment or reformatting to make it stable enough for use, and/or the collection needs to be re-housed into a more stable enclosure or environment to reduce risk of damage or deterioration.*

Fig. 4.8 Collections Items in Urgent Need*



**Urgent need: Material needs major treatment or reformatting to make it stable enough for use, and/or the material is located in an enclosure or environment that is causing damage or deterioration. For machine-readable collections, deterioration of media and/or obsolescence of play-back equipment or hardware/software threaten loss of content.*

Fig. 4.9 Collections Items in Need and Urgent Need

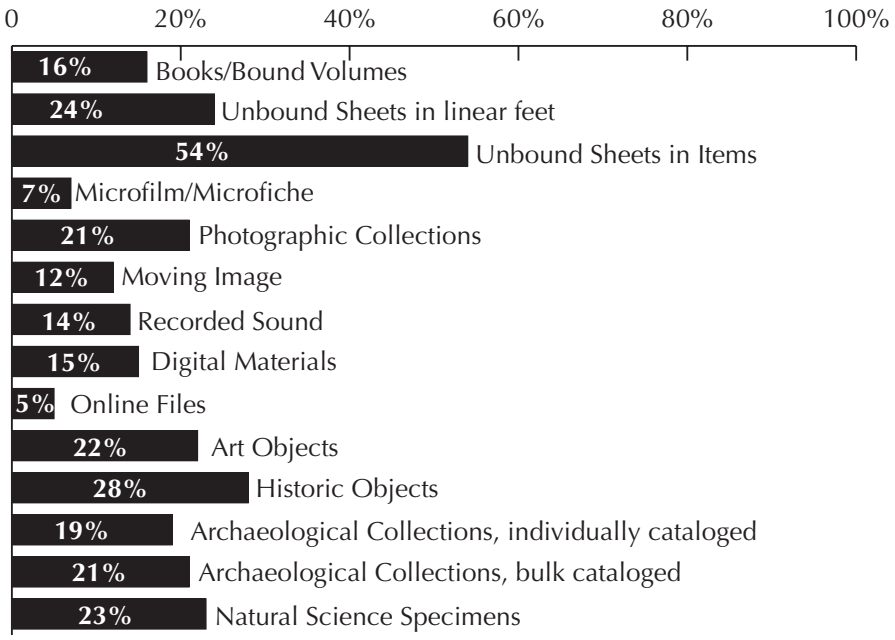
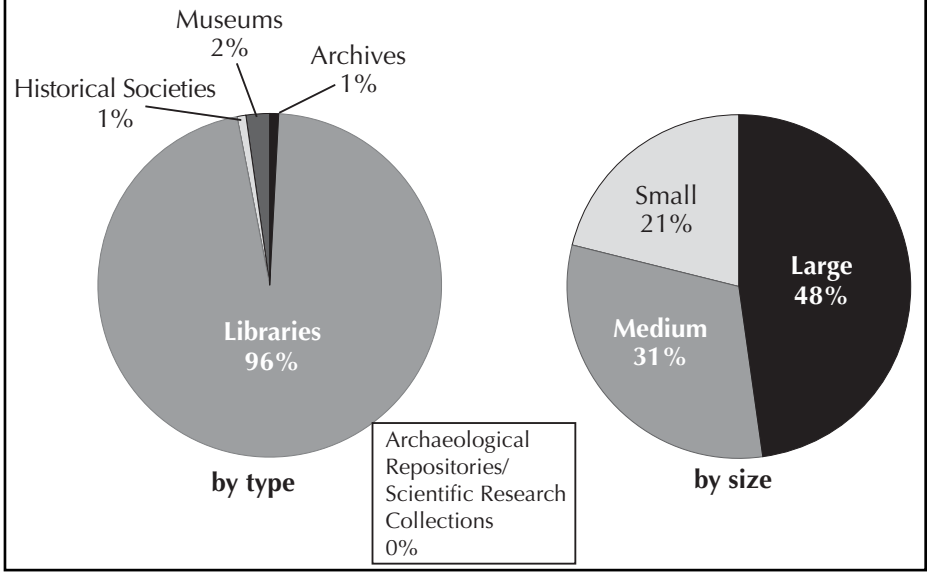


Fig. 4.10 Institutions Care for 1.7 Billion Books and Bound Volumes



(15%) appear to be in the least need; however, one-third to more than half of these collections are in unknown condition, so the amount of collections in need could be much higher. When data for collections items in urgent need, need, and unknown condition are added together, it is clear that the condition of all types of items will require attention and resources in the decades ahead.

Response rates for the condition of collections items are lower than most questions in the Heritage Health Index, but significantly higher than the response rates for quantity of collections. More discussion on unknown condition may be found in Chapter 10 on intellectual control and condition assessments. The response rates for condition are:

Microfilm/Microfiche	80%
Moving Image Collections	79%
Unbound Sheets, cataloged in linear feet	78%
Art Objects	78%
Recorded Sound Collections	77%
Photographic Collections	76%
Historic Objects	76%
Books and Bound Volumes	76%
Archaeological Collections, individually cataloged	76%
Natural Science Specimens	74%
Online files	73%
Digital Materials	70%
Archaeological Collections, bulk cataloged in cubic feet	70%
Unbound Sheets, cataloged in items	69%

To compensate for missing data, condition of collections was imputed by applying the mean condition of collections items from institutions of like type and size (Methodology, p. 22).

Books and Bound Volumes

Books and bound volumes includes books/monographs, serials/newspapers, and

Fig. 4.11 Condition of Books and Bound Volumes

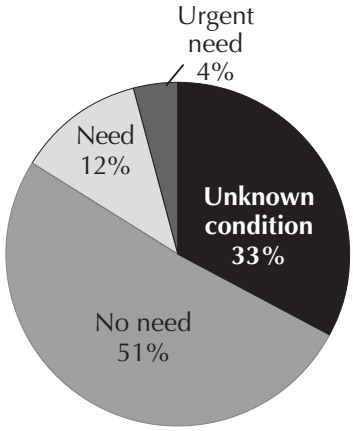


Fig. 4.12 Condition of Books and Bound Volumes (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Books and monographs	1.5 billion	33%	52%	12%	3%
Serials and newspapers	188 million	25%	54%	14%	7%
Scrapbooks, albums, pamphlets	22.3 million	40%	32%	16%	11%
Other bound volumes	5.8 million	59%	27%	11%	3%

scrapbooks/albums/pamphlets. The survey specified including only serials/newspapers on paper in this category; serials/newspapers on microfilm/microfiche were to be recorded under photographic collections.

U.S. collecting institutions have preservation responsibility for about 1.7 billion books and bound volumes (figure 4.10). Libraries hold 96% of these items, while museums hold 2%, historical societies and archives each hold 1%, and archaeological repositories/scientific research collections hold less than 1%. Books are among the most commonly held collections items, with almost 100% of libraries and historical societies holding books and 94% of archives, 88% of museums, and 70% of archaeological repositories/scientific research collections having books and bound volumes for which they take preservation responsibility. Almost half of books and bound volumes are in the care of large institutions, 31% are in medium-sized institutions, and 21% are in small institutions. By governance, state, county/municipal, and nonprofit institutions each hold approximately one-third of U.S. book and bound volume collections, with federal institutions holding 4% and tribal-governed institutions holding 1%.

One-third of books and bound volumes are in unknown condition, 51% are in no need, 12% are in need, and 4% are in urgent need (figure 4.11). Historical societies report 61% of the 21 million book collections they hold are in unknown condition, while 33% of the 1.5 billion books and bound volumes in libraries are in unknown condition. Museums have 24% of their book collections in unknown condition, with archaeological repositories/scientific research collections having 20% and archives having 12%. Museums have the highest percentage of books in need at 19% and urgent need at 8%. Archives, libraries, and historical societies all have 4% of their book collection in urgent need, and archaeological repositories/scientific research collections have 2% in urgent need. Large institutions, which care for 823 million books, have the greatest number of books in unknown condition (38% compared to 28% at mid-sized and 28% at small institutions) and in urgent need (6% compared to 2% and 3%).

Figure 4.12 shows the condition of specific types of books and bound volumes. Books and monographs make up the majority of this collections category. Examples of materials that remain in "other" are musical scores, scripts, bound records, and bound manuscripts, because it is unknown whether they are books or pamphlets. Many unspecified items are also included in the other category. Scrapbooks/albums/pamphlets have the highest percentage in need and urgent need, and 40% are in unknown condition.

Unbound Sheets Cataloged in Linear Feet

Unbound sheets are recorded by two measurements, linear feet and item, and each group of collections is considered separately. Archival records/manuscripts and maps/oversized items are recorded in linear feet or cubic feet. For pur-

Fig. 4.13 Institutions Care for 44 Million Linear Feet of Unbound Sheets

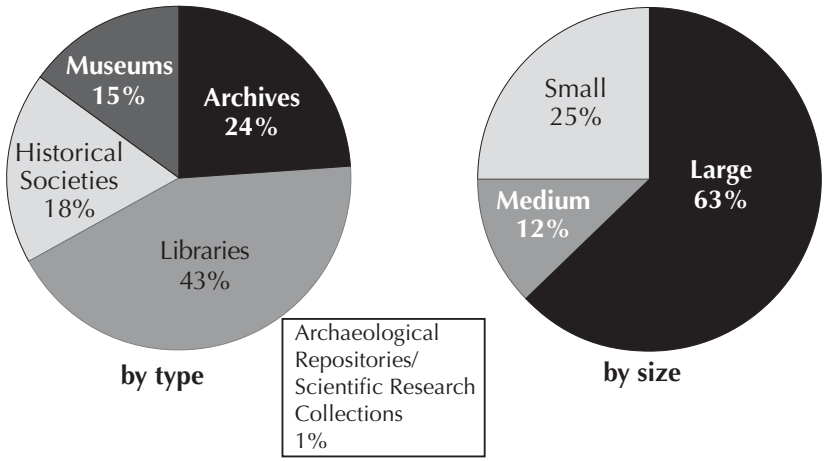
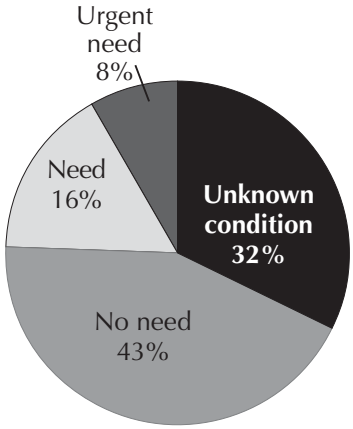


Fig. 4.14 Condition of Unbound Sheets Measured in Linear Feet



poses of analysis, one cubic foot is converted to one linear foot.

U.S. collecting institutions care for 44 million feet of archival records/manuscripts and maps/oversized items (more than 8,300 miles). Libraries hold 43% of these collections (about 19 million feet), archives 24%, historical societies 18%, museums 15%, and archaeological repositories/scientific research collections less than 1% (figure 4.13). Unbound sheets—whether measured in linear feet or by items— are prevalent in all types of collections: 98% of archives, 91% of historical societies, 83% of museums, 70% of libraries, and 63% of archaeological repositories/scientific research collections have these collections. Large institutions hold 63%, medium-sized institutions hold 12%, and small institutions hold 25% of unbound sheets measured in linear feet. Nonprofit institutions care for 43% of linear feet of unbound sheets, state-governed institutions 30%, federal institutions 14%, county/municipal institutions 11%, and tribal-governed institutions 2%.

Figure 4.14 illustrates that 32% of unbound sheets by linear feet are in unknown condition, 43% are in no need, 16% are in need, and 8% are in urgent need for treatment or improved conditions. Libraries hold most of these collections and have the greatest amount in unknown condition (49%). Archives hold 11 million linear feet and have 30% in unknown condition and the highest percentage in both need (19%) and urgent need (22%). Historical societies hold 8 million linear feet of unbound sheets and have the lowest percentage in unknown condition (8%), need (10%), and urgent need (2%). Large institutions report the greatest need; of the 28 million linear feet of unbound sheets they hold, 39% are in unknown condition, 34% in no need, 17% in need, and 10% in urgent need. Tribal-governed institutions hold 2% of U.S. unbound sheets by linear feet (1 million linear feet), but 66% are in need. Nonprofit organizations—the largest holder of unbound sheets at 19 million linear feet—have 14% in need and 4% in urgent need.

Unbound sheets measured in linear feet include about three-quarters archival records/manuscripts and one quarter maps/oversized

Fig. 4.15 Condition of Unbound Sheets Measured in Linear Feet (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Archival records and manuscripts	31.4 million ft	26%	47%	17%	10%
Maps and oversized items	12.2 million ft	48%	34%	15%	3%

Fig. 4.16 Institutions Care for 96 Million Items of Unbound Sheets

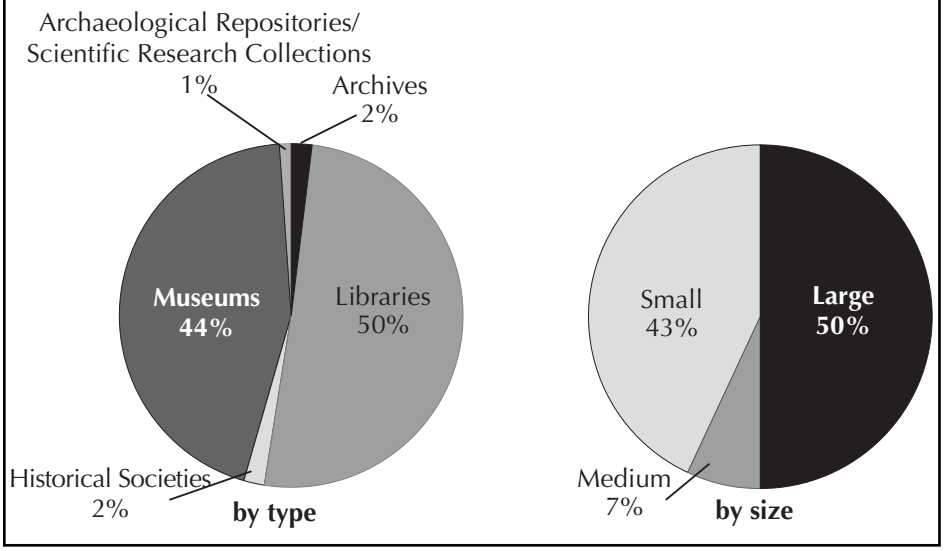
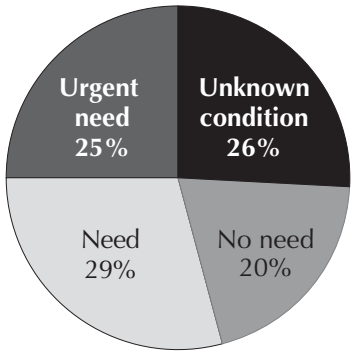


Fig. 4.17 Condition of Unbound Sheets in Items



Includes ephemera, broadsides, philatelic, and numismatic items

items (figure 4.15). The condition of archival records/manuscripts is more likely to be known and is in greater need (17% in need and 10% in urgent need). Again, this suggests that if the condition of maps/oversized items were known, the amount of these collections in need would be greater.

Unbound Sheets Cataloged in Items

The remaining unbound sheets are counted in items. These include ephemera/broadsides, philatelic/numismatic artifacts (made of paper), and other paper artifacts—96 million items in all.

Figure 4.16 shows that 50% of unbound sheets recorded in items are held in libraries, 44% are held in museums, 2% in both archives and historical societies, and 1% in archaeological repositories/scientific research collections. Differences in the distribution of holdings between unbound sheets cataloged by linear feet and by item may be accounted for by the cataloging practices of institutions (e.g., it is a more common practice in archives to catalog in linear feet, while museums are more likely to catalog by item). Large institutions hold half of the unbound sheets (48 million items), medium-sized institutions care for 7%, and small institutions hold 43% (41 million items). Like unbound sheets measured in linear feet, 43% of those cataloged by item are held by nonprofit organizations; federal institutions hold 36%, state institutions hold 16%, county/municipal institutions hold 4%, and tribal institutions hold 1%.

Twenty-six percent of unbound sheets cataloged by items are in unknown condition, 20% are in no need, 29% are in need, and 25% are in urgent need (figure 4.17). Of all types of collections, this collections category has the highest percentage in urgent need at 25% (figure 4.8) and need and urgent need at 54% (figure 4.9). Museums account for a large part of this percentage, because they hold 44% of total collections and have 25% in need and 35% in urgent need. Libraries, which hold 48 million items or half of

Fig. 4.18 Condition of Unbound Sheets in Items (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Ephemera and broadsides	22 million	24%	28%	22%	25%
Philatelic and numismatic artifacts	18.1 million	24%	15%	32%	29%
Other unbound sheets	55.7 million	28%	19%	31%	23%

Fig. 4.19 Institutions Care for 1 Billion Microfilm and Microfiche

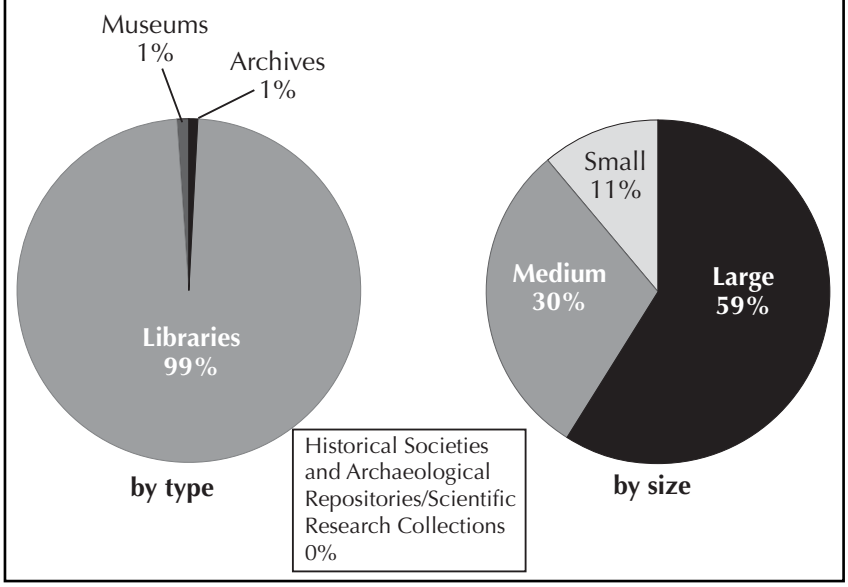
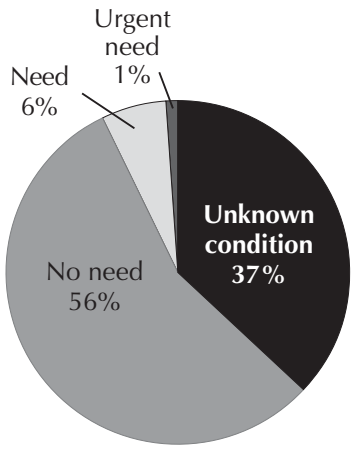


Fig. 4.20 Condition of Microfilm and Microfiche



total U.S holdings of unbound sheets cataloged by item, have 18% in urgent need and 34% in need. The figures are also influenced by size of institution, with small institutions holding 43% of items and having 41% in urgent need and 32% in need. Large institutions hold half of these collections; 14% are in urgent need and 27% are in need. By governance, federal institutions have the largest percentage of items of unbound sheets in urgent need (42%) and need (26%), followed by nonprofit institutions with 19% in urgent need and 35% in need.

Viewed by specific type of unbound sheets (figure 4.18), about 23% are ephemera/broadsides, 19% are philatelic/numismatic artifacts, and the remaining 58% are other unbound sheets by item. The "other" category mainly includes items that are not recorded in linear feet, such as architectural drawings, blueprints, and sheet music. The three specific types are about equal in the percentages in unknown condition, no need, need, and urgent need.

Microfilm/Microfiche

Since microfilm/microfiche accounts for 58% of all photographic collections items and differs in condition, it is considered separately from other photographic collections. U.S. collecting institutions care for 1 billion items of microfilm/microfiche. Microfilming is a method for preserving content of paper artifacts, so these items constitute an important collection (in survey question D10, one-third of institutions report their staff is involved in preservation reformatting, which includes microfilming, and 16% of institutions contract with external providers for preservation reformatting). Almost all microfilm/microfiche is held by libraries (99%), with archives and museums both holding 1%, and historical societies and archaeological repositories/scientific research collections having less than 1% (figure 4.19). Large institutions hold 59% of microfilm/microfiche; medium-sized institutions hold 30%; and small institutions hold 11%. Almost 60% are held by state-governed institutions, 19% by nonprofit institutions, 13% by county/municipal institutions, 4% by federal institutions, and 1% by tribal institutions.

Figure 4.20 shows the condition of microfilm/microfiche: 37% in unknown condition, 56% in no need, 6% in need, 1% in urgent need. Museums recorded 77% (about 4.9 million items) of microfilm/microfiche in unknown condition, so it is not surprising that only 1% are in need and less than 1% are in urgent need. Archives, libraries, and historical societies all have about 35% in unknown condition and between 7% and 13% in need and urgent need. By size, large institutions have the most in unknown condition at 46% and most in need and urgent need at 11%.

Fig. 4.21 Institutions Care for 727 Million Photographic Items

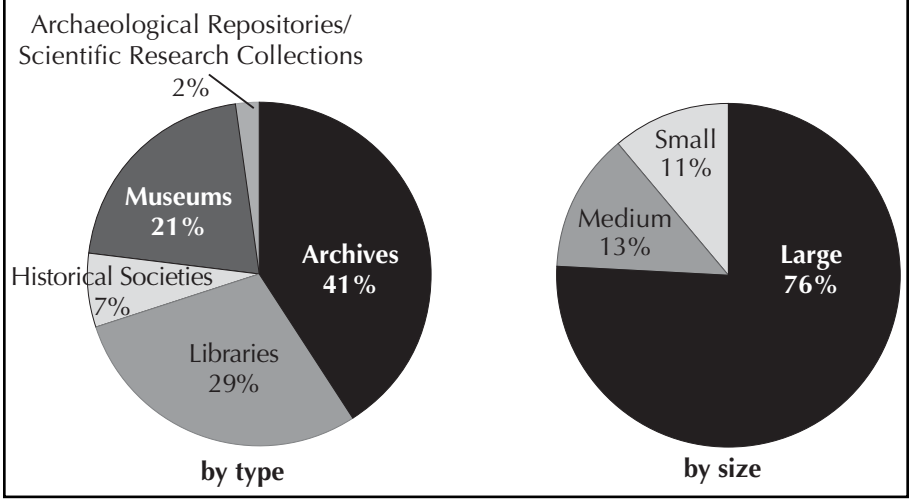
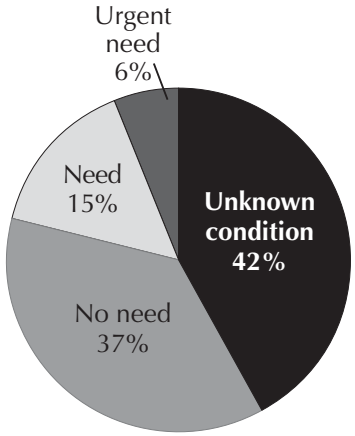


Fig. 4.22 Condition of Photographic Items



Photographic Collections

Photograph formats are organized by media that have similar preservation needs. Black and white negatives are further divided into "pre-1950" and "post-1950" because cellulose nitrate and cellulose acetate—highly unstable photographic mediums—were more commonly used in the late nineteenth century and first half of the twentieth century, while the comparatively more stable films such as polyester have been more common since 1950. Formats include: black and white prints; black and white film negatives, pre-1950; black and white film negatives, post-1950; color prints/negatives/positives; cased objects (such as daguerreotypes, ambrotypes, tintypes); glass plate negatives/lantern slides; and other photographic collections.

There are 727 million photographic items being cared for by U.S. collecting institutions. Archives care for 41% or almost 300 million photographic items; libraries hold 29%, museums hold 21%, historical societies hold 7%, and archaeological repositories/scientific research collections hold 2% (figure 4.21). Photographic collections, including microfilm/microfiche, are common in all U.S. collecting institutions: 96% of archives, 93% of historical societies, 90% of museums, 71% of libraries, and 62% of archaeological repositories/scientific research collections have photographic items in their collections. Large institutions take preservation responsibility for about three-quarters of photo-

Fig. 4.23 Condition of Photographic Items (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Microfilm and Microfiche	1 billion	37%	56%	6%	1%
Black and white prints	251.5 million	33%	44%	19%	5%
Black and white negatives (pre-1950)	57 million	27%	38%	26%	9%
Black and white negatives (post-1950)	123.8 million	23%	47%	17%	13%
Color prints, negatives, and positives	67.5 million	24%	48%	25%	3%
Cased objects	0.7 million	47%	28%	21%	4%
Glass plate negatives and lantern slides	9.7 million	34%	40%	21%	5%
Other photographs	194 million	73%	21%	2%	3%

graphic materials in the U.S., while medium-sized institutions care for 13%, and small institutions care for 11%. About a third of photographic collections are held in nonprofit institutions, and another third are held in state-governed institutions; almost one quarter is held by federal institutions.

More than 40% of photographic collections are in unknown condition (figure 4.22), 37% are in no need, 15% are in need, and 6% are in urgent need. At archives, 56% of photographs are in unknown condition, while at historical societies the figure is 50%. Almost 40% of photographs in libraries, 21% in museums, and 14% in archaeological repositories/scientific research collections are in unknown condition. By type of institution, almost all have close to 20% of their photographic collections in need (with the exception of archives, which have 6% in need) and about 5% in urgent need. Viewed by size of institution, large institutions, which hold the greatest number of photographic items, have the highest percentage in unknown condition at 46%, need at 9%, and urgent need at 2%. The data by governance does not vary significantly from the national average, except for tribal-governed institutions, which have 10% in unknown condition, 76% in no need, 12% in need, and 1% in urgent need.

Figure 4.23 shows the data on photographic materials by specific type. The quantities will not add to the total of 727 million items because some institutions were not able to report by specific category and instead reported total photographic material holdings. Institutions were instructed to include digital and inkjet prints in the "other" category, and these items account for a large portion of collections in this category. Some institutions reported digital photographs in this category and, since they did not indicate what media the digital photographs are stored on, it is not possible to move their responses to the digital material category where they should have been recorded. Therefore, these are included in "other photographic collections" as well. Black and white prints account for the greatest number of photographic items, after microfilm/microfiche. There are more than 57 million black and white negatives created before 1950, which includes some on highly unstable photographic materials; some of it (cellulose nitrate) is flammable if not stored in the proper conditions. Nine percent are in urgent need and, most significantly, 27% are in unknown condition. Black and white negatives, post-1950, have the greatest urgent need at 13%, and almost half of cased objects are in unknown condition.

Moving Image Collections

Moving image collections include motion picture film, magnetic tape (e.g., Beta video, VHS video, digital), disk (e.g., laser, CD, DVD, minidisk), and other moving image collections. The quantity of moving image collections can be recorded in various ways—for example, in feet of

Fig. 4.24 Institutions Care for 40 Million Moving Image Items

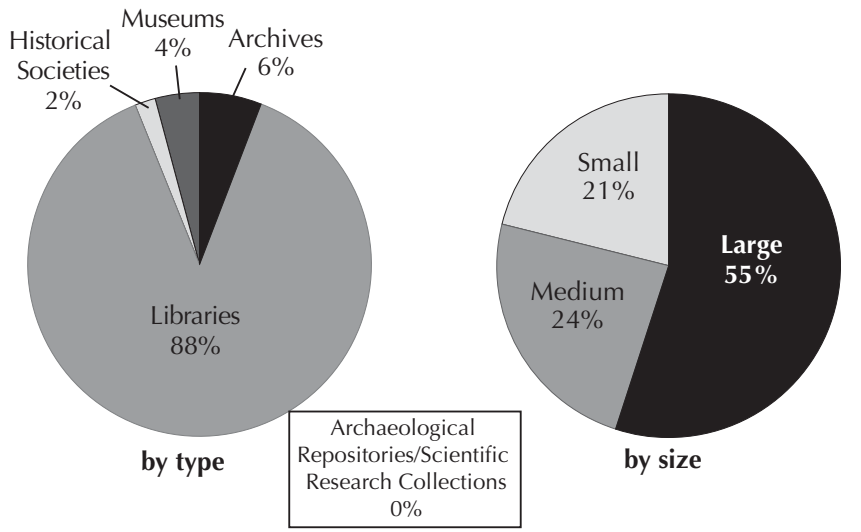


Fig. 4.25 Condition of Moving Image Items

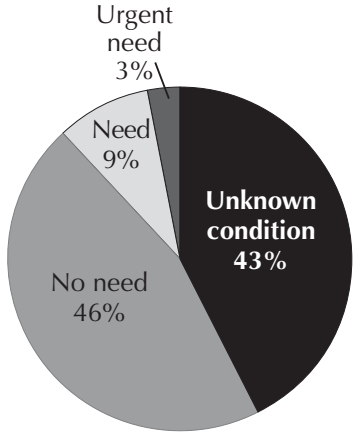


Fig. 4.26 Condition of Moving Image Items (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Motion picture film	5.9 million	40%	32%	19%	9%
Magnetic tape	23 million	41%	49%	8%	2%
Disk	10.7 million	47%	49%	3%	1%
Other moving image items	0.3 million	89%	9%	1%	0%

film. Moving Images and Recorded Sound Working Group members discussed the best way to quantify these media and decided that for the ease of the majority of respondents, most types of collections should be counted by item, such as reels or tapes.

There are 40 million moving image items being cared for in the U.S. Figure 4.24 shows that 88% are in the care of libraries, 6% are in archives, 4% in museums, 2% in historical societies, and less than 1% in archaeological repositories/scientific research collections. Moving image collections are in 86% of archives, 78% of libraries, 63% of historical societies, 52% of museums, and 30% of archaeological repositories/scientific research collections. Large institutions hold 55% of moving image collections, while 24% reside in mid-sized institutions and 21% are held by small institutions. More than half (57%) are held by institutions under county/municipal governance and 19% by state, 17% by nonprofit, 7% by federal, and 1% by tribal-governed institutions.

The condition of moving image collections includes 43% in unknown condition, 46% in no need, 9% in need, and 3% in urgent need (figure 4.25). Viewed by type of institution, libraries, which hold the majority of moving image collections (almost 36 million items), cite that 45% are in unknown condition. Museums claim the greatest need (22%) and urgent need (11%). By size, large institutions—dominated by libraries—have 51% of moving image collections in unknown condition, 8% in need, and 3% in urgent need. The results from libraries also explain the high percentage of moving images held by county/municipal governed institutions. County/ municipal institutions have 44% in unknown condition, 6% in need, and 2% in urgent need.

Heritage Health Index survey question D10 asked what is included in institutions' preservation programs, and only 23% of institutions indicated they are involved in the preservation of audio-visual media and play-back equipment. This would include making preservation copies of materials and maintaining equipment without which older formats of moving image and recorded sound collections could not be accessed. At 8% of institutions, preservation of audio-visual media is done by an external provider. Most significantly, at 46% of institutions, no such preservation activities are taking place. (Respondents also had the option of selecting not applicable; 25% did so.).

Fig. 4.27 Institutions Care for 46 Million Recorded Sound Items

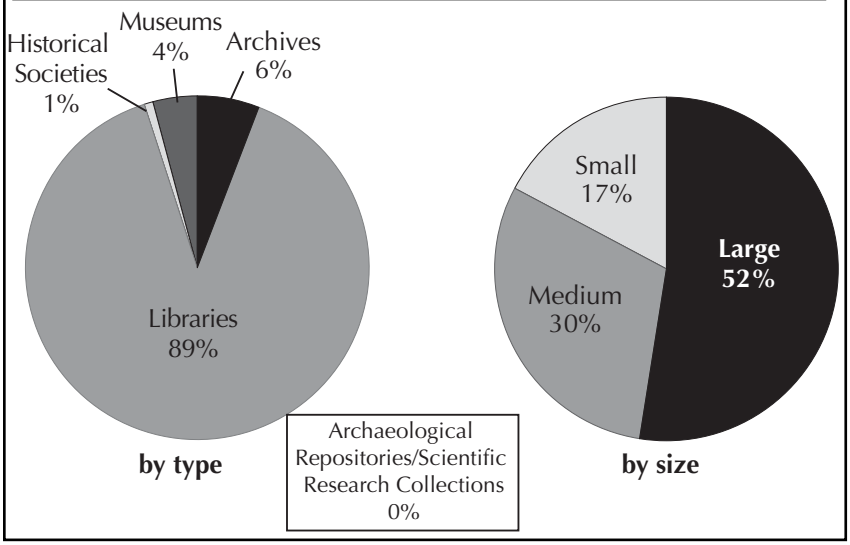


Figure 4.26 shows the quantity and condition of specific types of moving image collections. While magnetic tape is more prevalent, accounting for 58% of all moving image items, film is in the greatest

Fig. 4.28 Condition of Recorded Sound Items

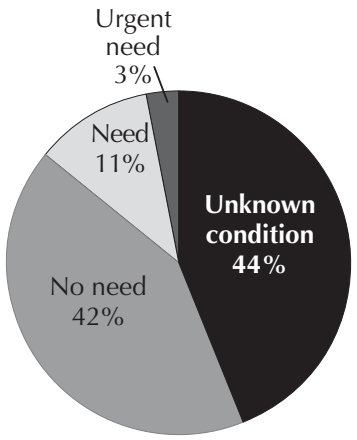


Fig. 4.29 Condition of Recorded Sound Items (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Grooved media	9.6 million	59%	23%	13%	6%
Magnetic media	21.5 million	30%	52%	16%	2%
Optical media	12.4 million	52%	43%	2%	3%
Digital media	0.4 million	61%	36%	3%	0%
Other recorded sound items	0.2 million	74%	8%	15%	3%

need, with almost one-fifth in need and 9% in urgent need. Other moving image collections include film loops, filmstrips, film slides, and unspecified collections.

Recorded Sound Collections

Recorded sound collections include grooved media (e.g., cylinder, phonodisk), magnetic media (e.g., cassette, open reel tape, DAT), optical media (e.g., CD, DVD), digital media (e.g., MP3s), and other recorded sound collections. All collections are counted by item.

U.S. collecting institutions have taken a responsibility to preserve 46 million recorded sound collections items. The distribution of these collections is similar to that of moving image collections. Most recorded sound items are held by libraries (89%), with the remaining held by archives (6%), museums (4%), historical societies (1%), and archaeological repositories/scientific research collections (less than 1%) (figure 4.27). Recorded sound collections are in 84% of archives, 76% of libraries, 64% of historical societies, 50% of museums, and 26% of archaeological repositories/scientific research collections. Large institutions hold 52%; medium-sized institutions hold 30%; and small institutions have 17%. Slightly more than a third are held by state and county/municipal institutions, 20% by nonprofit institutions, 8% by federal institutions, and less than 1% by tribal-governed institutions.

The condition is not known for 44% of recorded sound items—more than 20 million items (figure 4.28). Forty-two percent are in no need, 11% are in need, and 3% are in urgent need. When viewed by institutional type, libraries and historical societies both have about 46% in unknown condition, while archives and museums have about 30%. Archives have the greatest percentage in need at 43%, followed by museums and archaeological repositories/scientific research collections, both at 24%. Museums have the most recorded sound collections in urgent need at 9%. Large institutions lead in having recorded sound items in unknown condition (55%), but small institutions do not know the condition of 41% of their recorded sound collections. Small institutions cite the greatest needs for recorded sound, with 17% in need and 4% in urgent need. By governance, conditions are relatively close to the national average, with the exception of federal institutions, which have 23% of recorded sound in need and 15% in urgent need, and tribal-governed institutions, which have 83% of their collections in unknown condition.

Recorded sound is divided by specific type of collections in figure 4.29. The quantities total slightly less than 46 million items because some institutions could only report totals for their collections. Magnetic media accounts for the largest portion of recorded sound, has the most condition known, and has one of the highest percentages in need at 18% (16% need, 2% urgent need). Grooved and digital media are the most likely to be in unknown condition. Institutions were instructed to include wire and dictabelts in the

Fig. 4.30 Institutions Care for 9 Million Digital Material Items

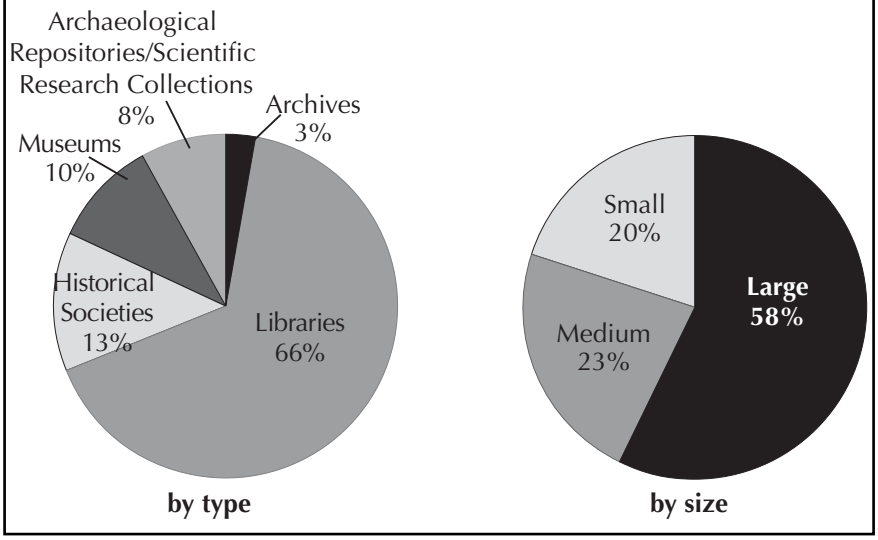
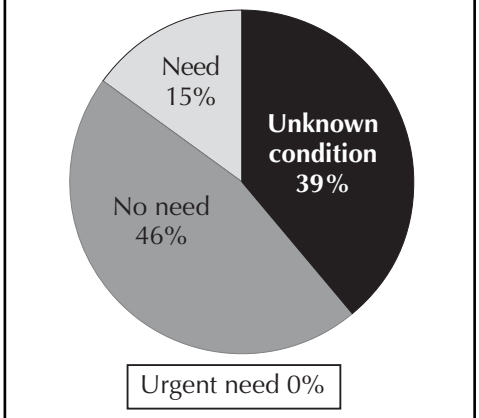


Fig. 4.31 Condition of Digital Material Items



"other recorded sound collections," and these formats dominate the count in the category. "Other" also includes music box disks and player piano rolls.

Digital Materials

The Heritage Health Index is the first survey to document the condition of digital collections at all institutions that hold them; this is particularly significant in the case of digital materials, because they are increasingly larger portions of collecting institutions' holdings and pose new, unique preservation challenges. Digital materials include floppy disks, other disks, CD-R/DVD-R, data tape, online collections (to be recorded in files), and other digital collections. The survey's Frequently Asked Questions asked survey respondents to carefully consider whether digital or digitized materials are items they take a preservation responsibility to maintain. For example, it was recommended that most electronic material made available at an institution through a subscription not be recorded in the survey, unless the institution maintains the master digital files for the resource.

While digital materials could have been quantified in bytes of information, Working Group members concluded it would be easiest for most institutions to count digital materials by item. Counts of physical items, such as floppy disks or CDs, are easily understood, whereas counts of online files are more complex. An online file could have one piece of information or thousands of bytes of information in it. To get a better understanding of the condition of physical items that hold digital information, online files are considered separately from digital material on physical formats.

U.S. institutions have taken preservation responsibility for 9 million physical items that store digital materials. Two-thirds reside in libraries, 13% in historical societies, 10% in museums, 8% in archaeological repositories/scientific research collections, and 3% in archives (figure 4.30). Including online files, digital materials are in 73% of archives, 58% of libraries, 55% of archaeological repositories/scientific research collections, 44% of historical societies, and 43% of museums. Large institutions care for 58% of digital materials; the remaining are at mid-sized institutions (23%) and small institutions (20%). About half of digital materials are held by state institutions (48%), 30% by county/municipal, 18% by nonprofit, 3% by federal, and 1% by tribal-governed institutions.

The condition of digital material items is illustrated in figure 4.31; 39% are in unknown condition, 46% are in no need, 15% are in need, and less than 1% are in urgent need. The percentage in unknown condition ranges from 3% at historical societies to 50% at libraries. The percentage in need also covers a broad range, with 86% in need at historical societies and 2% in need at libraries. Perhaps if libraries knew the condition

Fig. 4.32 Institutions Care for 55 Million Online Files

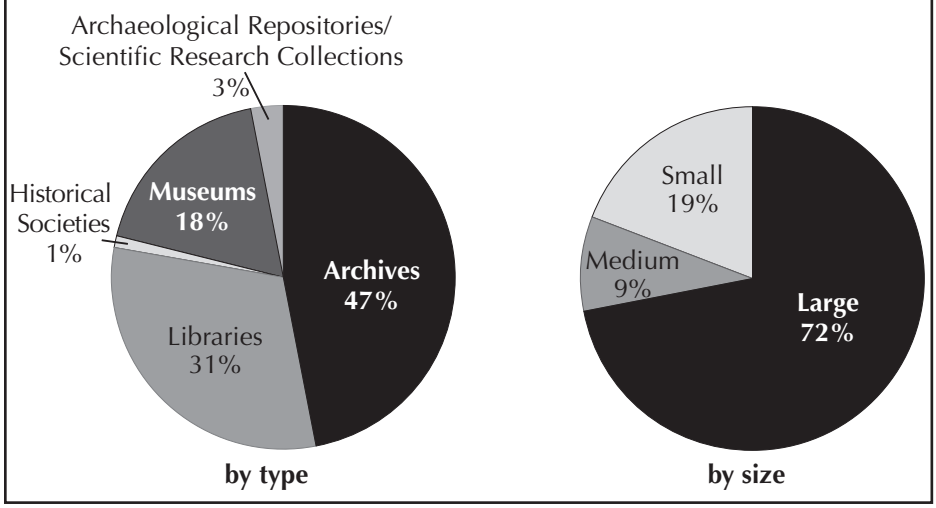
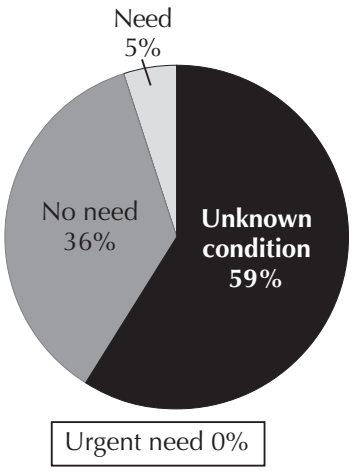


Fig. 4.33 Condition of Online Files



of more of their digital materials they, like historical societies, might have a greater percentage in need. At large institutions, 52% of digital materials are in unknown condition, 25% are in no need, 23% are in need, and less than 1% are in urgent need. At medium-sized institutions, those figures are 19% in unknown condition, 79% in no need, 3% in need, and less than 1% in urgent need. At small institutions, 26% of digital materials are in unknown condition, 69% are in no need, 5% are in need, and less than 1% are in urgent need. State institutions cite one-third of digital materials in unknown condition and 24% in need. At county/municipal institutions, 43% are in unknown condition and only 1% are in need.

Considering online collections, U.S. institutions have taken preservation responsibility for 55 million files. Archives hold 47%, libraries 31%, museums 18%, archaeological repositories/scientific research collections 3%, and historical societies 1% (figure 4.32). Nearly three-quarters are in large institutions, 9% in medium-sized institutions, and 19% in small institutions. About 40% are held by federal institutions, while nonprofit and state institutions each have about a quarter.

The condition of online files includes 59% in unknown condition, 36% in no need, 5% in need, and less than 1% in urgent need (figure 4.33). Archives, which hold the greatest number of online files (almost 26 million), have 84% of collections in unknown condition. Libraries, the second largest holders of online files, have 48% in unknown condition. Like physical digital materials, there is a range in condition; archaeological repositories/scientific research collections have the lowest percentage in unknown condition (3%) and the greatest percentage in need (64%), while archives have the highest percentage in unknown condition (84%) and one of the lowest percentages in need (2%). Large institutions have 71% of online collections in unknown condition, 26% in no need, 2% in need, and less than 1% in urgent

Fig. 4.34 Condition of Digital Materials (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Floppy disks	0.6 million	62%	30%	6%	2%
Other disks	1.6 million	91%	7%	1%	0%
CD-R/DVD-R	2 million	46%	50%	4%	0%
Data tape	0.2 million	44%	40%	15%	1%
Online collections (by files)	54.6 million	59%	36%	5%	0%
Other digital material	1.4 million	16%	76%	8%	0%

Fig. 4.35 Institutions That Include Responsibility to Preserve Digital Collections in Conservation/ Preservation Missions or Programs

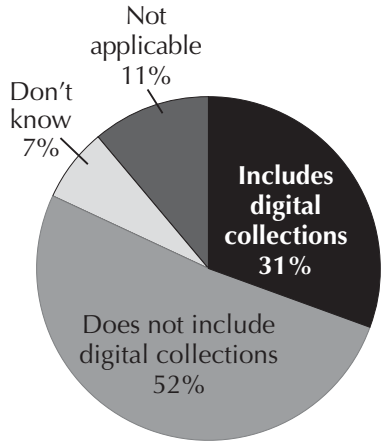
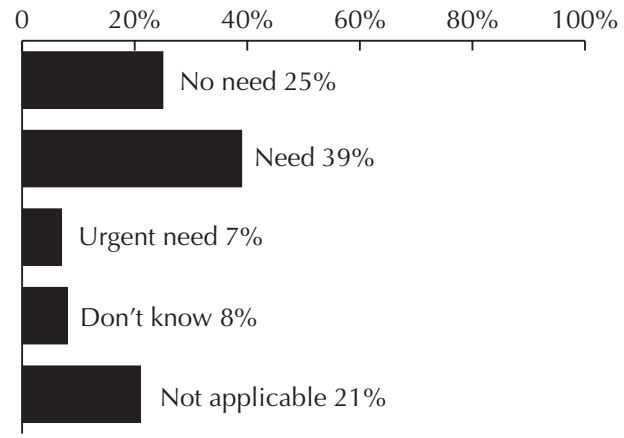


Fig. 4.36 Need for Preservation of Digital Collections

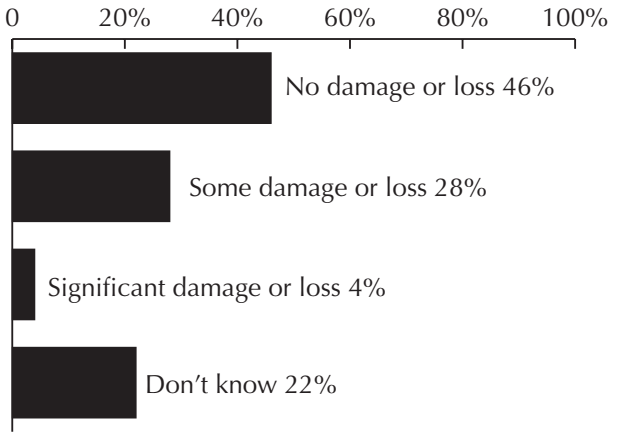


need. At mid-sized institutions these figures are 22%, 53%, 25%, and less than 1%; at small institutions they are 27% in unknown condition, 69% in no need, 3% in need, and less than 1% in urgent need.

Figure 4.34 shows results by specific types of digital materials. Online files account for the largest number of these materials, but of physical formats, CD-R/DVD-R is the most prevalent. Data tape has the greatest need at 16%. Some institutions could only provide total quantities of digital materials, so specific categories of digital materials will not total 9 million. Other digital collections include databases, e-books, and files specified by content rather than the media on which that content is held.

Because digital is a relatively new format, the Electronic Records and Digital Collections Working Group did not expect to find many institutions engaged in the preservation of digital materials. However, they recommended that the Heritage Health Index gauge how many institutions have recognized that digital materials should be part of their preservation programs. Survey question D11 asked, "Does your institution's conservation/preservation mission or program include the responsibility to preserve digital collections?"[6] The responses, shown in Figure 4.35, include 31% of institutions responding they do, 52% do not, and 7% don't know; 11% stated it is not applicable for their institution. Archives (52%) and archaeological repositories/ scientific research collections (49%) are more likely to include digital materials in their preservation programs or missions than libraries (23%), historical societies (33%), and museums (36%). Digital materials are included in 47% of large institutions' preservation missions or programs, compared to 37% for medium-sized institutions and 28% for small institutions.

Fig. 4.37 Institutions with Collections Currently in Need of Treatment Due to Obsolescence of Play-back Equipment, Hardware, or Software



6. Digital collections are defined as computer-based representations of text, numbers, images, and/or sound, e.g., optical disks, Web sites, electronic books.

Fig. 4.38 Institutions Care for 21 Million Art Objects

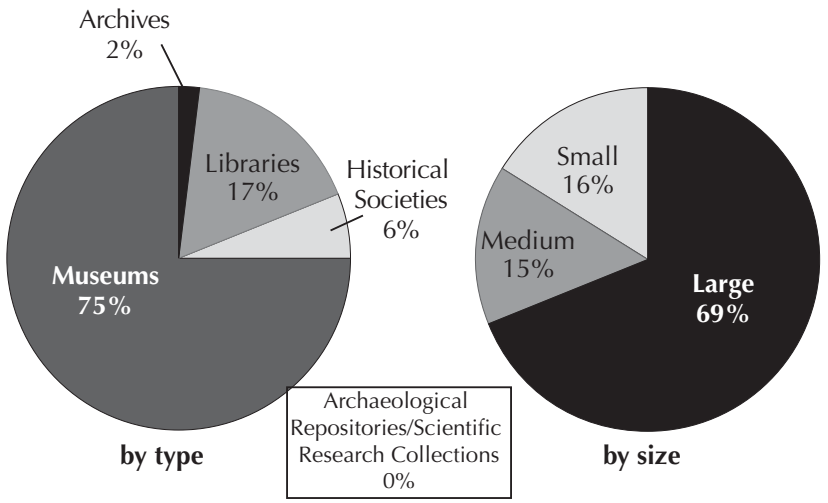
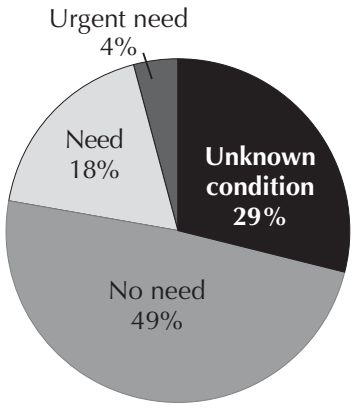


Fig. 4.39 Condition of Art Objects



Survey question D10 asked whether institutions are involved in the preservation of digital materials and electronic records, and 27% of institutions have staff involved in digital preservation, such as migrating data to current software, while 6% have external providers doing such activities. Additional questions on digital preservation asked institutions about the need to preserve digital collections (figure 4.36); 46% cited a need. Digital preservation was a topic in question D13, which asked about causes of damage. The question asked if access to collections has been lost due to obsolescence of play-back equipment, hardware, or software. The results apply to all machine-readable formats, including motion picture, recorded sound, and digital materials. While 46% of institutions have experienced no loss, 28% have had some damage, 4% have had significant damage, and 22% of institutions don't know—one of the highest "don't know" figures for this question (figure 4.37).

Art Objects

Art objects include paintings (e.g., on canvas, panel, plaster), art on paper (e.g., prints, drawings, watercolors), sculptures (including carvings, indoor and outdoor sculptures in all media), decorative arts (e.g., fine metalwork, jewelry, timepieces, enamels, ivories, lacquer), and other art objects.

U.S. collecting institutions care for 21 million art objects. Most are held by museums (75%), while libraries hold 17%, historical societies 6%, archives 2%, and archaeological repositories/scientific research collections less than 1% (figure 4.38). Eighty-six percent of museums have art objects in their collections, as do 83% of historical societies, 74% of archives, 44% of libraries, and 33% archaeological repositories/scientific research collections. Large institutions hold nearly 70% of art objects, followed by 16% at small institutions and 15% at medium-sized institutions. More than half of art object collections are in nonprofit organizations (54%); 30% are in state organizations; and the remaining amounts are split between federal (7%) and county/municipal institutions (8%). Tribal-governed institutions account for less than 1% of art object holdings.

Figure 4.39 shows that 29% of art objects are in unknown condition, 49% are in no need, 18%

Fig. 4.40 Condition of Art Objects (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Paintings	1.5 million	22%	49%	23%	7%
Art on paper	12.4 million	29%	48%	19%	4%
Sculptures	0.7 million	20%	55%	23%	3%
Decorative arts	3.1 million	38%	42%	16%	4%
Other art objects	1.4 million	28%	58%	13%	1%

Fig. 4.41 Institutions Care for 48 Million Historic and Ethnographic Objects

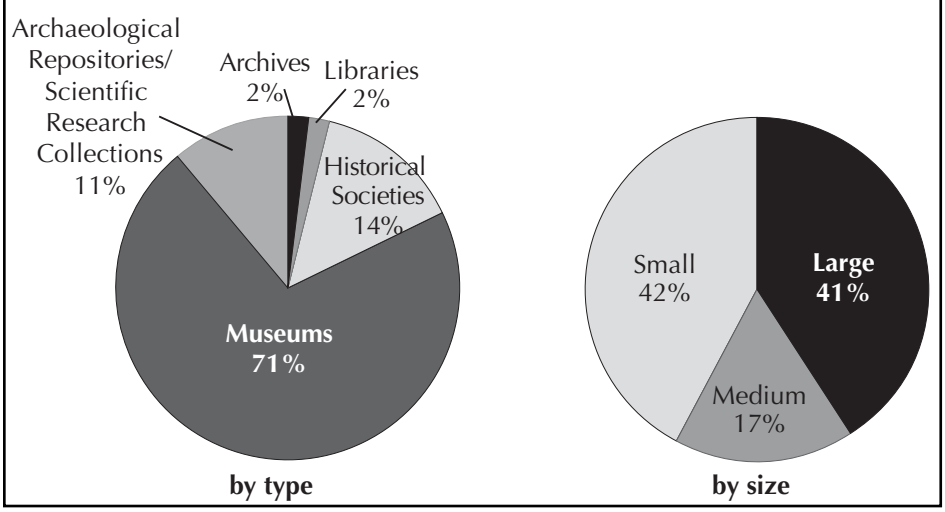
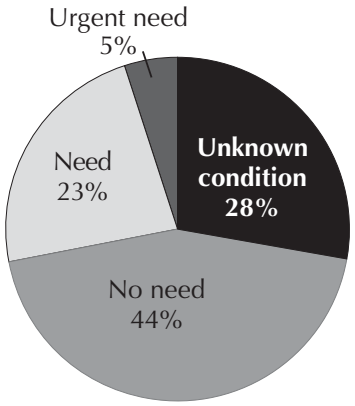


Fig. 4.42 Condition of Historic and Ethnographic Objects



are in need, and 4% are in urgent need. Archives have the greatest percentage in unknown condition at 56%, followed by historical societies at 45%. Museums, libraries, and archaeological repositories/scientific research collections have close to the national average of 29% in unknown condition. Archaeological repositories/scientific research collections have the highest percentage in urgent need at 11%. Archives have the least in need with 13% in need and 2% in urgent need, while the remaining types of institutions are close to the average of 18% in need and 4% in urgent need. Small institutions do not know the condition of 36% of art objects (more than at institutions of other sizes) and also have the most in need at 20% in need and 7% in urgent need. Large institutions, which hold almost 15 million art objects, have 30% in unknown condition, 17% in need, and 3% in urgent need.

Viewed by specific types of collections (figure 4.40), art on paper represents the largest portion of art objects but paintings are in the greatest need. The total of specific types is under 21 million objects because some institutions could only report total holdings. Other art objects include artists' materials, such as woodblocks or other print plates, and mixed media such as collage or folk art.

Historic and Ethnographic Objects

Creating a list of artifacts to include in this category was a great challenge. In other categories, collections of like media are grouped together. However, many historic collections are arranged thematically, making it difficult for institutions to separate out specific types such as wooden objects or metal objects. The Working Group on Furniture, Textiles, and Historic Objects settled on a mixed approach of media and subject matter. The specific types for historic and ethnographic objects include textiles (including flags, rugs, costumes, and accessories); ceramics and glass artifacts (including stained glass); ethnographic and organic collections (e.g., leather, skin, baskets, bark); metalwork (e.g., arms and armor, medals, coins); furniture; domestic artifacts (including frames, household tools/machines, dolls/toys, musical instruments); science, technology, agricultural, and medical artifacts (including transportation artifacts); and other historic and ethnographic objects.

U.S. collecting institutions care for 48 million historic and ethnographic objects, with 71% at museums, 14% at historical societies, 11% at archaeological repositories/scientific research collections, and 2% at both archives and libraries (figure 4.41). Historic and ethnographic objects are in 95% of historical societies, 90% of museums, 73% of archives, 35% of archaeological repositories/scientific research collections, and 33% of libraries. Small institutions hold 42% of historic and ethnographic objects (20 million items), while large institutions hold 41% and medium-sized hold the remaining 17%. Nonprofit

Fig. 4.43 Condition of Historic and Ethnographic Objects (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Textiles	9.5 million	26%	39%	30%	5%
Ceramics and glass artifacts	10.8 million	21%	55%	22%	2%
Ethnographic and organic collections	6.8 million	23%	40%	27%	9%
Metalwork	3.2 million	35%	45%	17%	4%
Furniture	1.6 million	27%	41%	26%	6%
Domestic artifacts	7.1 million	29%	44%	21%	6%
Science, technology, agricultural, medical artifacts	4.7 million	28%	45%	23%	5%
Other historic and ethnographic objects	3.3 million	44%	35%	16%	5%

organizations hold most historic and ethnographic objects at 57%, followed by state at 27%, federal at 8%, county/municipal at 7%, and tribal-governed institutions at less than 1%.

Twenty-eight percent of historic and ethnographic objects are in unknown condition, 44% are in no need, 23% in need, and 5% in urgent need (figure 4.42). Historic and ethnographic objects are second, behind unbound sheets cataloged by item, as the collections in the greatest need (figure 4.9). Museums, which hold the largest number of historic and ethnographic objects (more than 34 million), have similar condition figures to the national average, with the exception that 6% are in urgent need. At historical societies, 32% are in unknown condition, 38% are in no need, 24% are in need, and 6% are in urgent need. Small institutions have 35% of historic and ethnographic objects in unknown condition, 36% in no need, 24% in need, and 6% in urgent need. Large institutions have 25% in unknown condition, 47% in no need, 24% in need, and 4% in urgent need. Results by governance are close to the national average, except tribal-governed institutions, which have 59% in unknown condition, 23% in no need, 14% in need, 4% in urgent need.

Figure 4.43 shows historic and ethnographic objects by specific type. Ceramic and glass artifacts, followed by textiles, are in the greatest numbers. Ethnographic/organic collections have the highest percentage in urgent need at 9% and in combined need and urgent need at 36%. Specific types do not add to the total of 48 million items because some institutions could only record historic and ethnographic objects in total. Other historic and ethnographic objects include architectural elements or models and mixed collections identified by subject matter, such as advertising or promotional items or war artifacts.

Fig. 4.44 Institutions Care for 198 Million Archaeological Items

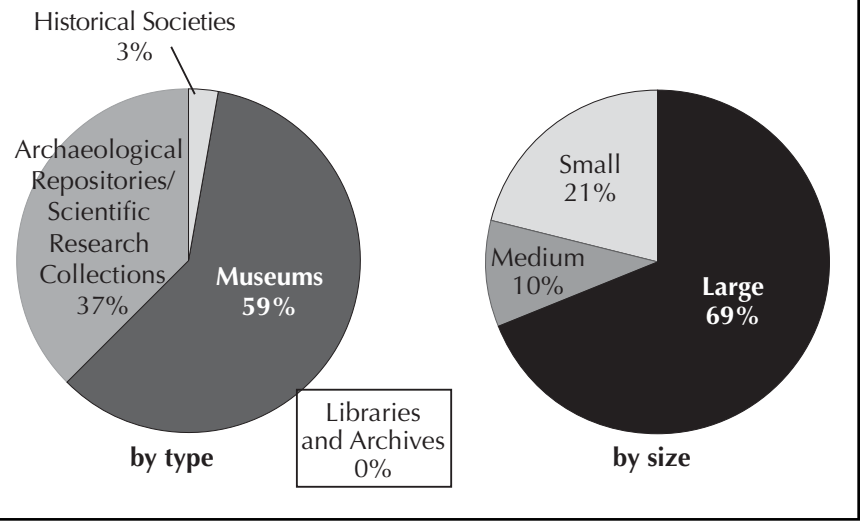


Fig. 4.45 Condition of Archaeological Collections (individually cataloged)

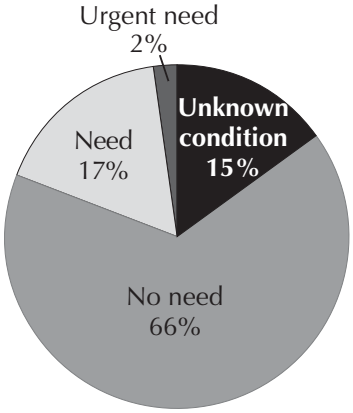
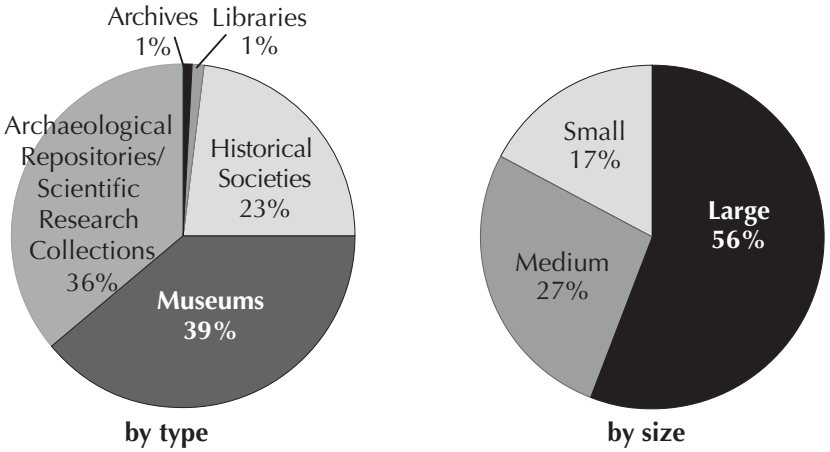


Fig. 4.46 Institutions Care for 2.6 Million Cubic Feet of Archaeological Collections



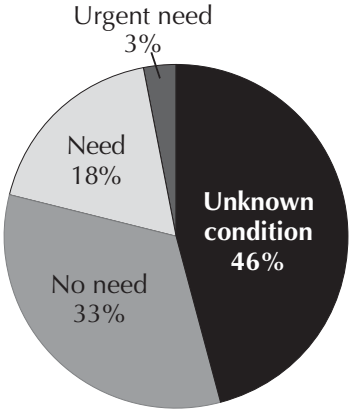
Archaeological Collections, Individually Cataloged

Archaeological collections recorded in individual items and cubic feet are considered separately. Each category included two specific types: organic-based material (e.g., textile, fiber, wood, bone, shell, feather) and inorganic material (e.g., ceramic, glass, metal, plastics).

U.S. collecting institutions care for 198 million archaeological collections items. Museums hold 59% of these collections, archaeological repositories/scientific research collections 37%, historical societies 3%, and libraries and archives less than 1% (figure 4.44). Combining individually and bulk cataloged archaeological collections, half of museums have such holdings, as do 45% of historical societies, 36% of archaeological repositories/scientific research collections, 22% of archives, and 8% of libraries. Large institutions have 69% of archaeological collections items, small institutions have 21%, and medium-sized institutions have 10%. State institutions hold 68% of archaeological collections items; federal institutions hold 20% and nonprofit organizations hold 11% (county/municipal and tribal-governed institutions have less than 1%).

The condition of archaeological collections items includes 15% in unknown condition, 66% in no need, 17% in need, and 2% in urgent need (figure 4.45). Museums, which hold approximately 118 million archaeological collections items, have 21% in unknown condition, 61% in no need, 15% in need, and 3% in urgent need. Archaeological repositories/scientific research collections, which hold 74 million archaeological collections items, have 3% in unknown condition, 77% in no need, 19% in need, and less than 1% in urgent need. The condition of archaeological collections items at large institutions is close to the national average; at small institutions, 11% are in unknown condition, 85% in no need, 4% in need, and less than 1% in urgent need. Nonprofit institutions have the greatest percentage in unknown condition at 33%, and federal institutions have the greatest percentage in combined need and urgent need at 20% (need 15% and urgent need 5%).

Fig. 4.47 Condition of Archaeological Collections (bulk cataloged)



Archaeological Collections, Bulk Cataloged

Archaeological collections cataloged in bulk, such as potsherds or other small items,

Fig. 4.48 Condition of Archaeological Collections (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Individually cataloged organic-based material	37.6 million	24%	49%	25%	2%
Individually cataloged inorganic-based material	160.3 million	13%	71%	15%	2%
Bulk cataloged organic-based material	0.7 million ft^3	48%	33%	16%	3%
Bulk cataloged inorganic-based material	1.9 million ft^3	46%	33%	18%	4%

total 2.6 million cubic feet. Museums hold 39%, archaeological repositories/scientific research collections hold 36%, historical societies hold 23%, and archives and libraries each hold 1% (figure 4.46). By size, large institutions have 56% of archaeological collections cataloged in bulk, 27% are held by mid-sized institutions, and 17% are held at small institutions. Nonprofit institutions hold 44% of archaeological collections cataloged in bulk; state institutions hold 36%; federal and county/municipal hold 9% each; and tribal-governed institutions hold 2%.

Almost half of archaeological collections cataloged in bulk are in unknown condition (46%), 33% are in no need, 18% are in need, and 3% are in urgent need (figure 4.47). Historical societies have the greatest percentage in no need at 83%, followed by libraries with 72%. Only 24% of archaeological repositories/scientific research collections have archaeological collections cataloged in bulk in unknown condition. Libraries cite the highest percentage in urgent need, but this only accounts for about 3,000 cubic feet of collections since libraries have such small holdings in this area. Large institutions report 56% of archaeological collections cataloged in bulk in unknown condition, 31% in no need, 10% in need, and 3% in urgent need. Nonprofit institutions, which hold most of the archaeological collections cataloged in bulk, have 61% in unknown condition, 24% in no need, 13% in need, and 3% in urgent need. Federal institutions have 46% in unknown condition, 37% in no need, 16% in need, and 1% in urgent need. State institutions have 32% in unknown condition, 37% in no need, 26% in need, and 4% in urgent need.

Figure 4.48 shows the specific types for archaeological collections. Since these types are broadly defined, an "other" category is not included. Individually cataloged organic material is in the greatest need. The level of need may be the same with bulk cataloged organic materials, if the condition were known.

Natural Science Specimens

Natural science specimens include zoological specimens (dry, glass slide, and frozen); zoological specimens (wet preparations); botanical speci-

Fig. 4.49 Institutions Care for 820 Million Natural Science Specimens

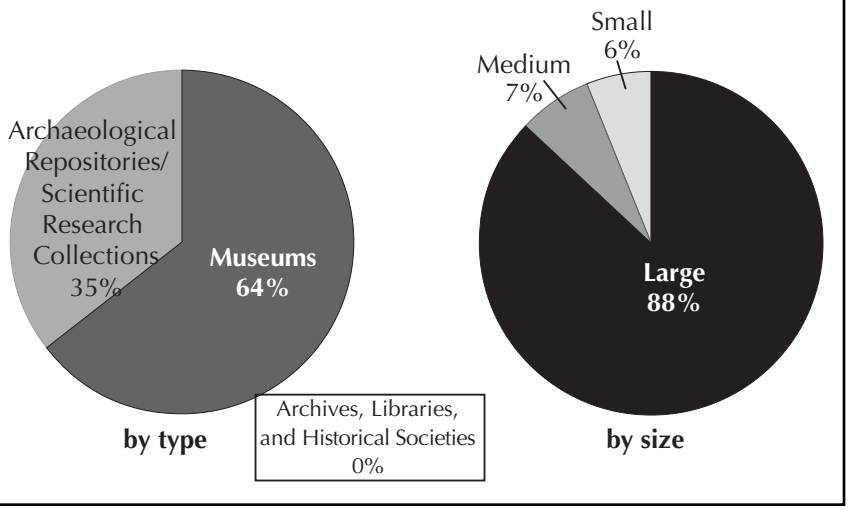
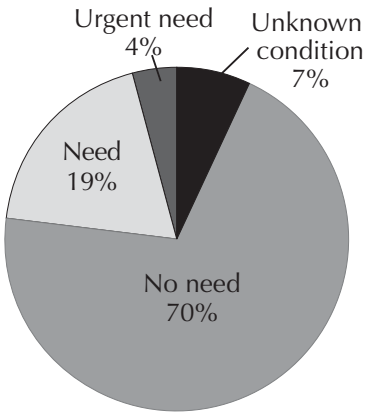


Fig. 4.50 Condition of Natural Science Specimens



mens (dry, glass slide, frozen, culture, palynology); botanical specimens (wet preparations); geological specimens; vertebrate paleontological specimens; invertebrate paleontologial specimens; paleobotany specimens; and other natural science specimens. The Natural Science Working Group advised that wet preparations be separated from other preparations because of the specific preservation needs of these items. Institutions were instructed to record all collections in items, not in lots. In reviewing some of the figures for natural science specimens, some of Heritage Preservation's advisers found the quantities to be lower than expected. RMC followed up with several institutions they suspected had reported collections in lots, and some submitted corrections; however, it is possible that other such errors exist in this data.

Fig. 4.51 Condition of Natural Science Specimens (by specific type)

	Quantity	In unknown condition	In no need	In need	In urgent need
Zoological specimens (dry, glass slide, and frozen)	231.5 million	4%	77%	15%	3%
Zoological specimens (wet preparations)	308.4 million	3%	76%	17%	3%
Botanical specimens (dry, glass slide, and frozen)	118.5 million	11%	69%	18%	2%
Botanical specimens (wet preparations)	0.3 million	19%	38%	41%	2%
Geological specimens	7 million	18%	65%	15%	2%
Vertebrate paleontological specimens	30.5 million	10%	50%	31%	9%
Invertebrate paleontological specimens	109.1 million	11%	52%	28%	8%
Paleobotany specimens	11.7 million	15%	25%	48%	13%
Other natural science specimens	3 million	75%	14%	11%	0%

U.S. collecting institutions care for 820 million natural science specimens. Museums hold 64% and archaeological repositories/scientific research collections hold 35%, with archives, libraries, and historical societies holding less than 1% each (figure 4.49). These collections are divided among 86% of archaeological repositories/scientific research collections, 38% of museums, 27% of historical societies, 9% of archives, and 7% of libraries. Large institutions hold 88% of natural science specimen collections, medium-sized institutions hold 7%, and small institutions hold 6%. State institutions hold most natural science specimens at 47%, followed by nonprofit institutions at 32%. Federal institutions hold 15%.

Of all collections, natural science specimens have the smallest number in unknown condition (7%) (figure 4.50). Most natural science collec-

tions are in no need (70%); 19% are in need and 4% are in urgent need. At the two types of institutions that hold the most natural science specimens, museums have 9% in unknown condition, 64% in no need, 23% in need, and 4% in urgent need; archaeological repositories/scientific research collections have 2% in unknown condition, 82% in no need, 11% in need, and 4% in urgent need. Large institutions, which hold 720 million natural science specimens, have 6% in unknown condition, 71% in no need, 19% in need, and 4% in urgent need. Federal institutions have the greatest percentage in need and in urgent need (25% and 11% respectively).

Figure 4.51 shows the quantity and condition of specific natural science collections. Zoological collections (wet preparation) account for the highest number of holdings, followed by the remaining zoological collections. Paleobotany specimens are in the greatest urgent need and greatest need and urgent need combined. Other natural science specimens include unspecified items such as "herbarium collections," "rock and fossil collections," etc.

The following chapters will discuss the reasons for collections items in need or urgent need, as well as the high percentage of items in unknown condition.

Chapter 5: Collections Environment

The ideal environment includes controlled temperature and relative humidity, clean air with good circulation, controlled light sources, and freedom from biological infestation.

–IFLA Principles for the Care and Handling of Library Material, International Federation of Library Associations and Institutions, 1998

The Accreditation Commission expects that the museum…takes pro-active measures to mitigate the effects of ultraviolet light, fluctuations in temperature and humidity, air pollution, damage, (and) pests….

–A Higher Standard: Museum Accreditation Program Standards, American Association of Museums, 2005

The Heritage Health Index asked institutions to report on environmental controls in areas where the collections are held. Protection from extremes and harmful fluctuations in temperature and relative humidity, as well as from exposure to light, is fundamental to the care of collections. The exact specifications vary depending on the media or fragility of collections. The ability of institutions to provide strictly controlled collections spaces also varies and may be an unrealistic expectation for some institutions. Furthermore, even the most sophisticated climate control system may become ineffective if it is not carefully monitored and maintained. Given the length limitations of the Heritage Health Index, the Working Group members suggested that broadly stated questions would accommodate all types of collections and institutions and effectively gather data on whether institutions are considering the environmental conditions of collections.

Survey respondents were asked whether they used environmental controls to meet 1) temperature, 2) relative humidity, and 3) light level specifications for the preservation of their collections. "Specifications for preservation" was intentionally not defined to allow institutions with all levels of preservation expertise and facilities to select the response most accurate for them. As throughout the survey, response options included a mid-range between "yes" and "no"–"in some but not all areas."

Figure 5.1 illustrates the responses for temperature, relative humidity, and control of light levels. In institutions that employ environmental controls in all or some areas where collections are held, temperature is more likely to be controlled than relative humidity or light. Of the institutions in figure 5.1 that do not control temperature, relative humidity, or light levels in any areas, 26% do not have control for all three factors; figure 5.2 shows these results by type of institution.

Fig. 5.1 Institutions' Use of Environmental Controls for the Preservation of Collections

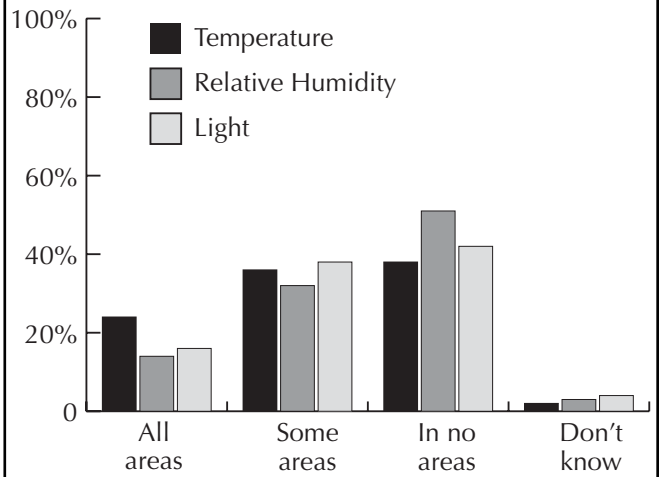


Fig. 5.2 Institutions Using No Environmental Controls for the Preservation of Collections (by type)

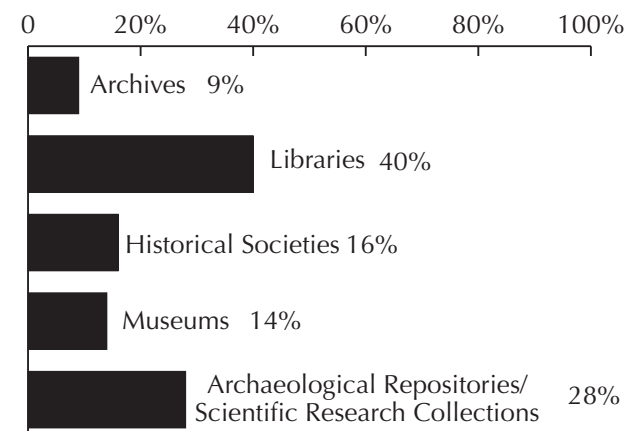


Fig. 5.3 Use of Temperature Controls for the Preservation of Collections (by type)

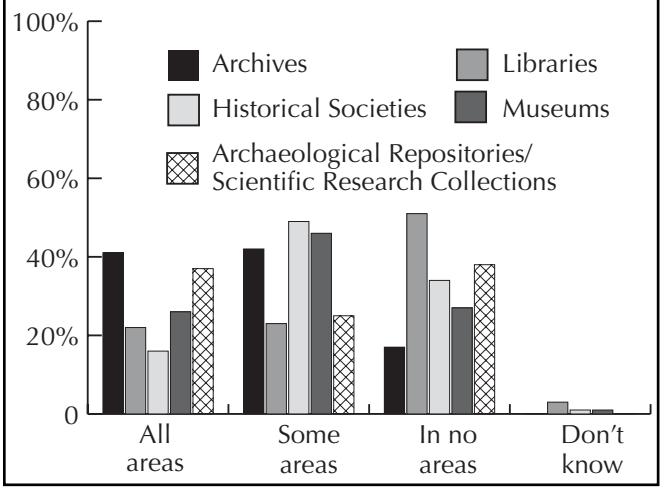


Fig. 5.4 Use of Humidity Controls for the Preservation of Collections (by type)

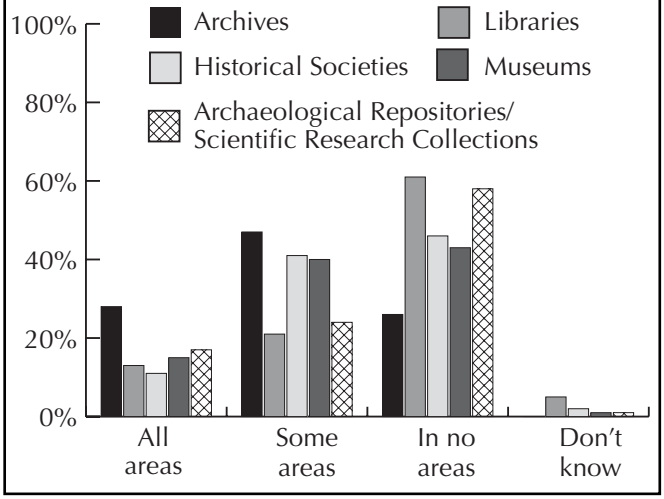
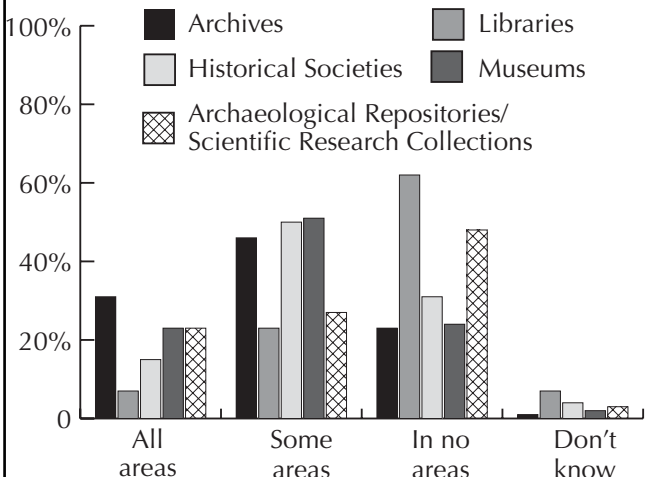


Fig. 5.5 Control of Light Levels for the Preservation of Collections (by type)



When considering each environmental factor individually (figures 5.3, 5.4, and 5.5), archives lead in providing environmental controls in all areas where collections are held. However, the results are based on a small universe of stand-alone archives; when combined with all institutions that have an archival function, the results drop: for control of temperature in all areas from 41% to 25%; for control of relative humidity in all areas from 28% to 15%; and for control of light levels in all areas from 31% to 14%. Libraries, followed by archaeological repositories/scientific research collections, were most likely not to use temperature, relative humidity, or light level controls.

The use of environmental controls correlates to size of institution (figures 5.6, 5.7, 5.8, and 5.9), with large institutions more likely to control temperature, relative humidity, and light levels in all and some areas that hold collections, and small institutions most likely not to use environmental controls in any areas. That 27% of small institutions do not control temperature, relative humidity, or light levels in any areas contributes significantly to the 26% national average. However, it is significant to note than almost one-fifth of large institutions do not use environmental controls in any areas (libraries and archaeological repositories/scientific research collections account for much of this figure).

Viewing the data by region (figure 5.10) shows institutions in the Southeast are more likely to

Fig. 5.6 Use of Temperature Controls for the Preservation of Collections (by size)

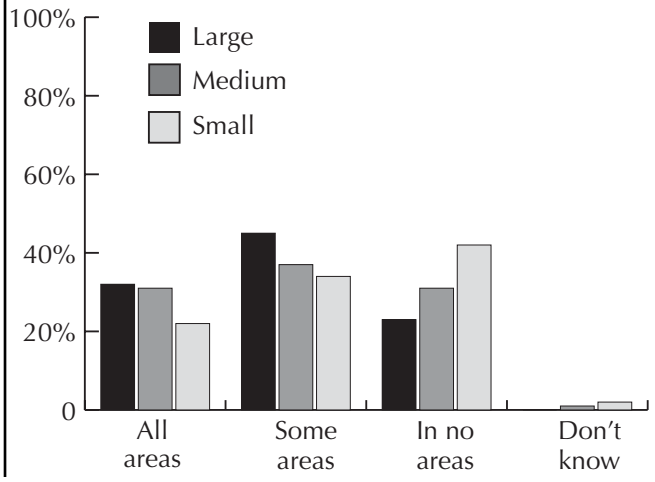


Fig. 5.7 Use of Humidity Controls for the Preservation of Collections (by size)

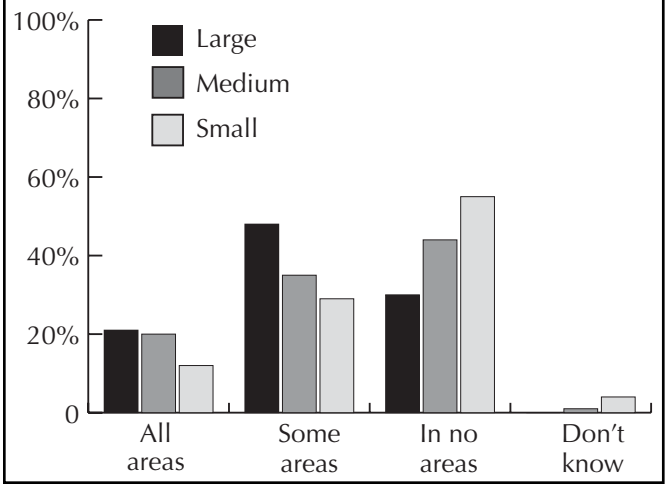


Fig. 5.8 Control of Light Levels for the Preservation of Collections (by size)

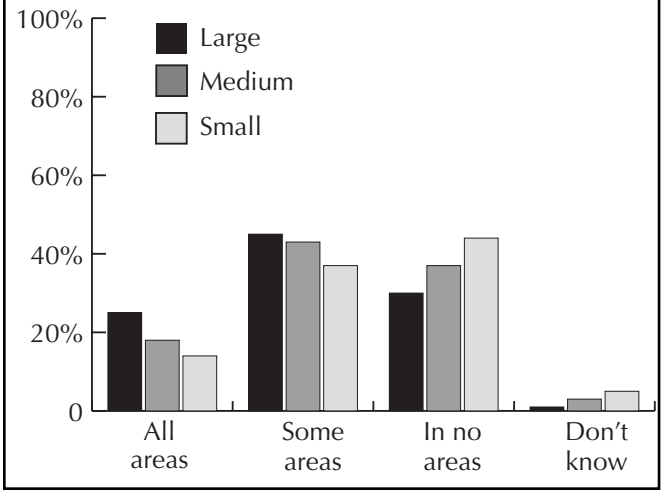


Fig. 5.9 Institutions Using No Environmental Controls for the Preservation of Collections (by size)

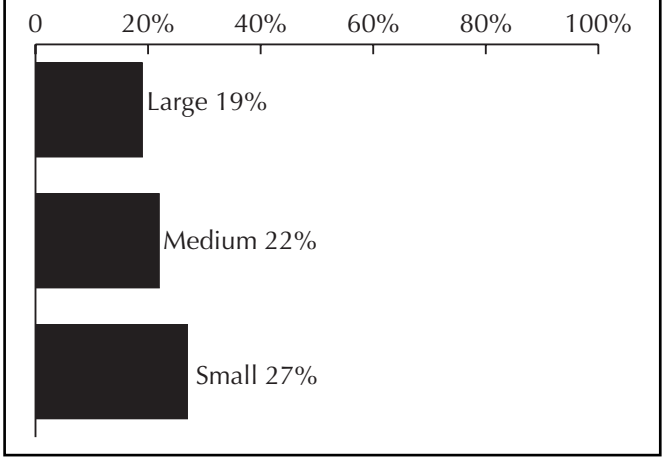
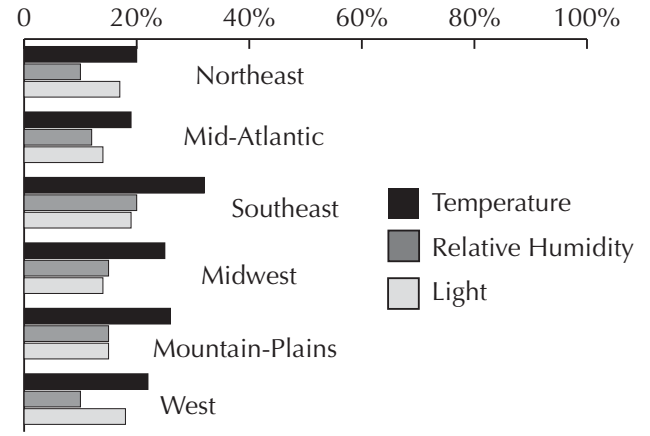


Fig. 5.10 Use of Environmental Controls in All Areas Where Collections Are Held (by region)



control temperature in all areas (32% compared with the national average of 24%) and relative humidity (20% compared with 14%). Data on the control of light levels does not differ as significantly by region.

When the data is analyzed by governance (figure 5.11), institutions under tribal governments or county/municipal governments are more likely to have no environmental controls in place for temperature, relative humidity, and light levels (41% and 38%, respectively) compared to the national average of 26%. Nonprofit and federal institutions fall below the national average with 19% and 22%, and state institutions are about on average at 25%. Question D12 in the Heritage

Fig. 5.11 Institutions Using No Environmental Controls for the Preservation of Collections (by governance)

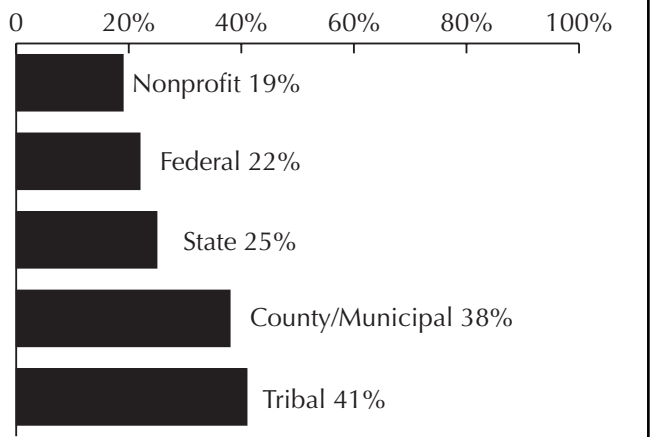
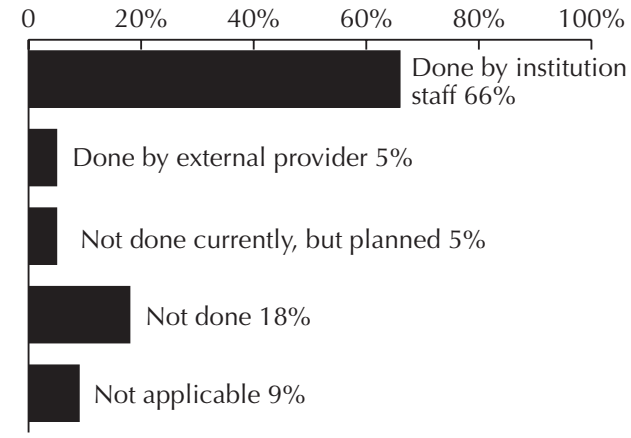


Fig. 5.12 Institutions with Urgent Conservation/Preservation Needs[2]

Environmental controls	19%
Finding aids/cataloging collections	17%
Condition surveys/assessments	14%
Conservation treatment	13%
Staff training	12%
Security	9%
Reduce exposure to light	9%
Integrated pest management	8%
Preservation of digital collections	7%

Fig. 5.13 Institutions' Conservation/ Preservation Program Includes Preventive Conservation



Health Index questionnaire asked institutions to rate various conservation/preservation activities by level of need using "no need," "need,"[1] "urgent need,"[2] "don't know," and "not applicable." The question included environmental controls (defined with examples of heating, air conditioning, de-humidifying, and humidifying) and improvements to reduce collections' exposure to light. As shown in figure 5.12, environmental controls are cited as the most urgent need at 19%; the urgent need to reduce exposure to light is 9%. When combining "need" and "urgent need" for environmental controls and reduced exposure to light, the results are 63% and 49%. About a quarter of museums and historical societies state an urgent need for environmental controls, more than other types of institutions. Historical societies have the highest urgent need to reduce light levels at 13%.

Of the institutions that do not control temperature in any areas, 67% state a need or urgent need for environmental controls, but 17% claim no need and 9% don't know, indicating that about a quarter of institutions may not appreciate the connection between environmental conditions and long-term preservation of collections. The results are only slightly more promising for relative humidity; institutions that do not control relative humidity in any areas had a combined need and urgent need for environmental controls of 71%, but 16% claim no need and 4% don't know.

Environmental controls were included in survey questions about preservation programs and causes of damage. These questions also brought in other environmental factors, such as control of airborne particulates and pests.

In survey question D10 about what is included in institutions' preservation programs, the definition for preventive conservation incorporated environmental monitoring (figure 5.13). These activities are likely to be done by institutional staff (66%) or not at all (18%). (See the "Preservation Staffing and Activities" chapter for additional analysis of this question.)

Consistent with the findings on use of environmental controls, libraries are least likely to have institutional staff involved in preventive conservation at 53%. The results are most influenced by public libraries at 45% and special libraries at 57%; 76% of academic libraries and 62% of independent research libraries have institutional staff involved in preventive conservation. The rate for archives is 88%, archaeological repositories/scientific research collections 86%, and museums 77%. The results on whether conservation/preservation programs include preventive conservation relate to size, with larger institutions more likely to be involved in preventive conservation activities.

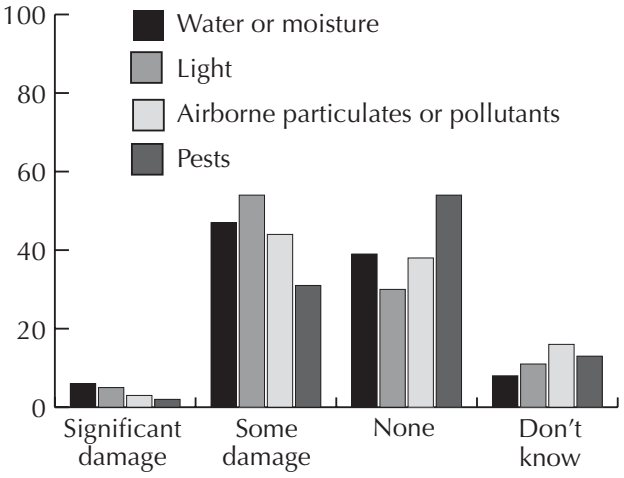
Environmental controls were also part of survey question D13, which asked institutions to

1. Need defined as improvement required to reduce risk of damage or deterioration to collections.
2. Urgent Need defined as major improvement required to prevent damage or deterioration to collections.

Fig. 5.14 Institutions Reporting Causes of Significant Damage to Collections

Improper storage or enclosure	7%
Water or moisture	6%
Light	5%
Obsolescence of playback equipment, hardware, or software	4%
Airborne particulates or pollutants	3%
Handling	3%
Pests	2%
Prior treatment(s) or restoration	2%
Vandalism	1%
Fire	.04%

Fig. 5.15 Institutions Reporting Causes of Damage to Collections from Environmental Factors



identify the causes of damage or loss of access to collections currently in need of treatment. Respondents indicated whether "no damage or loss," "some damage or loss,"[3] or "significant damage or loss"[4] has occurred. Factors included water or moisture (with examples of mold, stains, or warping), light (with examples of fading, discoloration), airborne particulates or pollutants (with examples of dust, soot), and pests. Figure 5.14 shows that water or moisture and light fall in the top four causes of significant damage (6% and 5%). When significant and some damage are combined, the figures are 53% and 59%. The data from this question underscores how prone collections can be to environmental damage; however, it should be noted that some collections might have sustained damage before coming into an institution's care.

Airborne particulates and pests have caused significant damage to collections at only 3% and 2% of institutions, respectively. When combining significant and some damage, the results are 47% and 33% (figure 5.15). However, the response "don't know" is high in these categories (16% and 13%). The level of need for integrated pest control (defined as approaches to prevent and solve pest problems in an efficient and ecologically sound manner) is among the lowest ranking urgent needs at 8% and also one of the lowest ranking needs when combining urgent and some need (46%).

Recommendation

Based on these findings, Heritage Preservation recommends that institutions give priority to finding solutions that will place as many of their collections in proper environmental conditions as possible.

3. Some damage or loss defined as change(s) in an item's physical or chemical state requiring minor treatment.
4. Significant damage or loss defined as change(s) in an item's physical or chemical state necessitating major treatment or reformatting or resulting in total loss of access.

Chapter 6: Collections Storage

Every effort must be made to minimize the level of risk facing specimens and artifacts as a result of storage and use.

–Guidelines for the Care of Natural History Collections, Society for the Preservation of Natural History Collections, 1998

Librarians must be committed to preserving their collections through appropriate and non-damaging storage….

–American Library Association Preservation Policy, American Library Association, 2001

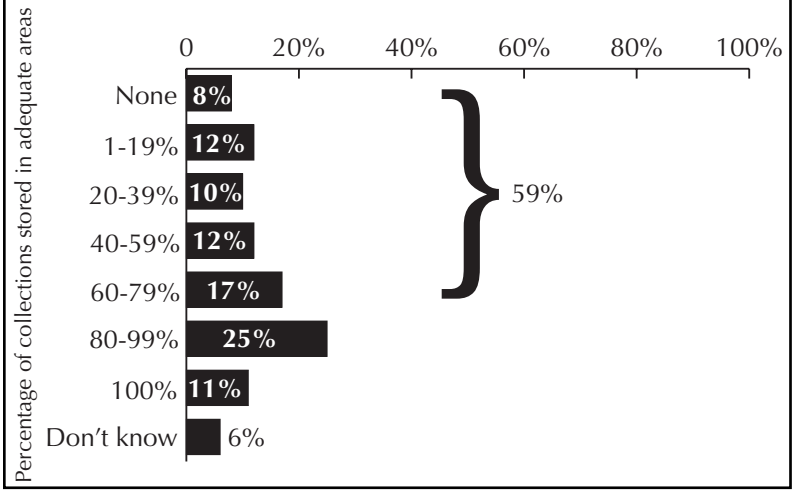
An accreditable museum must demonstrate that it allocates its space and uses its facilities to meet the needs of the collection….

–A Higher Standard: Museum Accreditation Program Standards, American Association of Museums, 2005

Storage is a critical component of preventive collections care because, with few exceptions, it is the environment in which collections are held much of the time. At archives, libraries, archaeological repositories, and scientific research collections, most collections are in held in storage areas until accessed by researchers or occasionally placed on exhibit. While museum and historical society collections are more likely to be exhibited, it is often temporary, after which they are returned to storage. Most museums and historical societies hold many more collections items than could ever be exhibited at one time.

The Heritage Health Index asked institutions to report the percentage of collections held in adequate storage, which was defined as large enough to accommodate current collections with safe access to them and appropriate storage furniture. Respondents were given a range of percentages from which to select. Given the importance of proper storage, it is troubling that only 11% of institutions have adequate storage facilities for all their collections (figure 6.1). An additional 25% have less than ideal storage–80% to 99% of collections stored in adequate areas–but even on the low end of this range, this could be considered acceptable if institutions are consistently working to improve storage conditions. The remaining institutions, 59%, have more significant storage concerns: 8% have no collections in adequate storage; 12% of institutions have only 1-19% of their collection stored properly; 10% of institutions have 20-39% in adequate storage; 12% have about half of their collection stored appropriately (40-59%); and 17% have 60-79% in adequate storage. Six percent don't know the adequacy of their storage facilities.

Fig. 6.1 Percentages of Institutions' Collections Stored in Areas Large Enough to Accommodate Them Safely and Appropriately



Seen by type of institution, museums (9%) and libraries (8%) are slightly more likely to have no collections stored in adequate areas (figure 6.2). Museums (6%) and historical societies (3%) are least likely to have 100% of their collections stored appropriately, as well as least likely to have 80%-99% stored correctly (16% for historical societies, 21% for museums). Archives (42%), libraries (47%), and archaeological repositories/ scientific research collections (44%) are more likely to have

Fig. 6.2 Institutions' Collections Stored in Areas Large Enough to Accommodate Them Safely and Appropriately (by type)

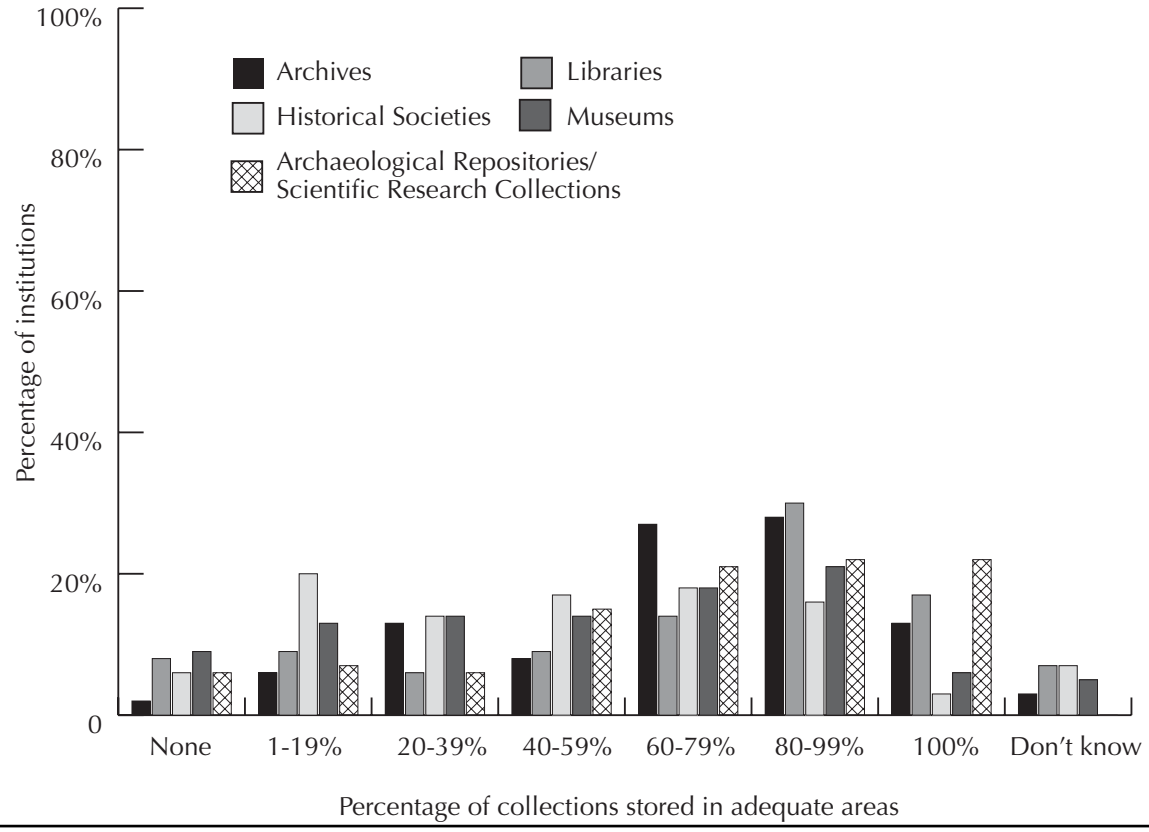
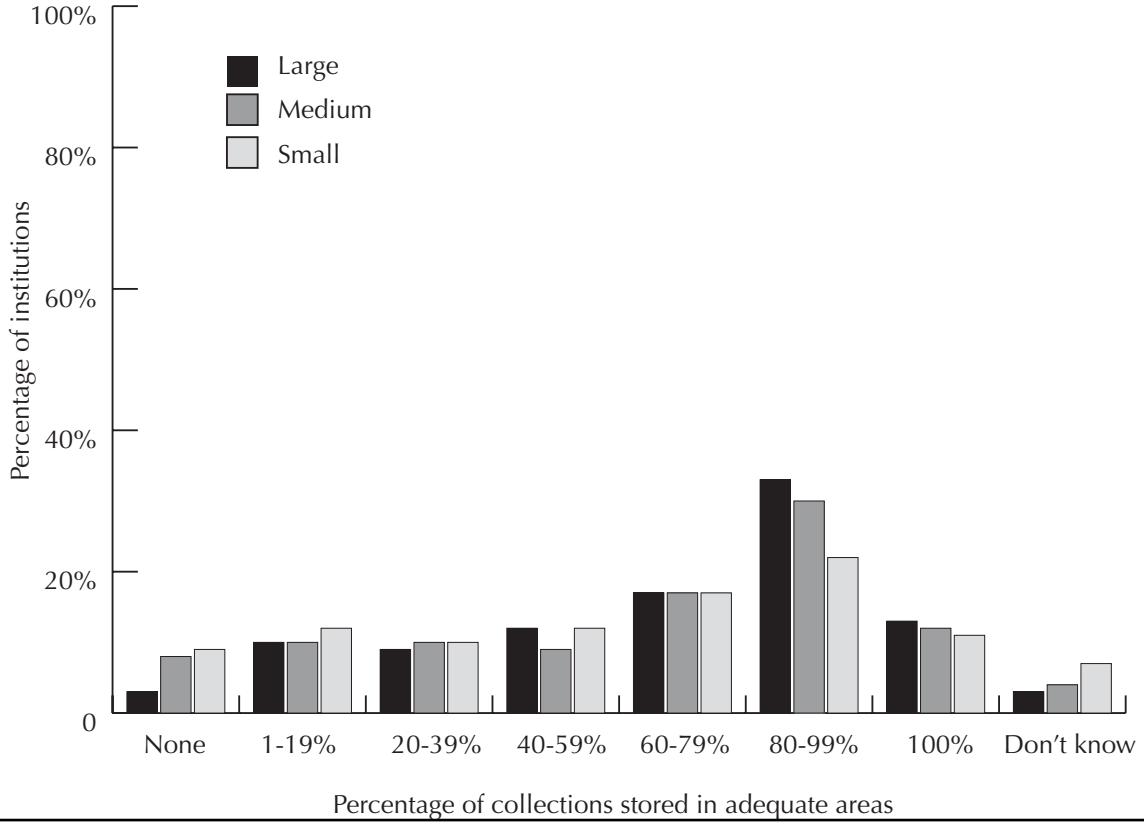


Fig. 6.3 Institutions' Collections Stored in Areas Large Enough to Accommodate Them Safely and Appropriately (by size)



more than 80% of their collections stored in adequate areas.

Considered by size, large institutions and medium-sized institutions are more likely to have more than 80% of their collections stored in adequate areas, but the figures for large and mid-sized institutions are relatively similar (large 46%, medium 42%, and small 33%) (figure 6.3). Viewed by governance, the results are relatively similar, with the exception of 25% of tribal-governed institutions having no collections stored in adequate areas. More than 80% of collections are stored properly at 42% of federal, state, and county/municipal institutions. The percentage of collections in adequate storage does not differ significantly by region.

Survey respondents were asked to indicate where improvements were needed for storage that is not adequate. They were given four categories of improvement: additional on-site storage, additional off-site storage, renovated storage space (either on-site or off-site), and new or improved storage furniture/accessories (such as shelves, cabinets, racks). Figure 6.4 illustrates the need and urgent need for storage improvements. About two-thirds of institutions indicated need in each of the four categories. There is an urgent need for additional on-site storage at 32% of institutions, storage renovations at 31% of institutions, new/improved storage furniture at 29% of institutions, and off-site storage at 23% of institutions. Among institutions that selected urgent need in more than one category, 3% selected urgent need for all four, 7% for three, and 11% for two areas of improvement to storage. Results are fairly equal across institution types, but one-third of archives, historical societies, and museums have an urgent need for new/renovated storage, compared with one-quarter of libraries and archaeological repositories/scientific research collections having an urgent need for storage renovations. By size, results are close to the totals, with the exception of large institutions having a greater urgent need for off-site storage (32%).

Fig. 6.4 Institutions' Need for Storage Improvements

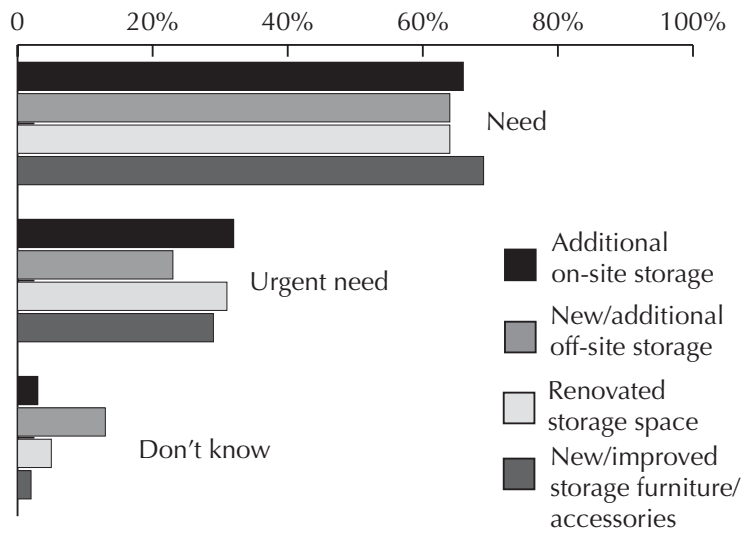
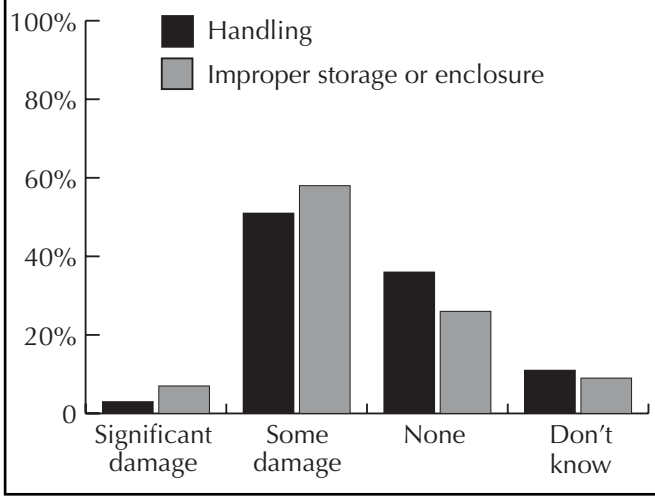


Fig. 6.5 Institutions Reporting Causes of Damage to Collections from Storage Conditions



Improper storage or enclosures, which could cause collections to be crushed, bent, creased, adhered together, broken, or otherwise damaged, ranks as one of the greatest threats to collections documented by the Heritage Health Index. As seen in figure 6.5, 7% of institutions have had significant damage to collections due to improper storage or enclosures, and 58% have had some damage. Damage from handling can also be related to improper storage because cramped conditions make item retrieval by staff or researchers risky. Significant damage due to handling has occurred at 3% of institutions, and some damage from handling has happened at 51% of institutions.

Not surprisingly, adequacy of storage and damage due to improper storage correlate. Institutions with 100% of their collections in proper storage report low levels of damage due to storage. As the number of collections stored in adequate areas decreases, the amount of damage due to improper storage or enclosures increases. The percentage of institutions that don't know about damage due to improper storage also increases as the percentage of collections stored in adequate areas decreases.

Storage can be a challenging preservation issue to address if collections have outgrown available space and new facilities are necessary. This represents a considerable expense. Storage might be in areas known to have imperfect environmental conditions, such as basements, attics, or commercial storage warehouses, and to correct the problems would demand a significant investment. Improving storage conditions by re-housing items in proper enclosures or storage furniture requires extensive human resources. Since collections storage is often out of the public eye, many institutions may be deferring solutions to storage issues. To do so puts collections at undue risk.

Recommendation

Institutions must give priority to providing safe conditions for the collections they hold in trust.

Chapter 7: Emergency Planning and Security

An institution demonstrates preservation awareness and well-integrated conservation policies through an emergency preparedness and response plan that is regularly reviewed and updated by conservation professionals and other appropriate staff.

–Position Paper on Conservation and Preservation in Collecting Institutions, American Institute for Conservation of Historic and Artistic Works, 2002

An organization that practices responsible stewardship maintains and enforces a well-developed Disaster Plan.

–Standards and Practices for Historic Site Administration, Tri-State Coalition for Historic Places, 2000

Archivists protect all documentary materials for which they are responsible and guard them against defacement, physical damage, deterioration, and theft.

–Code of Ethics for Archivists, Society for American Archivists, 2005

In fall 2005, Hurricanes Katrina and Rita brought renewed attention to the critical need for emergency planning at all levels of community life. For collecting institutions, the damage sustained by historic sites, libraries, archives, and museums on the Gulf Coast of Mississippi and Louisiana was a reminder of the importance of protecting collections from natural disasters. In this context, it is particularly alarming that the Heritage Health Index finds that 80% of U.S. collecting institutions do not have a written emergency/disaster plan that includes collections with staff trained to carry it out. Figure 7.1 shows this statistic by institutional type–historical societies are least likely to have a plan with trained staff, and archives are more likely to have these preventive measures in place.

The Heritage Health Index survey asked four questions to gauge the risk to collections of swift and catastrophic loss. Natural causes constitute just a portion of the types of disasters that could damage a collection; floods can result from burst pipes or malfunctioning sprinkler systems, and a fire or hostile act could put collections in danger. With 80% of institutions not having proper planning to protect their collections from emergencies or disasters, 2.6 billion items are at risk. Figure 7.2 illustrates that libraries without emergency plans hold most of these items, followed by museums, archaeological repositories/scientific research collections, archives, and historical societies. Viewed by type of collections, the lack of disaster preparedness puts about half of each type of collection items at risk for damage or

Figure 7.1 Institutions with No Emergency Plan with Staff Trained to Carry It Out

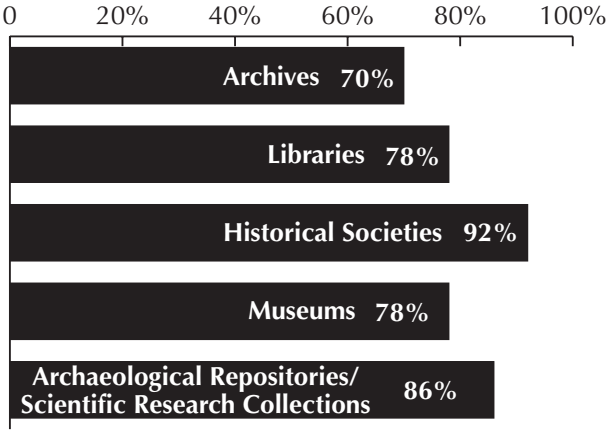
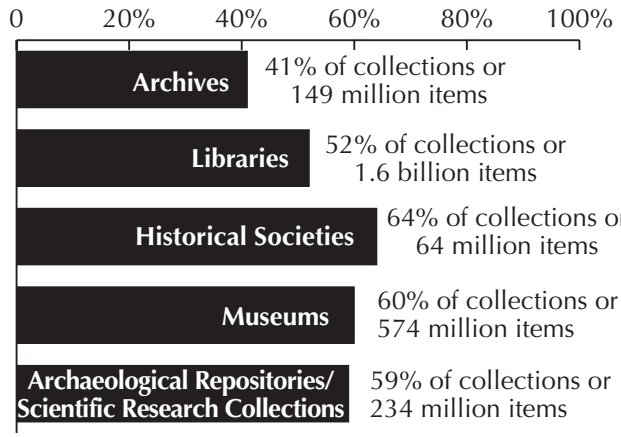


Fig. 7.2 Collections at Risk Because Institutions Do Not Have Emergency Plans



loss; an exception is that 72% of historical and ethnographic collection items are not covered by emergency planning.

The finding that 80% of U.S. collecting institutions do not have a written emergency/disaster plan that includes collections and staff trained to carry it out was determined from the responses to two questions. Question D4 "Does your institution have a written emergency/disaster plan that includes the collections?" was deliberately worded. Qualifying that the plan is "written" demonstrates that it has been carefully considered and codified as institutional policy. The wording "that includes collections" is also significant. Some institutions do have emergency plans in place for the safety of staff and visitors, and while that is paramount in the event of an emergency, planning for the protection of the collection is an essential component of responsible stewardship.

Answer choices to D4 included "yes," "yes, but it is not up-to-date," "no, but one is being developed," "no," and "don't know." In analyzing the responses to this question, Heritage Preservation considered "yes," and "yes, but it is not up-to-date" as affirmative responses. While an up-to-date plan is important in an emergency, an old plan is better than no plan at all. Likewise, the response "no, but one is being developed" was included with the "no" responses, because a plan in development is not adequate protection should disaster strike. "Don't know" was also included with "no" because all staff should be aware of the existence of a plan. The results to this question are:

Yes	22%
Yes, but it is not up-to-date	11%
No, but one is being developed	13%
No	50%
Don't know	5%

According to the analysis parameters, 68% do not have an emergency/disaster plan that includes collections.

An essential aspect of emergency/disaster preparedness is that staff be trained to carry out the plan. A follow-up question for respondents with written emergency/disaster plans that include collections asked, "Is your staff trained to carry it out?" The responses are:

Yes	56%
No	29%
Don't know	14%

Heritage Preservation considered the high percentage of "don't know" responses to indicate that staff is not trained.

Because a written plan without staff trained to carry it out is likely to be ineffective, Heritage Preservation staff and the advisers who reviewed the survey data concluded that understanding the actual level of preparedness by U.S. collecting institutions required cross-tabulating the responses to the two questions. The cross-tabulated result is that 80% of institutions do not have an emergency plan with staff trained to carry it out.

This finding correlates to size (figure 7.3). Considered together, 60% of large institutions have no plan with trained staff; of these, archaeological repositories/scientific research collections have the highest percentage without planning at 76%, followed by libraries at 63%. Emergency planning with staff training is lacking at 59% of large museums. Historical societies and archives are below the average of 60%, with 44% and 43% respectively. Mid-sized institutions are all close to the 66% average for this group, except for archaeological repositories/scientific research collections, with 86% having no emergency plan with staff trained to carry it out. Of the small institutions, historical societies are

Fig. 7.3 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by size)

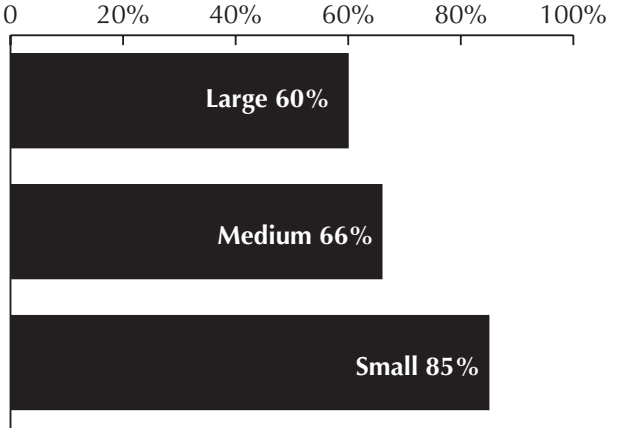


Fig. 7.4 Collections at Risk Because Institutions Do Not Have Emergency Plans (by size)

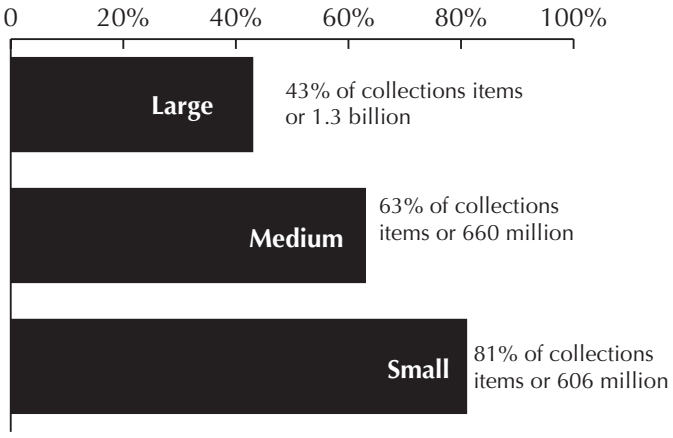
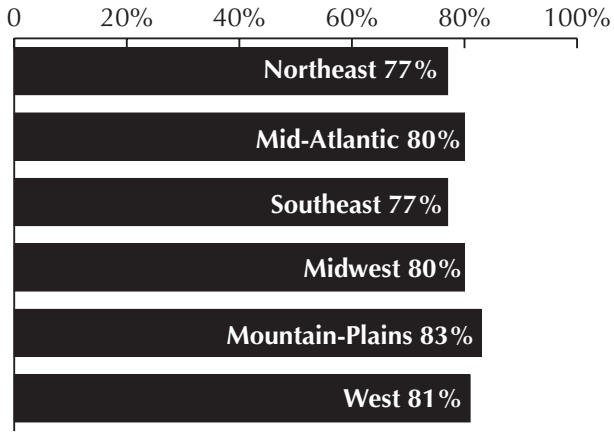


Fig. 7.5 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by region)



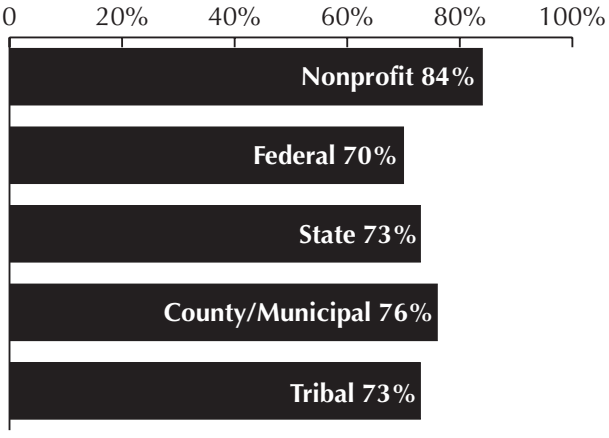
least likely to have a plan with staff trained (94%), followed by archaeological repositories/ scientific research collections at 88%. Archives, libraries, and museums are at about the 85% average for small institutions.

As shown in figure 7.4, large institutions without emergency plans and staff trained to carry them out put the largest amount of collections at risk: 43% of collections held at large institutions or 1.3 billion items. Medium-sized and small institutions hold the remaining approximately 1.3 billion items at risk because they are not covered by an emergency plan and trained staff.

Institutions in the Northeast and Southeast are only slightly more likely to have adequate emergency planning in place (figure 7.5), with other regions close to the 80% national average. Given the margin of error of between +/- 3% and +/- 4%, the differences between regions are slight. Viewing the statistic by governance (figure 7.6), institutions under federal, state, and tribal governments are more likely to have emergency planning in place than nonprofit institutions.

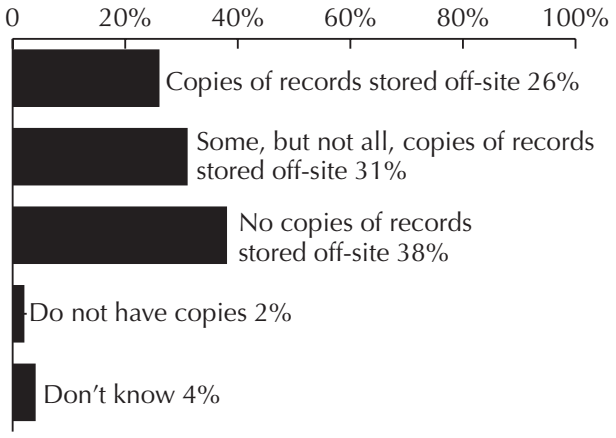
Findings from the Heritage Preservation report *Cataclysm and Challenge: Impact of September 11, 2001, on Our Nation's Cultural Heritage* underscored the importance of having collections records stored off-site. The report states, "Of significant concern, the survey found more than half (53 percent) of the respondents kept no off-site record of their inventory. Had the destruction of September 11 spread more widely, many collecting institutions would have been left with no complete record of what had been lost."[1] Based on this finding from *Cataclysm and Challenge*, the Heritage Health Index survey included a question to determine how many institutions would be similarly at risk should disaster strike. The question asked, "Are copies of vital collections records stored off-site?" and gave examples of "inventory, catalog, insurance polices," but otherwise allowed institutions to define what "vital" meant. Figure 7.7 shows that only 26% are sufficiently prepared

Fig. 7.6 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by governance)



1. Heritage Preservation, *Cataclysm and Challenge: Impact of September 11, 2001, on Our Nation's Cultural Heritage*, 2002, 18.

Fig. 7.7 Institutions with Copies of Vital Collection Records Stored Off-site



with copies of all vital records stored off-site; 31% have some records off-site, and 44% are unprepared (the 2% with no collections records at all and 4% that responded "don't know" can be logically added to the 38% "no" responses).

Although the results correspond to size (figure 7.8), the differences between large and small institutions are not dramatic; the largest gap between the two is 11% in the "no" response. When considering responses to "no collections records stored off-site" by governance (figure 7.9), federal institutions have the lowest percentage at 28%, compared to the national average of 38%, and institutions under tribal governance have the highest at 48%. By type of institution, 52% of archaeological repositories/scientific research collections have no collections records stored off-site, followed by 45% of science museums/zoos/botanical gardens. At 38%, independent research libraries are most likely to have all their vital collections records stored off-site.

Another catastrophic risk to collections is theft or vandalism. Heritage Health Index survey question D7 asked, "Do you have adequate security systems to help prevent theft or vandalism of collections?" Since the level and sophistication of security systems can vary depending on the size and type of institutions and the collections, "adequate" was left to the judgment of the responding institution. The type of examples given to demonstrate the range of types of security included security guard, staff observation, and intrusion detection. The Heritage Health Index finds that 44% of collecting institutions deem their security systems to be adequate, leaving 56% without adequate protection (figure 7.10). This data by type of institution shows that libraries (34%) and archaeological repositories/scientific research collections (33%) are most likely to have inadequate or no security systems. Art museums are most likely to have adequate security in all areas (59%), followed by history museums/historic sites/other museums (50%). Data from this question relates to size, with 29% of small institutions having inadequate or no security systems, compared with only 12% of large institutions and

Fig. 7.8 Institutions with Copies of Vital Collections Records Stored Off-site (by size)

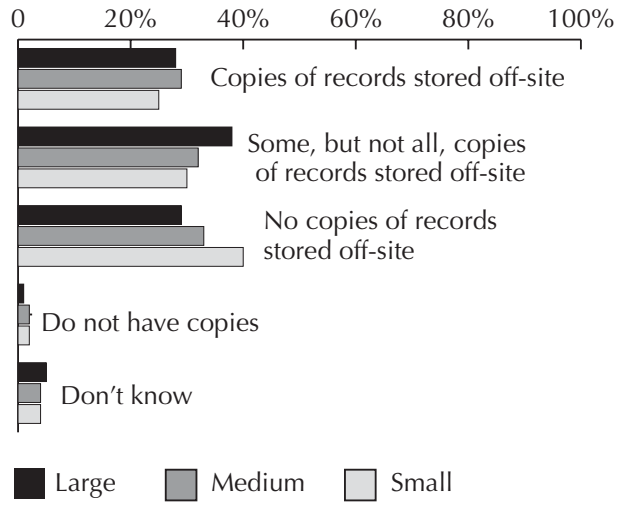


Fig. 7.9 Institutions with No Copies of Vital Collections Records Stored Off-site (by governance)

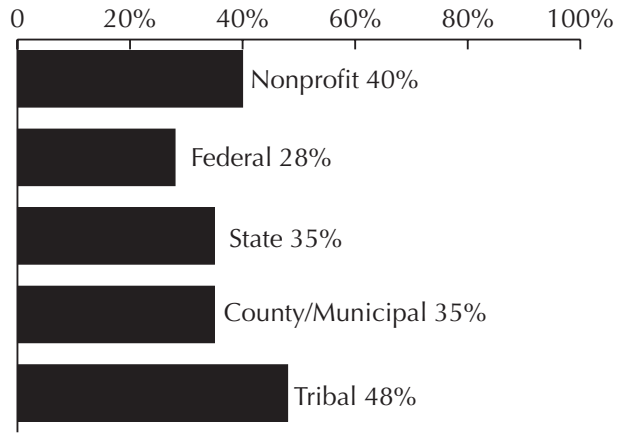


Fig. 7.10 Adequacy of Security Systems

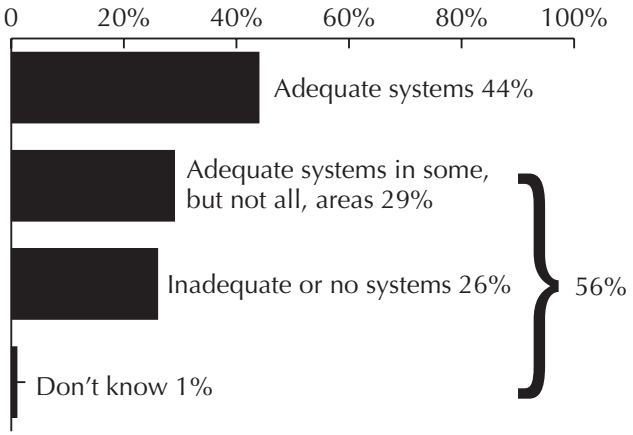
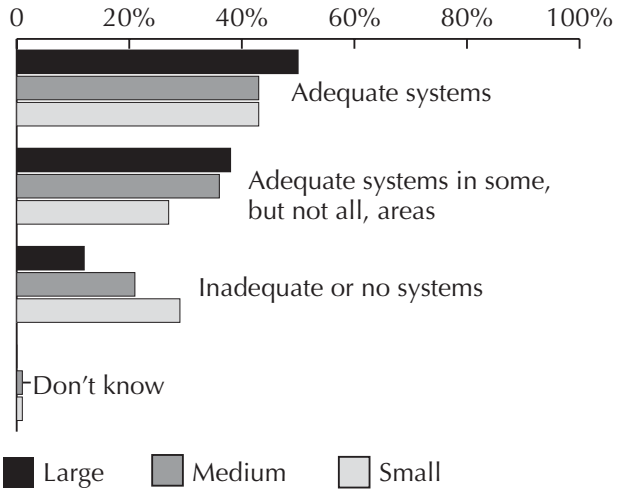


Fig. 7.11 Adequacy of Security Systems (by size)

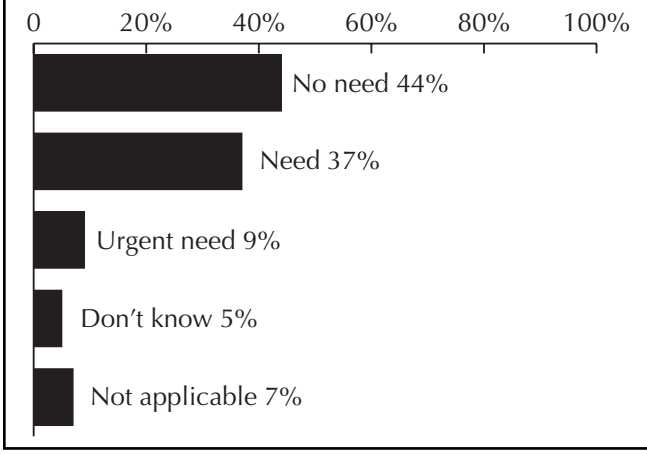


21% of medium-sized institutions (figure 7.11).

In question D12, which asked institutions the urgency of preservation/conservation needs, 9% cited an urgent need for security (figure 7.12), ranking below five other factors (figure 5.12, p. 54). Combining "some need" and "urgent need," 45% of institutions need security improvements; this is the lowest ranking need, just below preservation of digital collections and integrated pest management, both at 46%.

Vandalism was cited as the cause of significant damage at 1% of institutions and of some damage at 22% of institutions. It was the least frequent cause of significant and some damage, after fire at 0.4% and 3% respectively. However, of all causes of damage listed, fire is most likely to result in an immediate and a total loss to the object.

Fig. 7.12 Need for Security Improvements



Recommendation

Every collecting institution must develop an emergency plan to protect its collections and train staff to carry it out.

Chapter 8: Preservation Staffing & Activities

An institution demonstrates preservation awareness and well-integrated conservation policies through a conservation staff if resources allow, or well established relationships with consulting conservation professionals who have expertise in specific material types or issues appropriate to collections.

–Position Paper on Conservation and Preservation in Collecting Institutions, American Institute for Conservation of Historic and Artistic Works, 2002

Professional responsibilities involving the care of the collections should be assigned to persons with the appropriate knowledge and skill or who are adequately supervised.

–ICOM Code of Ethics for Museums, International Council of Museums, 2004

Collection care is principally the responsibility of staff members (regardless of job titles) directly involved with specimens and artifacts: curators, collection managers, curatorial assistants, conservators, registrars, preparators, and technical assistants in these areas.

–Guidelines for the Care of Natural History Collections, Society for the Preservation of Natural History Collections, 1998

The Heritage Health Index found that more than half of U.S. collecting institutions care for more than six types of collections (figure 8.1); given the diverse needs of collections, it is particularly important to have personnel who devote time to collections care.

Survey question D8 asked institutions about their level of conservation/preservation staffing. Institutions could select as many options as applicable. Only 20% of institutions have paid conservation/preservation staff, whether full-time or part-time (figure 8.2). Instead, most institutions depend on assigning collections care duties to other staff as needed (30%), to volunteers (44%), or to external providers (15%). Twenty-two percent of institutions report that no designated staff person has conservation/preservation responsibilities.

Viewed by type of institution, about one-third of archives and archaeological repositories/scientific research collections have paid conservation/preservation staff (figure 8.3). Museums are also above the national average, with 27% having paid staff dedicated to collections care. However, only 12% of libraries and 15% of historical societies have paid conservation/preservation staff. Archives and archaeological repositories/scientific research collections are also least likely to have no designated staff with collections care responsibilities at 5% and 8% respectively, while

Fig. 8.1 Most Institutions Care for More than Six Types of Collections

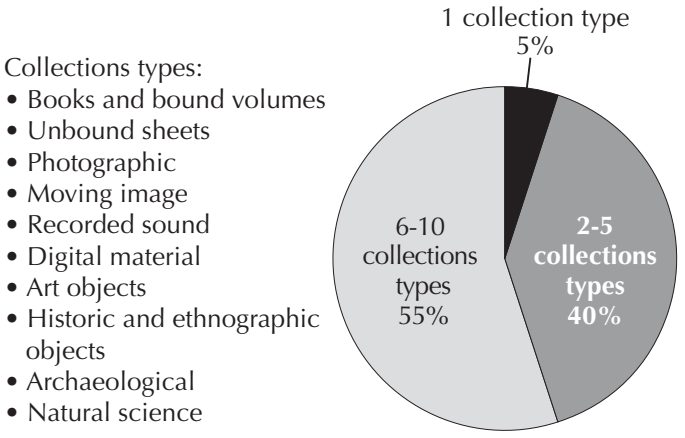


Fig. 8.2 Institutions' Staffing for Conservation/Preservation

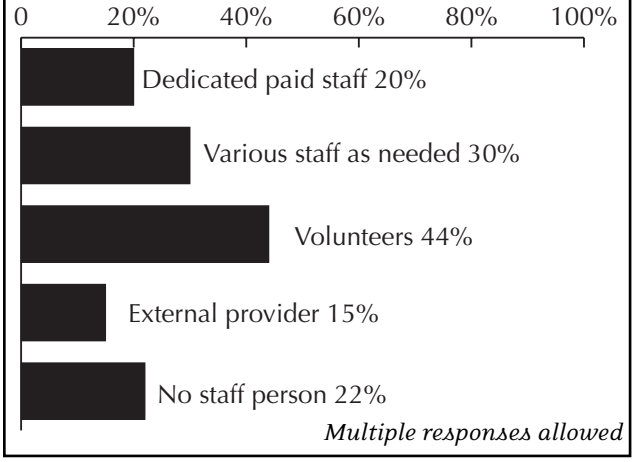
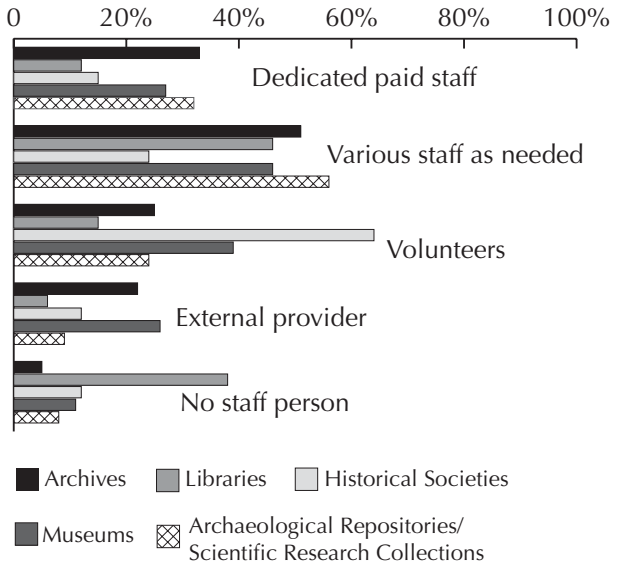
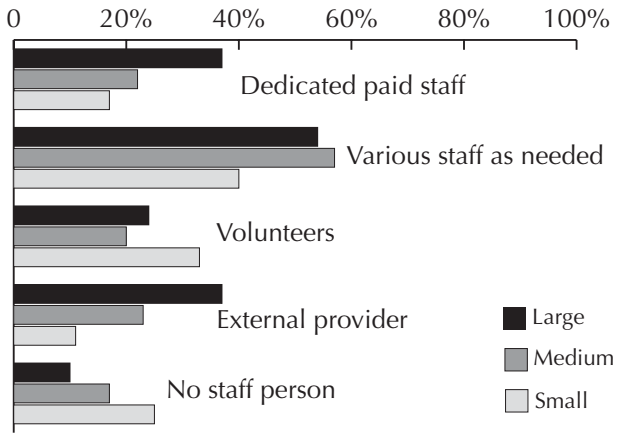


Fig. 8.3 Institutions' Staffing for Conservation/Preservation (by type)



Multiple responses allowed

Fig. 8.4 Institutions' Staffing for Conservation/Preservation (by size)



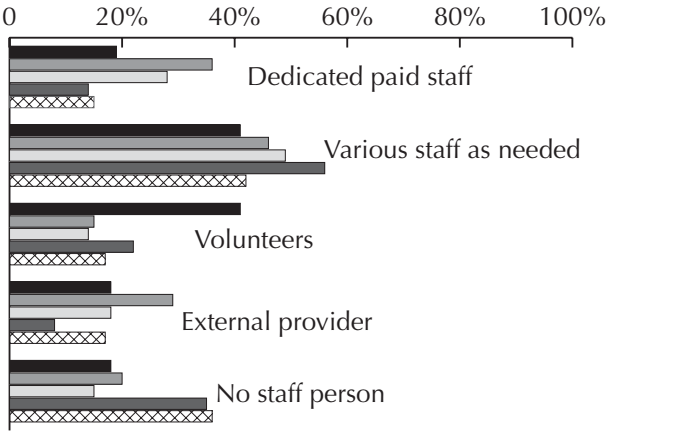
Multiple responses allowed

libraries are the most likely not to have staff (38%). Of libraries, only 17% of academic libraries and 22% of independent research libraries have no designated staff, while 45% of public libraries and 39% of special libraries have none. About half of archives, libraries, museums, and archaeological repositories/scientific research collections use various staff to handle collections care duties. Museums are most likely to use external providers for conservation/preservation services (26%). Historical societies are most likely to use volunteers (64%) as part of their personnel for conservation/preservation; 30% of historical societies use only volunteers to cover conservation/preservation duties.

Results relate to size of institution, with larger institutions more likely to have paid staff, have access to other staff, and use external providers, while smaller institutions are more likely to use volunteers or have no staff assigned to conservation/preservation (figure 8.4). Public libraries and special libraries contribute the most toward the 10% of large institutions with no designated staff.

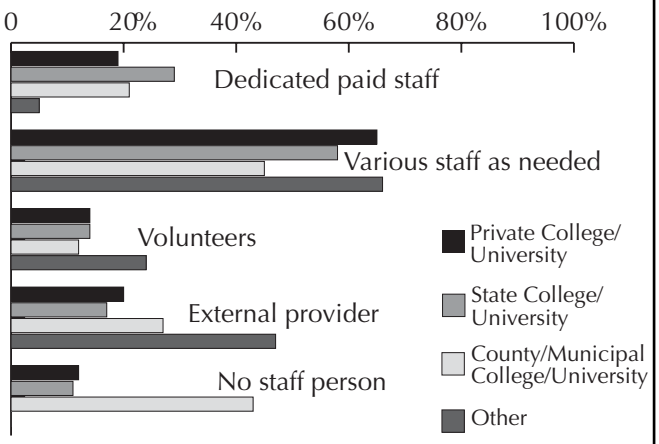
By governance, federal institutions are most likely to have paid conservation/preservation staff (36%), followed by state institutions (28%) (figure 8.5). County/municipal and tribal-governed institutions are most likely to have no staff assigned to conservation/preservation (35% and 36% respectively). These figures include academic institutions (Methodology, p. 20), but viewing academic institutions alone shows that state college/universities are the most likely to have paid conservation/preservation staff and county/ municipal college/universities are most likely to have no staff. These figures

Fig. 8.5 Institutions' Staffing for Conservation/Preservation (by governance)



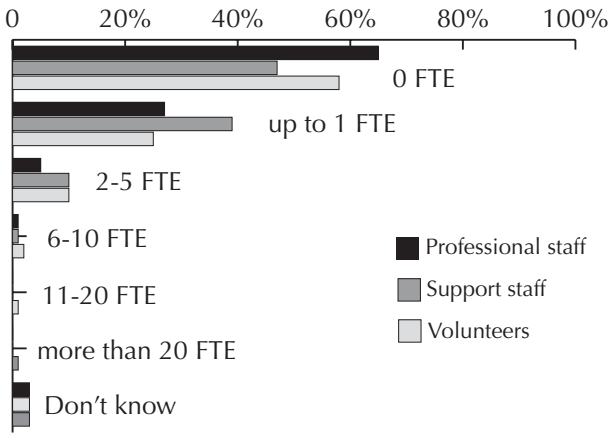
Multiple responses allowed

Fig. 8.6 Institutions' Staffing for Conservation/Preservation (by academic governance)



Multiple responses allowed

Fig. 8.7 Institutions' Internal Staff Who Perform Conservation/Preservation Activities



influence the data by overall governance (figure 8.6). Of all the variables, including type and size, academic institutions are more likely to use various staff as needed for conservation/preservation.

The second survey question about preservation staffing (D9) asked institutions to indicate the number of internal staff and volunteers who perform conservation/preservation activities. Institutions were to record human resources devoted to collections care using full-time equivalent (FTE), which is equal to a worker who works year-round for an average of 40 hours a week. The online version of the survey included an FTE calculator to assist respondents with this calculation. Institutions were to include all workers and volunteers including temporary, part-time, seasonal, work study, and intern help. Staffing was divided into three categories: professional conservation/preservation staff, support conservation/preservation staff, and volunteers. Respondents were given the choice of six answer choices that included ranges of numbers (Appendix F, p. 5).

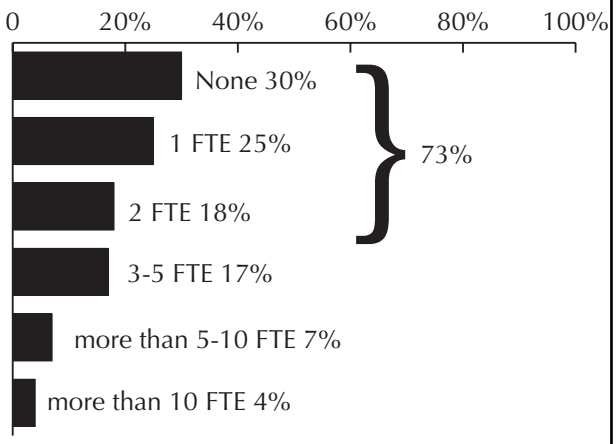
"Professional staff" was intentionally not defined to allow institutions to define it most appropriately for their institutions. Instead, examples of professional staff, including preservation administrators, conservators, and research scientists, were given. For example, at a natural science museum, a collections manager could be considered professional conservation/preservation staff, but at an art museum, this position could be considered support staff. Sixty-five percent of institutions responded that they had no professional conservation/preservation staff (figure 8.7). Only slightly more than a quarter (27%) have up to one full-time equivalent staff person; only 5% have 2-5 FTEs; 1% have 6-10 FTEs; and less than 1% have more than 11 full-time equivalent internal professional conservation/preservation staff.

Support conservation/preservation staff includes collections care assistants, technical assistants, and collections handlers; again the term was not rigidly defined so institutions could define it for themselves. Fewer than half of institutions (47%) have no FTE support staff; 39% have up to one FTE; 10% have 2-5 FTEs; 1% have 6-10 FTEs; and fewer than 1% have more than 11 full-time equivalent internal support conservation/preservation staff (figure 8.7).

There are no volunteers involved with conservation and preservation activities at 58% of collecting institutions. One-quarter use up to one FTE volunteer: only 10% use 2-5 FTEs; 2% use 6-10 FTEs; 1% uses 11-20 FTEs; and 1% use more than 20 full-time equivalent volunteers. In all three staffing categories, 3% of institutions replied "don't know."

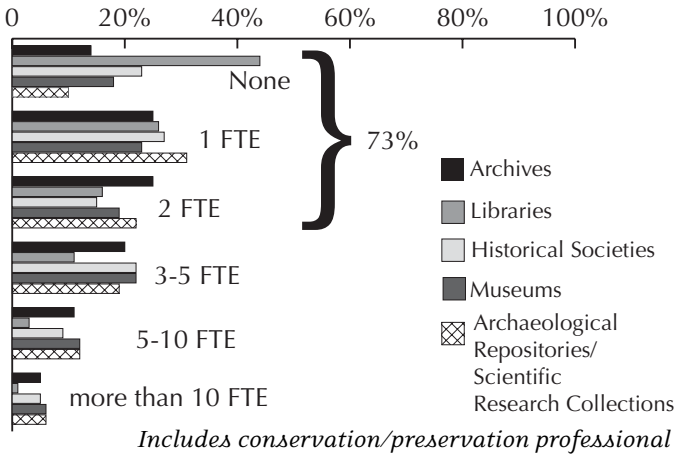
Averaging all three responses together, using midpoints for the ranges 2-5, 6-10, and 11-20 and

Fig. 8.8 Average Number of Internal Staff Who Perform Conservation/Preservation Activities



Includes conservation/preservation professional and support staff and volunteers

Fig. 8.9 Average Number of Internal Staff Who Perform Conservation/Preservation Activities (by type)



Includes conservation/preservation professional and support staff and volunteers

30 for "more than 20," 30% of institutions do not have any internal staff who perform conservation/preservation activities (figure 8.8); 25% have one full-time equivalent; 18% have two full-time equivalent staff members, whether they be conservation/professionals, support staff, volunteers, or some combination of the three. Seventeen percent have 3-5 FTEs; 7% have more than 5 but less than 10 FTEs; and only 4% have more than 10 FTEs. Overall, almost three-quarters of institutions have fewer than two full-time equivalent staff members with conservation/preservation responsibilities. At institutions that have internal conservation/preservation staff (professional, support, or volunteers), 36% have one FTE; 25% have two FTEs; 24% have 3-5 FTEs; 11% have more than 5 but less than 10; and only 4% have more than 10 FTEs.

Figure 8.9 shows the average by type of institution. Libraries are most likely to have no internal staff (44%), followed by historical societies (23%), museums (18%), archives (14%), and archaeological repositories/scientific research collections (10%). Results are fairly even across institutions that have 1 FTE, with museums at the lowest (23%) and archaeological repositories/scientific research collections at the highest (31%) percentage. Results remain balanced in the 3-5 and less than five and more than 10 categories, with the exception of libraries-about 10% lower than other institutions in both cases. Only 1% of libraries have more than 10 FTEs, compared with about 5% of other institutions.

Institutions were asked to report whether their conservation/preservation program included any of six types of activities:

- preventive conservation (e.g., housekeeping, holdings maintenance, re-housing, environmental monitoring)
- preservation management (e.g., administration, planning, assessment)
- conservation treatment (e.g., repair, mass deacidification, specimen preparation)
- preservation reformatting (e.g., preservation photocopying, microfilming)
- preservation of audio-visual media and playback equipment (e.g., preservation copies of media, maintaining equipment)
- preservation of digital materials and electronic records collections (e.g., migrating data to current software).

Respondents could indicate that the activity was done by institution staff; done by external providers; not done currently, but planned; not done; or not applicable. Preventive conservation is mostly likely to be done by internal staff at 66%, followed by preservation management at 55%, conservation treatment at 37%, preservation reformatting at 33%, preservation of digital materials at 27%, and preservation of audio-visu-

Fig. 8.10 What Institutions' Conservation/ Preservation Program Includes

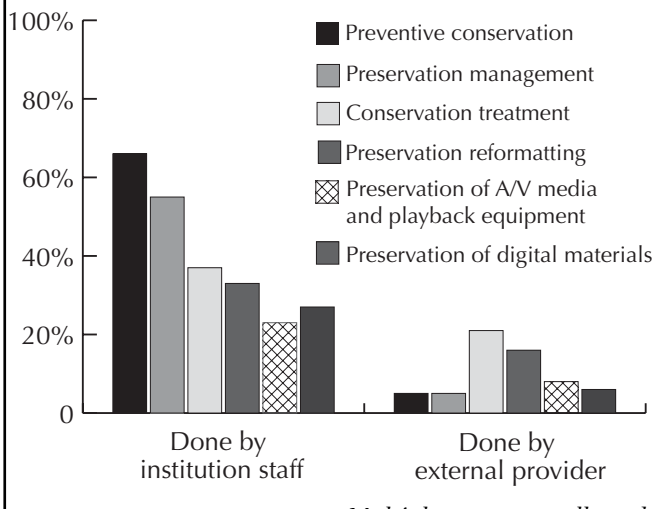
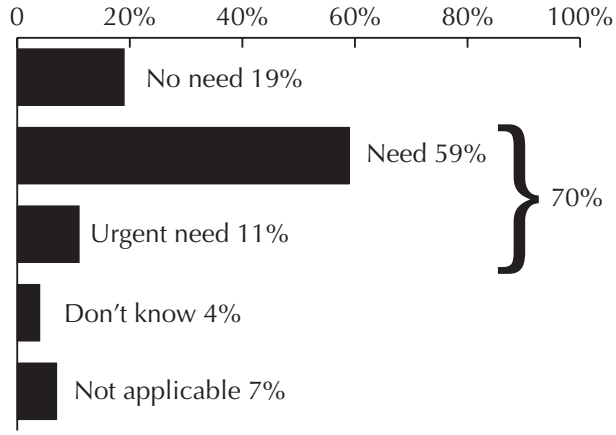


Fig. 8.11 Institutions' Need for Staff Training



al materials at 23% (figure 8.10). Conservation treatment is done by external providers at 21% of institutions. External providers are next most likely to be used for preservation reformatting (16%) and preservation of audio-visual media (8%). Preservation of digital material has the highest percentage of "not done currently, but planned" at 12%, but between 9% and 11% of the remaining activities are also planned, with the exception of preventive conservation (5%). Between one-quarter and one-third of institutions are not involved in these preservation activities, again with the exception of preventive conservation, which is not done at 18% of institutions.

Staff training for conservation and preservation is needed at 59% of institutions and urgently needed at 11% of institutions, resulting in a combined need figure of 70%, more than any other need cited by institutions (figure 8.11). This need is fairly balanced across types of institutions (figure 8.12), with archives and museums having the most need responses (63%) and archives, historical societies, and museums having the highest urgent need responses at 14% each. Results by size are also about equal, with more large and medium-sized institutions citing a need and slightly more small institutions citing an urgent need (12%) (figure 8.13).

Urgent need for staff training correlates with average size of internal staff for conservation/ preservation, with more institutions citing an urgent need for training if they have fewer staff.

Fig. 8.12 Institutions' Need for Staff Training (by type)

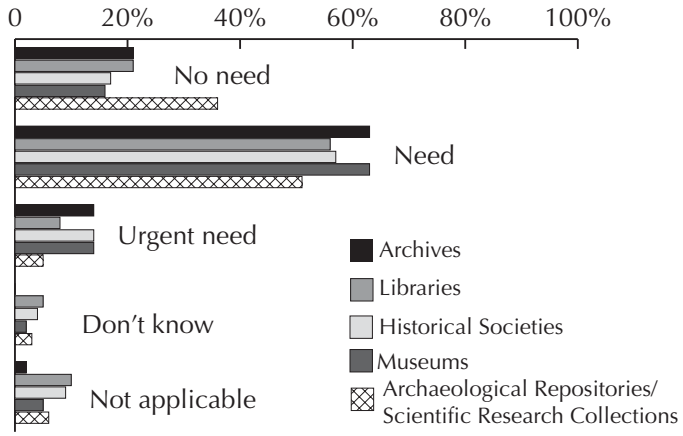


Fig. 8.13 Institutions' Need for Staff Training (by size)

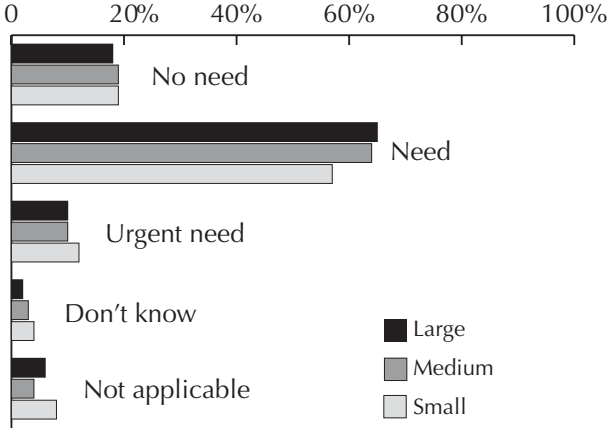


Fig. 8.14 Institutions' Need for Conservation Treatment

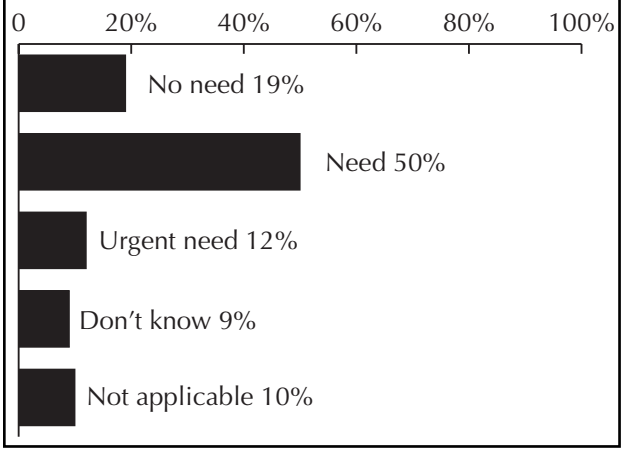
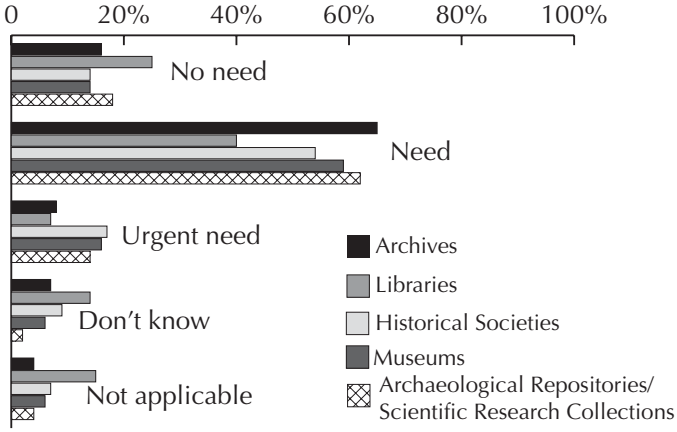


Fig. 8.15 Institutions' Need for Conservation Treatment (by type)



For example, 29% of institutions with an urgent need for staff training have no internal staff; 24% of institutions with an urgent need for staff training have 1 full-time equivalent staff; 19% with an urgent need have 2 FTEs; 17% with an urgent need have 3-5 FTEs; 8% with an urgent need have less than five but more than 10 FTEs; and 4% with an urgent need for staff training have more than 10 FTEs. The trend is the same when considering only institutions that have internal staff.

One-third of institutions report some (31%) or significant (2%) damage to collections due to prior treatment or restoration. While this damage may have occurred before an item entered the institution that currently holds it, it underscores the importance of using trained conservators to undertake treatment projects. It also indicates that a percentage of collections in need may require specialized treatment to ameliorate previous repair.

Half of all institutions have a need and 12% have an urgent need for conservation treatment (figure 8.14). By institutional type, archives have the greatest need at 65%; historical societies have the greatest urgent need at 17%, followed closely by museums at 16% and archaeological repositories/scientific research collections at 14% (figure 8.15). One-fifth of art museums have an urgent need for conservation treatment, more than any other specific type.

The services of a professional conservator would be required to address the problems of items described here and elsewhere in this report as being in urgent need. Not every institution has the resources to have a professional conservator on staff, but in these cases, institutions can call upon conservators in private practice and at regional conservation centers for assistance.

For more routine preventive conservation activities, institutions can take advantage of training opportunities (a list is provided on the Resources page of www.heritagehealthindex.org). Such training is necessary to ensure that staff know the fundamentals in collections handling, storage, environmental monitoring, and other basic preservation activities. Most problems identified by Heritage Health Index data could be reversed if every institution had adequate staff for preservation. At a minimum, every collecting institution should have a dedicated staff person who addresses collections care issues.

Recommendation

Every institution must assign responsibility for caring for collections to members of its staff.

Chapter 9: Preservation Expenditures and Funding

Librarians must educate the public about the choices and the financial commitments necessary to preserve our society's cultural and social records.

–American Library Association Preservation Policy, American Library Association, 2001

An institution demonstrates preservation awareness and well-integrated conservation policies through an annual budget appropriation, appropriate to the size of the institution, for preservation and conservation of the collection.

–Position Paper on Conservation and Preservation in Collecting Institutions, American Institute for Conservation of Historic and Artistic Works, 2002

It is the director's responsibility to identify priorities of the museum that are consistent with its board-approved policy and to recommend the allocation of funds required to support them.

–Professional Practices in Art Museums, Association of Art Museum Directors, 2001

The section of the Heritage Health Index survey devoted to preservation expenditures and funding revealed that few U.S. collecting institutions regularly designate funds to conservation/preservation and that most institutions' budgets for conservation/preservation are surprisingly low. Only 13% have access to preservation funding from permanent funds, such as endowments. Furthermore, many institutions are not seeking external funds to support preservation of their collections and are not engaged in activities to raise awareness from potential preservation funders. This data leads Heritage Preservation to conclude that preservation is not a core activity that is budgeted for regularly. Lack of financial support is at the root of all the issues identified in the Heritage Health Index. Making funds for preservation a consistent and stable part of annual operating budgets would begin to address these issues.

Only 23% of collecting institutions, which include archives, libraries, historical societies, museums, and archaeological repositories/scientific research collections, have funding specifically allocated for conservation/preservation activities in their annual budgets (figure 9.1). In some cases, institutions rely on other budget lines for conservation/preservation–for example, a museum may include preservation in a curatorial budget or a library might include preservation in a technical services budget. However, only 36% allocate funds through other budget categories. Forty percent of U.S. collecting institutions allocate no funds for the care of their collections.

The data on allocation of funds for preservation correlates to size (figure 9.2), with larger

Fig. 9.1 Institutions with Funds Allocated for Conservation/Preservation in Annual Budget

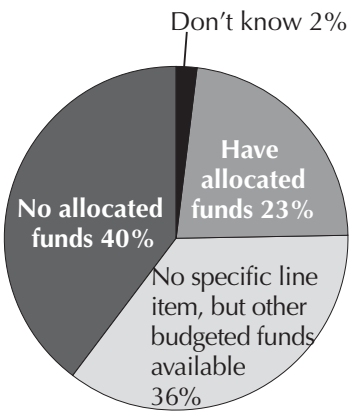


Fig. 9.2 Institutions with Funds Allocated for Conservation/Preservation in Annual Budget (most recently completed fiscal year) (by size)

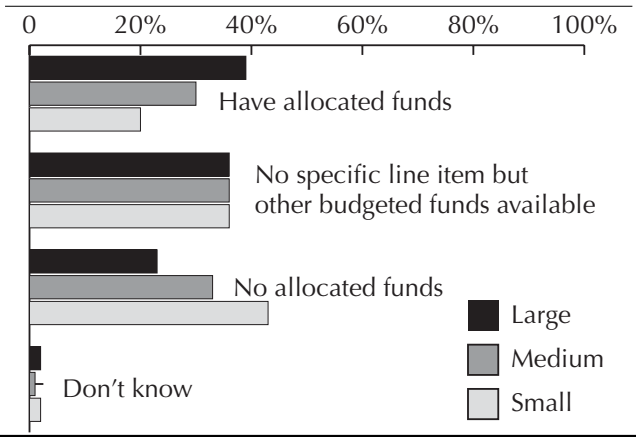
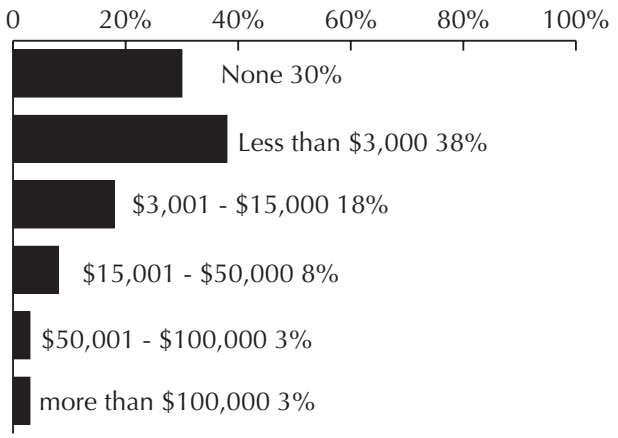


Fig. 9.3 Institutions' Annual Budget for Conservation/Preservation (most recently completed fiscal year)



institutions more likely to have a specific line-item for preservation, and smaller institutions more likely to not have any budgeted funds. More than one-third of institutions (36%), regardless of size, use funds from other budget lines for preservation. By institutional type, libraries are least likely to allocate for preservation at 54%. This figure is influenced by 60% of public libraries and special libraries not specifically allocating for preservation in their institutional budgets (including 42% of large public libraries and 55% of large special libraries). Art museums are most likely to have funds specifically allocated for preservation (45%), followed by independent research libraries (40%). By region, institutions in the Northeast are most likely to specifically allocate funds at 32%, and institutions in the Mountain-Plains region are least likely at 19%.

In question E3, survey participants were asked to record the amount of their institutions' conservation/preservation budget for the most recently completed fiscal year. Half the respondents reported data for FY2003; the other half reported data for FY2004. The question explained that if no specific line-item for preservation budget exists, respondents should include an estimate of other budgeted funds used in the most recent fiscal year. This estimate was to include funds for staffing, supplies, equipment, surveys, treatment, preservation reformatting, commercial binding, consultants, contractors, and other preservation costs. The instructions referred institutions to what they recorded in the preservation staffing question to ensure that all personnel costs were included in the preservation budget response. Funds for utilities, security, capital projects, or overhead were not to be included in the preservation budget, although in some cases these expenses could be related to preservation. Institutions were instructed to include all funds from the most recently completed fiscal year, even if that figure was higher than usual due to a special project or grant. This question received an 86% response rate—lower than most of the survey questions, which have responses close to 100%. If the question was left blank, data was considered to be missing rather than assumed to be zero.

Given such a broad definition of preservation expenses, preservation budgets are surprisingly low (figure 9.3). Almost a third (30%) had no funds budgeted, and 38% had less than $3,000 budgeted in the most recently completed fiscal year. As seen in figure 9.4, libraries at 44% are most likely to have a preservation budget of zero (50% of public libraries, 44% of special libraries, 43% of independent research libraries, and 25%

Fig. 9.4 Institutions' Annual Budget for Conservation/ Preservation (most recently completed fiscal year) (by type)

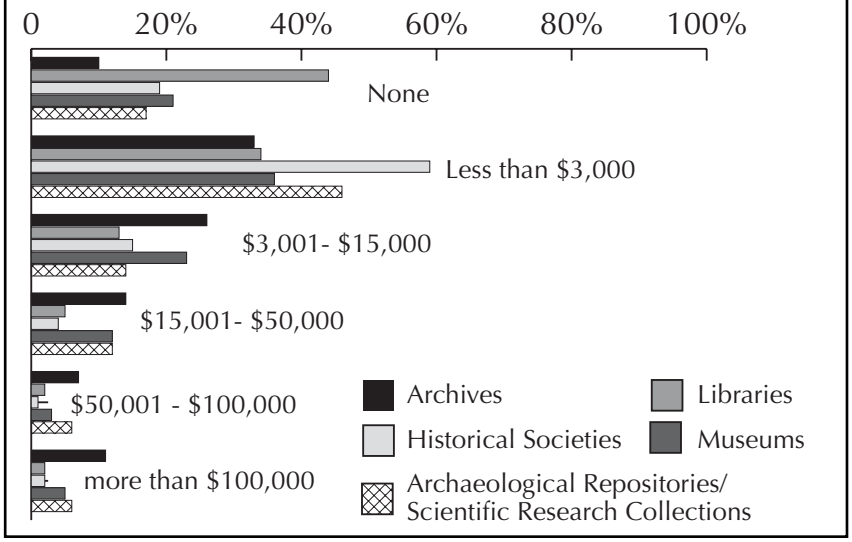


Fig. 9.5 Institutions' Annual Budget for Conservation/Preservation (most recently completed fiscal year) (by size)

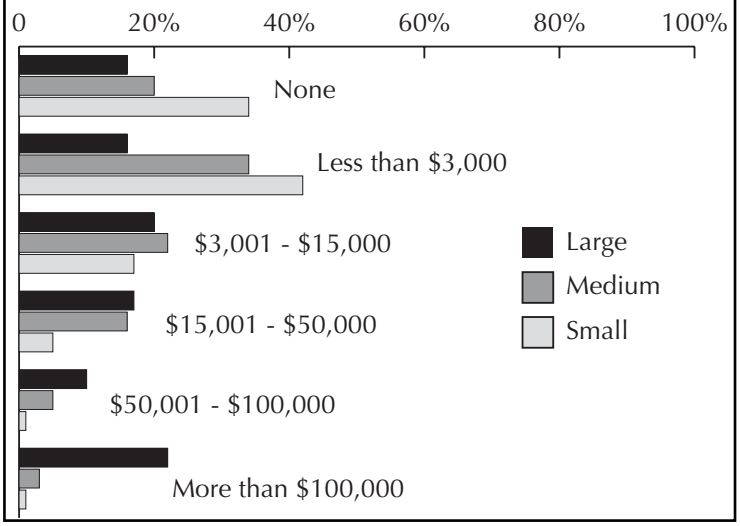


Fig. 9.6 Institutions with Annual Budgets for Conservation/Preservation Less than $3,000

Public Libraries	87%
Historical Societies	78%
Special Libraries	76%
Archaeological Repositories/ Scientific Research Collections	63%
History Museums/Historic Sites/ Other Museums	60%
Academic Libraries	50%
Science Museums/Zoos/ Botanical Gardens	50%
Art Museums	49%
Independent Research Libraries	45%
Archives	43%

of academic libraries). Results for preservation budget amounts correlate to size (figure 9.5).

In the preservation funding category of less than $3,000, 78% of libraries and 78% of historical societies have preservation budgets this low—10% less than the national average of 68%. The library figure (figure 9.6) is dominated by 87% of public libraries and 76% of special libraries having a preservation budget of less than $3,000. Archives fall to the bottom of the list with only 43% having less than $3,000, but this figure is based on a small number of institutions with a primary function as an archives. When considering all institutions that reported having archives among their functions, 59% had less than $3,000 budgeted for preservation in the most recently completed fiscal year. As shown in figure 9.7, 80% of institutions under county/municipal governance had a preservation budget less than $3,000, while only 43% of federal institutions have preservation budgets this low.

The Heritage Health Index questionnaire asked institutions to record their total annual operating budget for the most recently completed fiscal year so that it would be possible to put preservation budgets in some context. To consider the average percentage of total budgets devoted to preservation, the percentage is figured for each institution and weighted for institutions with

Fig. 9.7 Institutions with Annual Budgets for Conservation/Preservation Less than $3,000 (most recently completed fiscal year) (by governance)

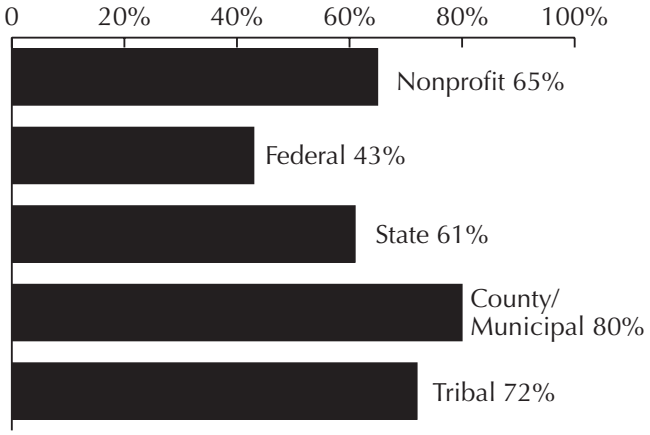


Fig. 9.8 Average Percentage of Annual Operating Budget Allocated to Conservation/ Preservation (most recently completed fiscal year) (by type)

Archives	14%
Libraries	3%
Historical Societies	12%
Museums	9%
Archaeological Repositories/ Scientific Research Collections	34%

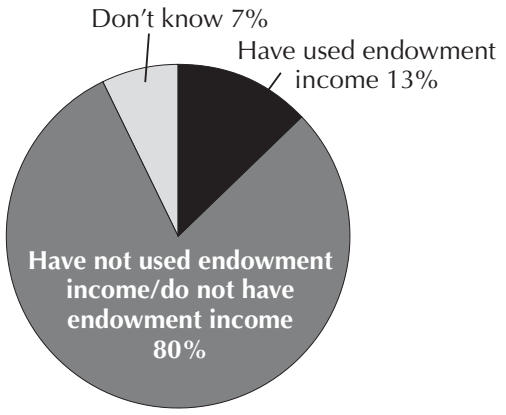
missing data (Methodology, p. 21); then an average is taken across all or similar institutions. In this case (figure 9.8), the range goes from an average of only 3% of library budgets allocated for preservation to 34% of archaeological repositories/scientific research collections' operating budgets spent on preservation. At large and medium-sized institutions, an average of 5% of total operating budgets is spent on preservation; at small institutions the average is 9%. In some cases, institutions recorded the same figure for total annual operating budget and preservation budget, indicating 100% of the institutions' budget goes to collections care expenses. This situation is conceivable, especially in collecting institutions where overhead is covered by a parent institution, such as an academic university or municipality.

To get a more complete understanding of nationwide conservation/preservation expenditures, it is useful to consider the proportion of total spending to total preservation spending. Budget figures for annual budgets and preservation budgets are each totaled and weighted to compensate for missing data (Methodology, p. 21). The response rate for the question about annual operating budget was 87%; for the question about annual conservation/preservation budget, 84%; and on both questions, 81%. Data needed to be weighted to compensate for missing data in about 20% of the cases. The total annual operating budgets of collecting institutions in the most recently completed fiscal year was $32,831,262,572, while the spending on conservation/preservation nationwide was $720,708,717—a proportion of 2%. The proportion does not change in relation to the size of the institution. Considered by type of institution (figure 9.9), 7% of total archives budgets was directed to preservation and only 1% of library budgets was spent on preservation.

Fig. 9.9 Proportion of Total Annual Operating Budgets to Total Conservation/Preservation Budgets (most recently completed fiscal year) (by type)

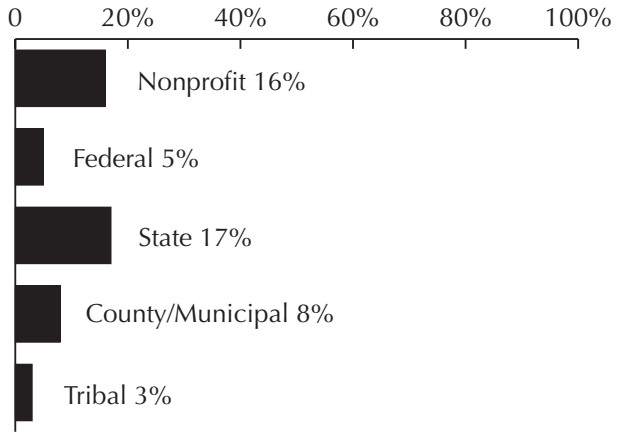
Archives	7%
Libraries	1%
Historical Societies	3%
Museums	4%
Archaeological Repositories/ Scientific Research Collections	5%

Fig. 9.10 Institutions that Used Income from Endowed Funds for Conservation/Preservation (last three years)



To ascertain the consistency of preservation funding at institutions, the Heritage Health Index asked, "In the last three years, have any of your conservation/preservation expenditures been met by drawing on income from endowed funds?" Only 13% (figure 9.10) use such income; 80% do not or their institution does not have endowed funds; and 7% don't know. Libraries were least likely to use income from endowed funds for preservation, though viewing the data by specific type of institution show there is a range among library responses; 32% of independent research libraries have used income from endowed funds (more than any other type of institution), while only 6% of public libraries and 6% of special libraries have done so. At 25% and 21% respectively, art museums and science museums/zoos/botanical gardens were among institutions with the highest likelihood of using endowment income for preservation. Larger institutions (24%) were more likely than medium-sized (15%) or small (11%) institutions to use income from endowed funds. This data has more variation when viewed by region than other funding data; 22% of institutions in the Northeast and 15% of institutions in the Midwest draw on income from endowed funds for preservation expenses, compared with 8% in the West and about 12% for the remaining regions.

Fig. 9.11 Institutions That Used Income from Endowed Funds for Conservation/Preservation (last three years) (by governance)



Considering the type of institutional governance and how it relates to use of endowment income (figure 9.11), state government and nonprofit institutions have higher rates than the national average of 13%. While the higher percentage is to be expected from nonprofit institutions, the figure for state-governed institutions is likely influenced by data from state colleges/universities. Since academic institutions are more likely to have endowments, their collecting entities are more likely to have this potential source for preservation funding.

The Heritage Health Index survey included three questions about where collecting institutions were obtaining support for conservation/preservation activities. Institutions were asked if in the last three years they had received funding from various sources outside their institution (figure 9.12). At 27%, individual donors are the most likely source for external preservation funds; this category included funds from membership or friends groups. Most noteworthy is that 40% of institutions have applied for no additional, external funding for preservation and 8% do not know. Breaking down 40% by size of institution reveals that 31% of large institutions, 39% of medium-sized institutions, and 41% of small institutions have sought no additional external funding. Libraries are the most likely not to have received external funds in the last three years at 58%. Almost two-thirds of special libraries have received no external funding for preservation; neither have more than half of public libraries and academic libraries. The next most likely not to have received any external preservation funding in the last three years was archaeological repositories/scientific research collections at 40%, followed by 30% of archives, 26% of museums, and 24% of historical societies. There are no significant differences among regions regarding obtaining external funds for preservation.

Many external funding sources require an application, and 62% of institutions indicate that they have not applied for funding from any public or private source in the last three years (figure 9.13). This was followed by a question for those that have not made grant applications to under-

Fig. 9.12 Source of Support for Institutions that Have Received External Conservation/ Preservation Funding (last three years)

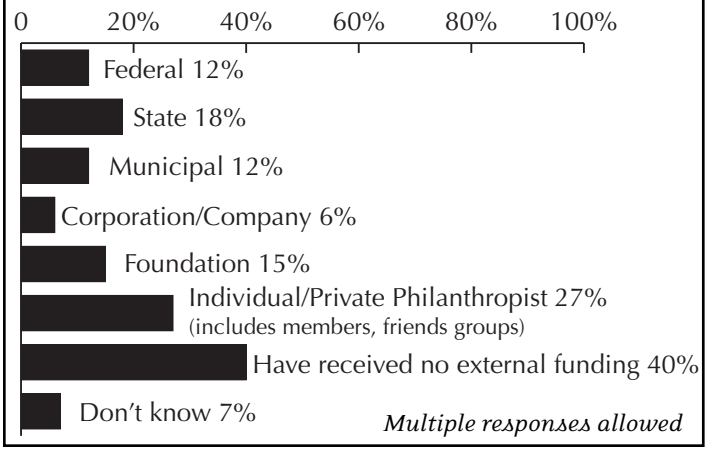


Fig. 9.13 Whether Institutions Have Applied for Conservation/Preservation Funding (last three years)

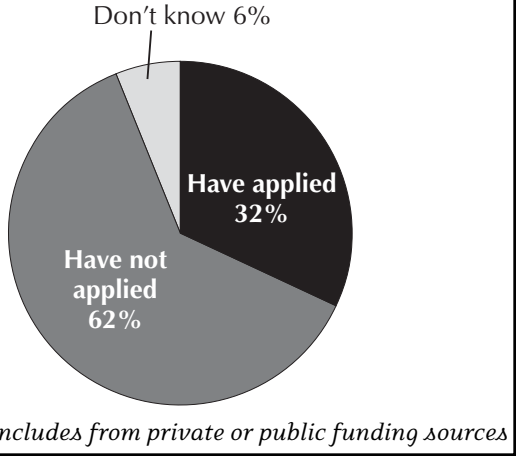
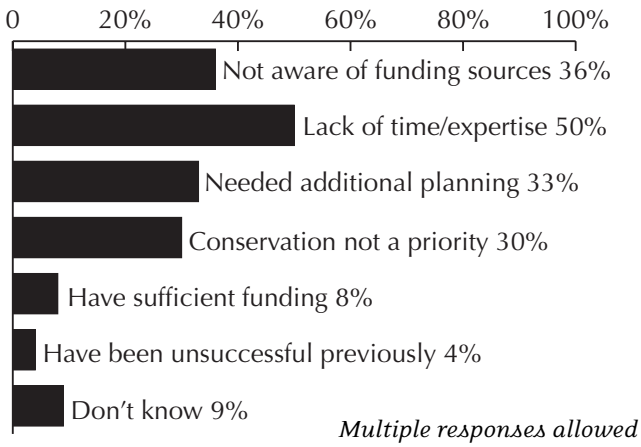


Fig. 9.14 Reasons Why Institutions Have Not Applied for Conservation/Preservation Funding (last three years)



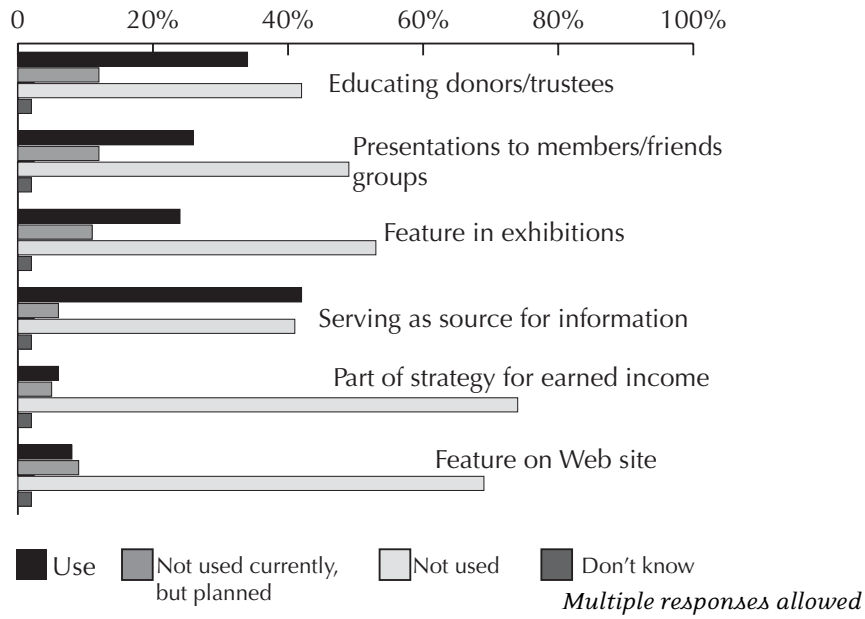
Multiple responses allowed

Includes from private or public funding sources

stand what factors influenced their decision not to apply. Lack of staff time or expertise in applying for grants was the most frequent response at 50% (figure 9.14). The next highest response at 36% was "not aware of appropriate funding sources." A third of institutions cite a need for additional time to plan projects before requesting grant funds. It is important to note that 30% responded that conservation/preservation is not an institutional priority and so additional funding has not been sought in the last three years.

Promoting awareness of what institutions do to care for collections is an additional way to attract outside funding for conservation and preservation. The results to a question on this topic (figure 9.15) illustrate that more institutions could employ strategies to attract funding. More than 40% serve as a source for preservation information for the public, and a little more than a third educate donors and/or trustees about preservation through such activities as tours or demonstrations. Only 8% feature preservation topics on their Web site, and few (6%) use preservation for earned income—for example, by selling preservation-quality materials in their gift shops or providing conservation services on a fee-for-service basis.

Fig. 9.15 Institutions that Promote Awareness of Conservation/Preservation Using the Following Activities



Multiple responses allowed

Recommendation

Institutions' budgets should reflect that preservation of collections is among their top priorities. Designated giving for the care of collections can help ensure this. Individuals at all levels of government and in the private sector *must* assume responsibility for providing support that will allow collections to survive.

Chapter 10: Assessments and Intellectual Control

Cataloging and documenting works of art in the collections are basic responsibilities of the museum.
–Professional Practices in Art Museums, Association of Art Museum Directors, 2001

Archivists strive to preserve and protect the authenticity of records in their holdings by documenting their creation and use in hard copy and electronic formats. They have a fundamental obligation to preserve the intellectual and physical integrity of those records.
–Code of Ethics for Archivists, Society for American Archivists, 2005

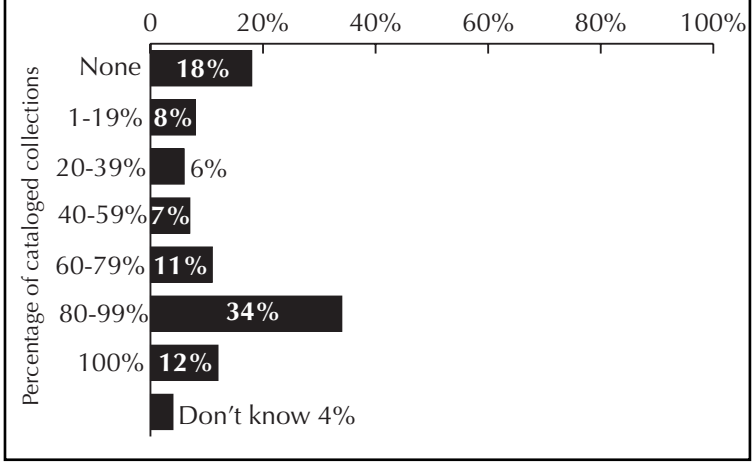
The Accreditation Commission expects that the scope of a museum's collections stewardship extends to both the physical and intellectual control of its property.
–A Higher Standard: Museum Accreditation Program Standards, American Association of Museums, 2005

The preservation needs documented by the Heritage Health Index are infinitely harder to address if archives, libraries, historical societies, museums, archaeological repositories, and scientific research organizations do not have recent assessments of their collections' conditions. Institutions will also find it challenging to manage the care of collections if they do not have sufficient intellectual control over what they hold. Although knowing the quantity and condition of collections is a fundamental component of collections stewardship, too many institutions do not have this information. Results from the survey questions that asked institutions to report on the percentage of collections that are cataloged and the availability of current assessments reveal this need. In addition, the percentage of missing information and "don't know" responses throughout the survey is telling about the lack of intellectual control over collections.

The Heritage Health Index asked institutions to estimate the percentage of their collections accessible through a catalog.[1] The definition of "catalog" did not specify what descriptive detail it must contain to allow institutions the broadest possible interpretation to this question. Only 12% said that all their collections were accessible through a catalog, but 34% have a large portion (80%-99%) of their collection cataloged (figure 10.1). A little over 10% of institutions have a backlog in cataloging, with only 60-79% of collections cataloged. Almost 40% of institutions have a significant backlog in cataloging, with 59% or less of their collection not having basic information recorded about it—including 18% of institutions with no cataloging records on any of their collections. That so many institutions lack information about their collections may explain the low response rate on the survey question that asked for the quantity of collections.

Looking at cataloging levels by institution, libraries are significantly more likely to have collections cataloged, with 69% of libraries having more than 80% of their collections cataloged (figure 10.2). Archives are least likely, with only 30%

Fig. 10.1 Institutions' Percentage of Collections Accessible Through a Catalog



1. Catalog: research tool or finding aid that provides intellectual control over collection through entries that may contain descriptive detail, including physical description, provenance, history, accession information, etc.

Fig. 10.2 Institutions' Percentage of Collections Accessible Through a Catalog (by type)

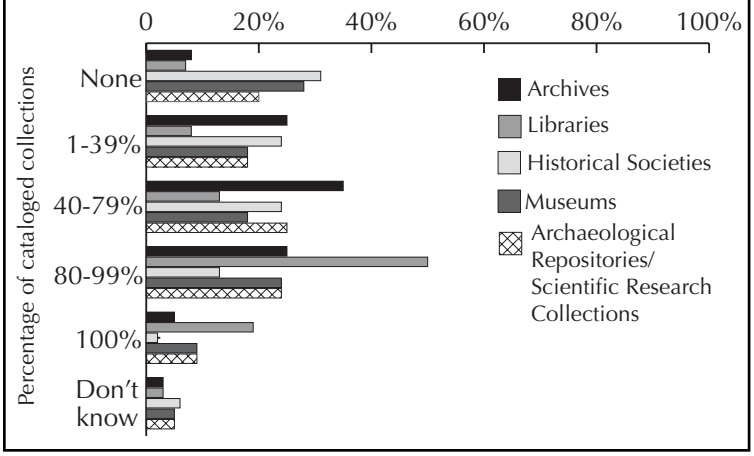
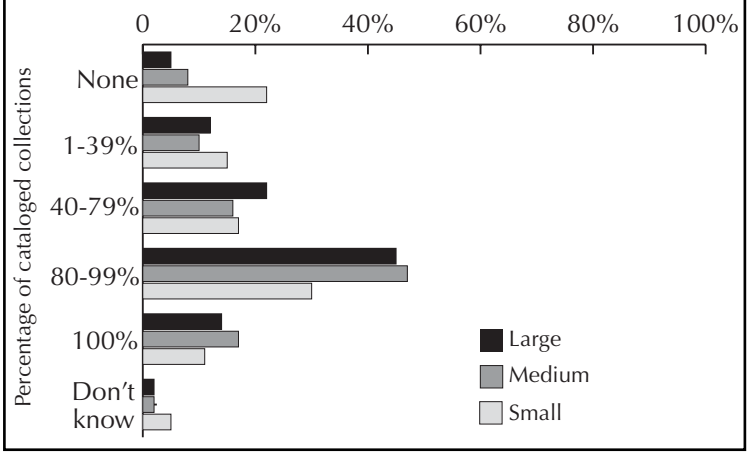


Fig. 10.3 Institutions' Percentage of Collections Available Through a Catalog (by size)



having a catalog that includes more than 80% of their collections. Only one-third of museums and archaeological repositories/scientific research collections have more than 80% of their collections cataloged. Institutions with no cataloging records include 31% of historical societies, 28% of museums, and 20% of archaeological repositories/scientific research collections. Only 7% of libraries and 8% of archives do not have anything cataloged.

Percentage of collections cataloged directly relates to size of institution, with smaller institutions more likely to have little or no collections data. Of the large institutions with none of their collections information in a catalog, 14% are large science museums/zoos/botanical gardens, 10% are large art museums, and 6% are large history museums/historic sites/other museums (figure 10.3). Small institutions with the highest percentage of having no collections cataloged include science museums/zoos/botanical gardens (43%), art museums and historical societies (33%), history museums/historic sites/other museums (31%), and archaeological repositories/scientific research collections (26%).

By governance, federal institutions are most likely to have more than 80% of their collections cataloged (60%), followed by 59% of institutions with county/municipal governance and 52% of state governed institutions. Tribal (50%) and non-profit (21%) organizations were most likely to have none of their collections cataloged.

Seventeen percent of institutions cited an urgent need for finding aids or cataloging of collections; it ranks as the second greatest urgent need cited by institutions after environmental controls (figure 10.4). Combining need and urgent need figures, 65% of institutions need cataloging—the third most frequent need after staff training and condition assessments. Historical societies (29%) and archives and history museums/historic sites/other museums (both 23%) cite an urgent need for cataloging.

To get a sense of the accessibility of collections information, the Heritage Health Index

Fig. 10.4 Need for Finding Aids or Cataloging of Collections

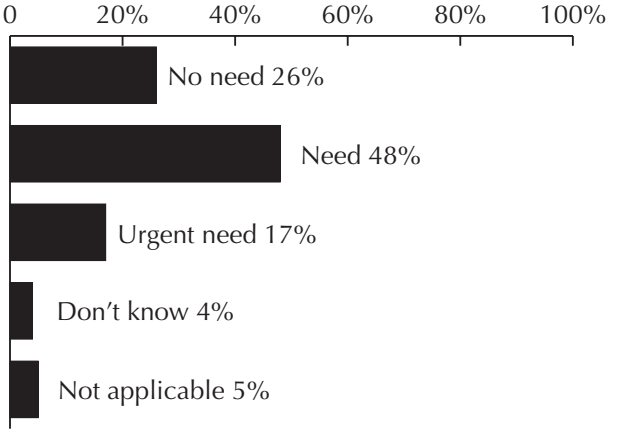


Fig. 10.5 Institutions' Percentage of Collections Catalog Available Online

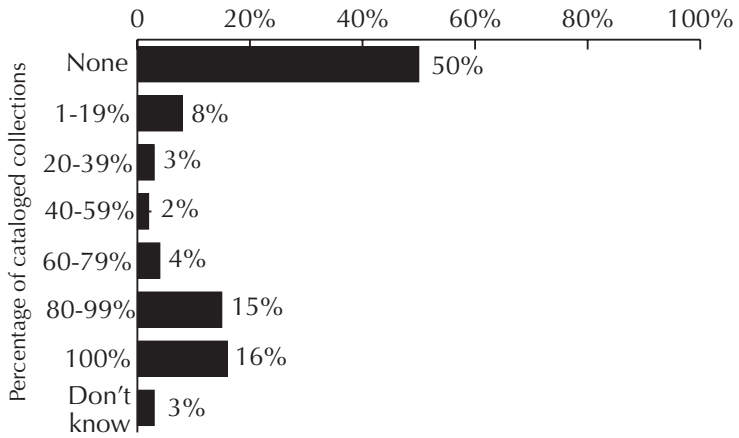
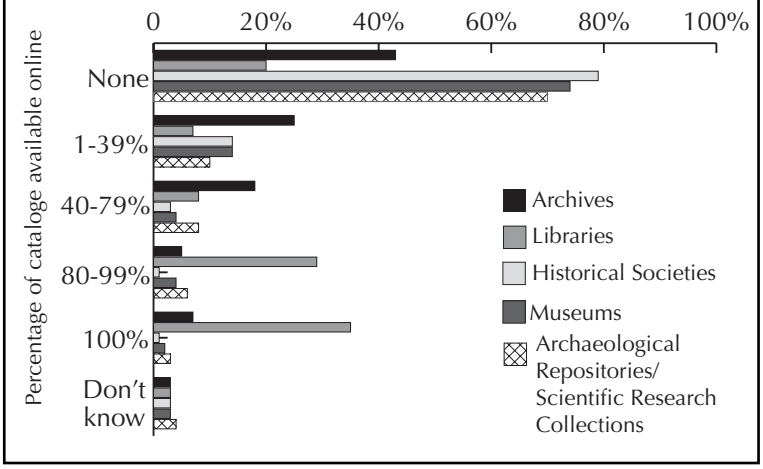


Fig. 10.6 Institutions' Percentage of Collections Catalog Available Online (by type)



included a question on the estimated percentage of the collection's catalog available online, whether for institutional or public use. Only 31% have such information available for more than 80% of their catalog, and half of all U.S. collecting institutions have no cataloging information available online (figure 10.5). At 64%, libraries are most likely to have online catalog access, while historical societies, museums, and archaeological repositories/scientific research collections are least likely to have any collections data available online (figure 10.6). Large institutions are more likely than small institutions to have their catalogs available online, with 41% of large institutions having more than 80% available, compared with 26% of small institutions (figure 10.7).

Only a quarter of institutions provide online access to the content of their collections or holdings through such things as online exhibitions, interactive resources, digital art, or digital copies of photographs, documents, or books (figure 10.8). Eight percent predict that they will begin to provide such content within a year. Archives (41%), libraries (29%), and museums (23%) are most likely to make collections content available online (figure 10.9). Large institutions are more

Fig. 10.7 Institutions' Percentage of Collections Catalog Available Online (by size)

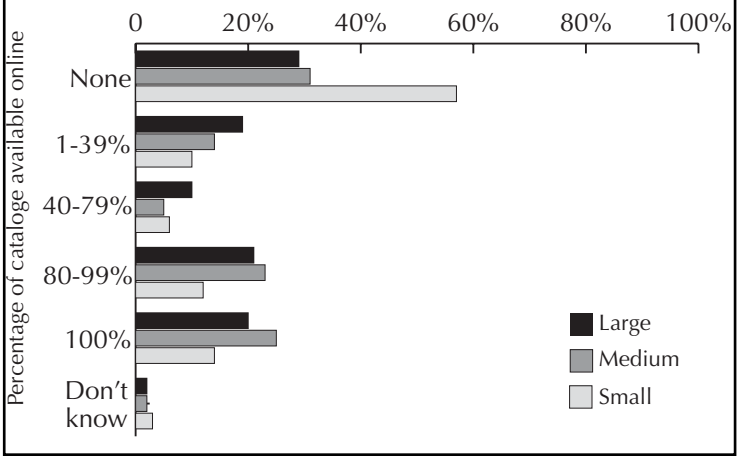


Fig. 10.8 Institutions That Provide Online Access to the Content of Any of Their Collections or Holdings

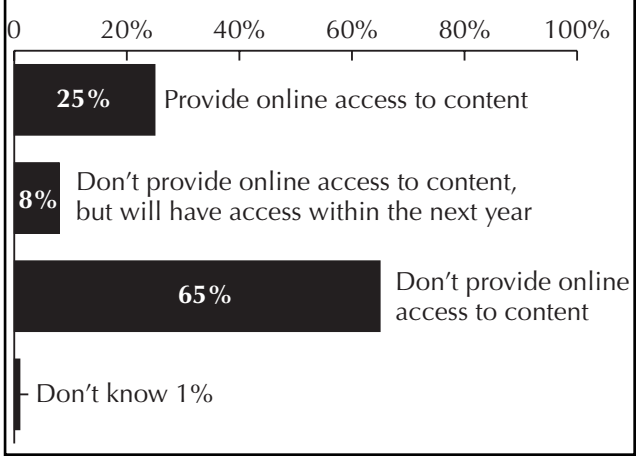


Fig. 10.9 Institutions That Provide Online Access to the Content of Any of Their Collections or Holdings (by type)

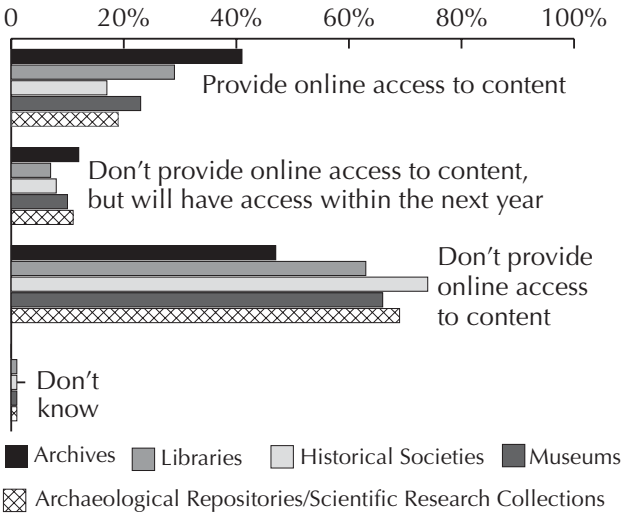
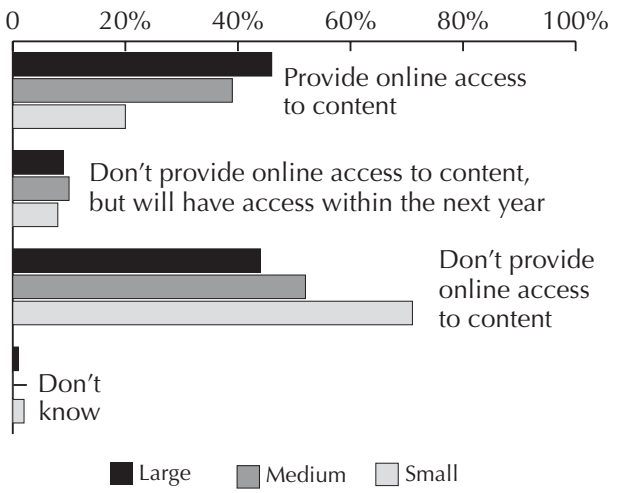


Fig. 10.10 Institutions That Provide Online Access to the Content of Any of Their Collections or Holdings (by size)

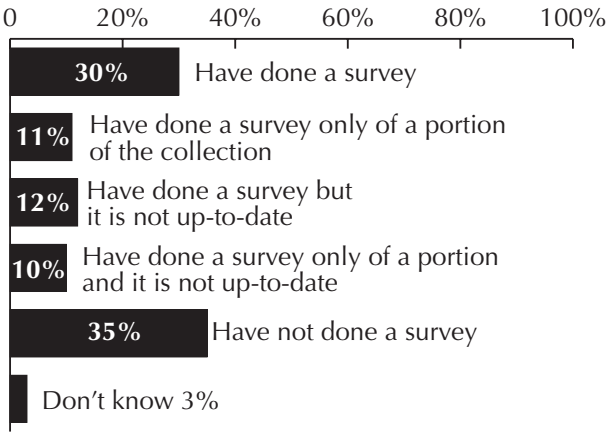


than twice as likely to provide access to content (46%) than small institutions (20%) (figure 10.10). The availability of such resources indicates not only an additional level of information about collections but also the existence of digital materials that should be potentially be part of an institution's preservation program.

Collections Assessments

The Heritage Health Index asked collecting institutions whether a survey of the general condition[2] of their collections has been done. Respondents were able to select from the following choices: "yes," "yes, but only of a portion of the collection," "yes, but it is not up-to-date," "yes, but only a portion of the collection, and it is not up-to-date," "no," and "don't know." Thirty percent of institutions have done a survey of the condition of their collections, but 35% have not done one (figure 10.11). The remaining one-third of institutions have surveys for only a portion of their collections or their surveys are out-of-date. Museums have a slightly higher percentage of having done surveys than other types of institutions (37%), and historical societies have the lowest percentage (22%) (figure 10.12). Libraries are the most likely not to have done any survey at all at 46%, including 47% of public libraries, 40% of academic libraries, and 50% of special libraries. Large, medium, and small institutions have similar percentages of having current surveys that included all of their collections (figure 10.13). The percentage of institutions that have done surveys is about equal across types of governance. Tribal-governed museums have the lowest percentage of

Fig. 10.11 Institutions That Have Done a Survey of the General Condition of Their Collections



2. Survey of general condition: an assessment based on visual inspection of the collections and the areas where they are exhibited or held.

Fig. 10.12 Institutions That Have Done a Survey of the General Condition of Their Collections (by type)

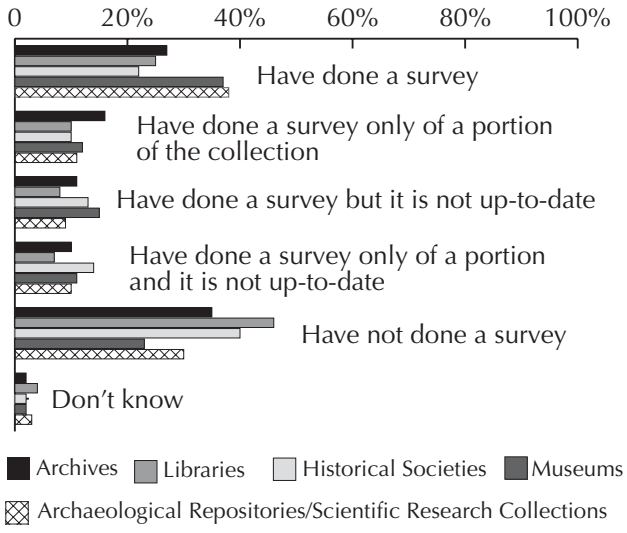


Fig. 10.13 Institutions That Have Done a Survey of the General Condition of Their Collections (by size)

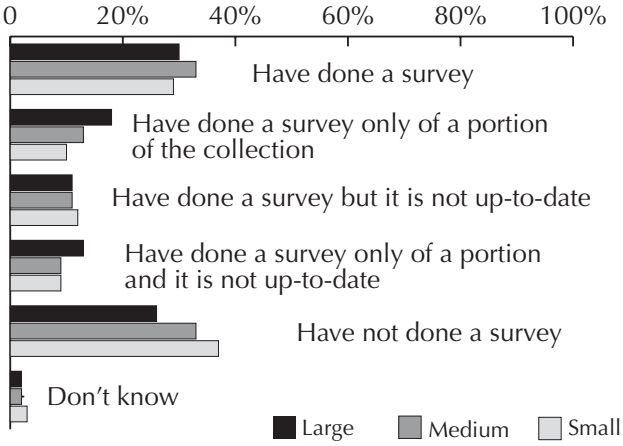
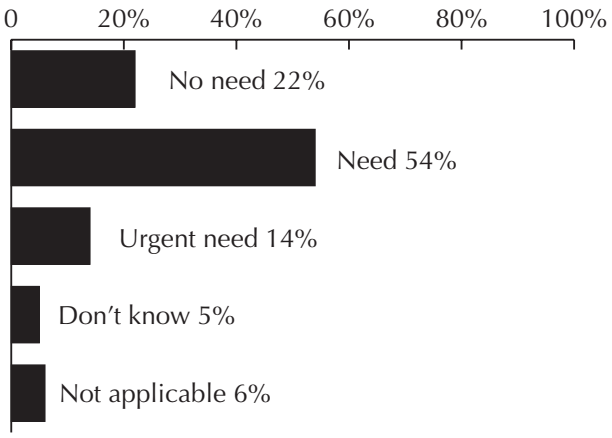


Fig. 10.14 Need for Condition Surveys or Assessments of Collections



having assessments (8%), but 19% of tribal institutions indicated "don't know" in this question.

In ranking needs, "condition surveys or assessments of collections" had a combined need and urgent need figure of 68%, the second most common cited need after staff training (figure 10.14). That assessments are such a common need and that only one-third of collecting institutions have a current assessment of their entire collection is consistent with the fact that many indicated "condition unknown" in the question about condition of collections items. It also explains why some survey questions, such as the one that asked institutions to indicate the causes of damage to items, had higher percentages of "don't know" responses.

As more institutions conduct surveys on the condition of their artifacts, there is the potential for the percentages of U.S. collections items in need to increase.

Appendix A—Heritage Health Index Institutional Advisory Committee

American Association for State and Local History
American Association of Museums
American Institute for the Conservation of Historic and Artistic Works
American Library Association
American Library Association/ALCTS Preservation and Reformatting Section
Association of Art Museum Directors
Association of Moving Image Archivists
Association of Regional Conservation Centers
Association of Research Libraries
Center for Arts and Culture
Council on Library and Information Resources
Getty Foundation
Institute of Museum and Library Services
Library of Congress
National Archives and Records Administration
National Association of Government Archives and Records Administrators
National Commission on Libraries and Information Science
National Conference of State Historic Preservation Officers
National Conference of State Museum Associations
National Endowment for the Arts
National Endowment for the Humanities
National Gallery of Art
National Historical Publications and Records Commission
National Park Service, Museum Management Program
National Preservation Institute
National Science Foundation
National Trust for Historic Preservation
Natural Science Collections Alliance
Regional Alliance for Preservation
RLG
Smithsonian Institution
Society for Historical Archaeology
Society for the Preservation of Natural History Collections
Society of American Archivists

Appendix B—Working Group Members*

Photographic materials

Chair, Debra Hess Norris, Director, Art Conservation Program, University of Delaware
Nora Kennedy, Conservator of Photographs, Metropolitan Museum of Art
Steve Puglia, Preservation and Imaging Specialist, National Archives and Records Administration
James Reilly, Director, Image Permanence Institute
Andrew Robb, Senior Photograph Conservator, Library of Congress
Grant Romer, Director of Conservation, George Eastman House
Deborah Willis, Professor of Photography & Imaging, New York University

Books, manuscripts, documents, maps, newspapers

Chair, Dianne van der Reyden, Senior Paper Conservator, Smithsonian Center for Materials Research and Education
Brenda Banks, Deputy Director, Georgia State Archives
Charles F. Bryan, Jr., Director, Virginia Historical Society (president-elect of American Association of State and Local History)
Richard Cameron, Director of State Programs, National Historical Publications and Records Commission
Sonja Jordan, Division Chief, Special Collections and Preservation, Chicago Public Library
Barclay Ogden, Head of Access/Preservation, University of California, Berkeley
Lorraine Olley, Executive Director of American Library Association-Library Administration and Management Association
Rodney Phillips, Director of the Humanities and Social Sciences Library, The New York Public Library

Paintings, prints, drawings

Chair, Barbara Heller, Head Conservator, Detroit Institute of Arts
Albert Albano, Executive Director and Head Paintings Conservator, Intermuseum Conservation Association
Rachel Allen, Deputy Director, Office of the Director, Smithsonian American Art Museum
Georgia Barnhill, Andrew W. Mellon Curator of Graphic Arts, American Antiquarian Society
Rebecca Buck, Registrar, Newark Museum
Maria Grandinette, Head, Conservation Treatment, Stanford University Libraries
Ross Merrill, Chief of Conservation, National Gallery of Art
Terrie Rouse, past President and CEO of African American Museum in Philadelphia

Anthropological and ethnographic objects

Chair, Jerry Podany, Head of Antiquities Conservation, Getty Museum
Marla C. Berns, Director, Fowler Museum of Cultural History, University of California Los Angeles
Judith Bittner, State Historic Preservation Officer, Office of History & Archeology, Alaska Department of Natural Resources
J. Claire Dean, Conservator, Dean & Associates Conservation Services
Jonathan Haas, MacArthur Curator, North American Anthropology, Field Museum
Jessica Johnson, Senior Objects Conservator, National Museum of the American Indian
Nancy Odegaard, Conservator, Arizona State Museum, University of Arizona
Robert Sonderman, Senior Staff Archeologist, Regional Archeology Program, Museum Resource Center, National Park Service

Furniture, textiles, historic objects

Chair, Sara Wolf, Director, Northeast Museum Services Center, National Park Service
Mary Jo Davis, Project Director, Vermont Collections Care Program
Sharon Fawcett, Deputy Assistant Archivist for Presidential Libraries, National Archives and Records Administration
Larry Franklin, Trustee, Panhandle-Plains Historical Museum
Mary Lou Hultgren, Curator, Hampton University Museum
Julie Reilly, Associate Director and Chief Conservator, Ford Conservation Center
Ralph Wiegandt, Conservator, Rochester Museum and Science Center

Moving images and recorded sound

Chair, Sarah Stauderman, Preservation Officer, Technical Services Division, Smithsonian Institution
Lisa Carter, Audio-visual Archivist, Special Collections & Archives, University of Kentucky
Alan Lewis, Subject Area Expert for Audiovisual Preservation, Special Media Archives Services, National Archives and Records Administration
Gregory Lukow, Assistant Chief, Motion Picture, Broadcasting & Recorded Sound Division, Library of Congress
Chris Paton, Archivist, Popular Music Collection, Georgia State University
Rowena Stewart, Executive Director, American Jazz Museum
Bonnie Wilson, Curator, Sound and Visual Collections, Minnesota Historical Society

Decorative arts, sculpture and mixed media

Chair, Meg Craft, Objects Conservator, The Walters Art Museum
Catherine Futter, Curator of Decorative Arts, Nelson-Atkins Museum of Art
Glen P. Gentele, Director, Laumeier Sculpture Park and Museum
Edward McManus, Chief Conservator, National Air and Space Museum
Ann-Marie Reilly, Registrar, American Folk Art Museum
Gabriela Truly, Collections Manager, Dallas Museum of Art
Glenn Wharton, Sculpture Conservator, Glenn Wharton & Associates

Electronic records and digital collections

Chair, Paul Conway, Director, Information Technology Services, Duke University Libraries
Philip C. Bantin, Director of Indiana University Archives, Indiana University
Linda Evans, Chief Cataloger, Chicago Historical Society
Carl Fleischhauer, Technical Coordinator, National Digital Library Program, The Library of Congress
Clyde Grotophorst, Associate University Librarian for Library Systems, George Mason University
James Henderson, State Archivist of Maine, Maine State Archives
Richard Rinehart, Digital Media Director, Berkeley Art Museum & Pacific Film Archive

Natural science specimens

Chair, Hugh Genoways, Curator of Zoology, University of Nebraska-Lincoln
Janet Braun, Curator, Division of Mammalogy, Sam Noble Oklahoma Museum of Natural History
Chris Collins, Director of Collections and Conservation, American Museum of Natural History
Julie Golden, Acting Director & Curator of Paleontologic Collections, University of Iowa
Ann Pinzl, Curator Emerita (Botany), Nevada State Museum
Robert Waller, Chief Conservator, Canadian Museum of Nature
Tim White, Senior Collection Manager Invertebrate Paleontology, Peabody Museum of Natural History, Yale University

**Affiliations as of May 2002*

Appendix C—Heritage Preservation Board Members

Board Members 2005-2006

Chairperson of the Board

Debra Hess Norris, Chair and Professor, University of Delaware/Winterthur Museum Art Conservation Program

Vice Chairperson

Mervin Richard, Deputy Chief of Conservation, National Gallery of Art

Treasurer

Julie Reilly, Associate Director and Chief Conservator, Nebraska State Historical Society

Secretary

Nancy Schamu, Executive Director, National Conference of State Historic Preservation Officers

Tom Clareson, Program Director for New Initiatives, PALINET

Dennis Fiori, Director, Maryland Historical Society

Doris Hamburg, Director, Preservation Programs, National Archives and Records Administration

Sherelyn Ogden, Head of Conservation, Minnesota Historical Society

Jerry Podany, Head, Antiquities Conservation, J. Paul Getty Museum

Victoria Steele, Head, Department of Special Collections, Young Research Library, UCLA

Previous Board Members During the Heritage Health Index Project

Ingrid Bogel, Executive Director, Conservation Center for Art & Historic Artifacts

Inge-Lise Eckmann

Barbara Heller, Chief Conservator, Detroit Institute of Arts

Maribelle Leavitt

Frank Matero, Chairman, Graduate Program in Historic Preservation, University of Pennsylvania

Stephen Williams, Strecker Museum Complex, Baylor University

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Appendix E—Heritage Health Index Participants*

Alabama

Air University Library
Alabama Department of Archives and History
Alabama Supreme Court and State Law Library
Alabama's Constitution Village
Aliceville Museum Inc.
American Truck Historical Society
Archaeological Resource Laboratory, Jacksonville State University
Archaeology Laboratory, Auburn University Montgomery
Athens State University Library
Autauga-Prattville Public Library
Bay Minette Public Library
Birmingham Botanical Society, Inc.
Birmingham Public Library
Bridgeport Public Library
Carrollton Public Library
Center for Archaeological Studies, University of South Alabama
Dauphin Island Sea Lab Estuarium
Depot Museum, Inc.
Dismals Canyon
Earle A. Rainwater Memorial Library
Elton B. Stephens Library
Fendall Hall
Freeman Cabin/Blountsville Historical Society
Gaineswood Mansion
Hale County Public Library
Herbarium, Troy State University
Herbarium, University of Alabama, Tuscaloosa
Historical Collections, Lister Hill Library of Health Sciences
Huntington Botanical Garden
J. F. Drake Memorial Learning Resources Center
Jacksonville State University Library
Jefferson County Law Library
John D. Freeman Herbarium, Auburn University
Karl C. Harrison Museum of George Washington
Magnolia Grove
Mobile Medical Museum
Mobile Municipal Archives
Mobile Museum of Art
Montgomery City-County Public Library
Montgomery Museum of Fine Arts
Montgomery Zoo
Morgan County Alabama Archives
National Voting Rights Museum
Natural History Collections, University of South Alabama
North Alabama Railroad Museum
Palisades Park
Pelham Public Library
Pond Spring-General Joseph Wheeler House
Ruffner Mountain Nature Center
South University Library
State Black Archives Research Center and Museum
Troy State University Library

Alaska

Alaska Division of Archives
Alaska Historical Society
Alaska Native Language Center
Alaska State Council on the Arts
Alaska State Museums
Alutiiq Museum and Archaeological Repository
Anchorage Museum of History and Art
Bethel Broadcasting, Inc.
Copper Valley Historical Society
Elmendorf Air Force Base Museum
Herbarium, U.S. Department of Agriculture Forest Service, Alaska Region
Herbarium, University of Alaska Fairbanks
Herbarium, University of Alaska Juneau
Historical Collections, Alaska State Library
Hoonah Cultural Center
Katmai National Park and Preserve
Kenai Peninsula College Library
Klondike Gold Rush National Historical Park
Kodiak Historical Society
Maxine and Jesse Whitney Museum
National Archives and Records Administration-Pacific Alaska Region
Nenana Public Library
Sitka National Historical Park
Takotna Community Library
Third Medical-Medical Library
Tri-Valley School-Community Library
University of Alaska Fairbanks Libraries
University of Alaska Museum
Wasilla Public Library

American Samoa

American Samoa Office of Archives and Records Management

Arizona

Arizona Historical Society
Arizona Historical Society Pioneer Museum
Arizona Jewish Historical Society
Arizona State Library, Archives and Public Records
Arizona State Museum
Avondale Public Library
Benson Public Library
Bisbee Mining and Historical Museum
Buckeye Valley Museum
Canyon De Chelly National Monument
Cline Library, Northern Arizona University
Collection of Mammals, University of Arizona
Copper Queen Library
Deaver Herbarium, Northern Arizona University
Department of Mines and Mineral Resources Library
Desert Foothills Library
Douglas Williams House
Empire Ranch Foundation
Gila County Historical Museum
Heard Museum
Herbarium, University of Arizona
Historic Sahuaro Ranch
Hubbell Trading Post National Historic Site
International Wildlife Museum
Kitt Peak National Observatory
Lake Havasu Museum of History
Mesa Historical Museum
Mesa Room-Local History and Special Collections
Mohave Museum of History and Arts
Museum of Northern Arizona
Navajo Nation Museum
Nogales-Santa Cruz County Library
Phoenix Museum of History
Phoenix Police Museum
Phoenix Public Library
Phoenix Zoo
Pinal County Historical Society and Museum
Pueblo Grande Museum
Quartzsite Public Library
Sedona Public Library
Telephone Pioneer Museum
Tempe Public Library
Tombstone Courthouse State Historic Park
Tubac Center of the Arts
Tucson Botanical Garden
UFO Information Retrieval Center
University of Arizona Library
University of Arizona Zoological Collections
Walnut Canyon National Monument
Western Archeological and Conservation Center
Winslow Public Library

Arkansas

Arkansas Air Museum
Arkansas Archeological Survey
Arkansas Archeological Survey Parkin Research Station
Arkansas Arts Center
Arkansas Geological Commission Library
Arkansas History Commission
Boone County Library
Clinton Presidential Materials Project
Collection of Recent Mammals, Arkansas State University
Delta Cultural Center
Herbarium, Biological Sciences Department, Arkansas State University
Historic Arkansas Museum
Jacksonport State Park
Lake Chicot State Park
Marked Tree Delta Area Museum
Phillips County Library
Pine Bluff/Jefferson County Historical Museum
Prairie Grove Battlefield State Park
Randolph County Library
Southeast Arkansas College Library
Southwest Arkansas Regional Archives
Springdale Public Library
University Museum Collections, University of Arkansas
University of Arkansas Libraries

California

Academy Film Archive, Academy of Motion Picture Arts and Sciences
Amador County Archives
Antelope Valley Indian Museum
Anthropological Studies Center, Sonoma State University
Armand Hammer Museum of Art and Cultural Center, University of California, Los Angeles

Asian Art Museum of San Francisco
Beaumont Library District
Benthic Invertebrate Collection, Scripps Institution of Oceanography
Brand Library and Art Center
Butte County Pioneer Memorial Museum
Cabrillo Marine Aquarium Library
Calaveras County Archives
California African American Museum
California Historical Society
California State Archives
California State Library
California State Railroad Museum
California State University
Camp Pendleton Command Museums
Central California Information Center
Charmlee Wilderness Park Nature Center
Chula Vista Public Library
City of Sonora
Clarke Historical Museum
Colusa County Free Library
Community Memorial Museum of Sutter County
Coronado Historical Association
Costa Mesa Historical Society
Covina Valley Historical Society
Crestmont College Salvation Army Library
Dana Adobe
De Saisset Museum
Death Valley National Park
Del Norte County Library District
Descanso Gardens Guild Inc.
Edward Laurence Doheny Memorial Library
Effie Yeaw Nature Center
Elverhoj Museum of History and Art
Erik Erikson Library
Essig Museum of Entomology
Ethnomusicology Archive, University of California, Los Angeles
Exotic Feline Breeding Compound, Inc.
Exposition Park Rose Garden
Fine Arts Museums of San Francisco
Foothill/De Anza Community College District Archives
Fort Jones Museum
Fresno County Public Library
Geological Collections, Scripps Institution of Oceanography
Golden Drift Historical Society
Golden Gate National Recreation Area
Gustine Historical Society
The Haggin Museum
Hayward Area Historical Society
Hearst Art Gallery, Saint Mary's College
Herbarium, Biology Department, University Of Redlands
Herbarium, Botany and Plant Sciences Department, University of California, Riverside
Herbarium, Department of Biology, San Diego State University
Historical Society of Long Beach
Hoover Institution Library and Archives
Humboldt Redwoods State Park Visitor Center
Huntington Library, Art Collections and Botanical Gardens
Imperial Public Library
Irwindale Public Library
J. Paul Getty Museum
Japanese American National Library
Lanterman House
Law Library for San Bernardino County
Lompoc Museum
Long Beach Public Library and Information Center
Los Angeles City Archives
Los Angeles City College Library
Los Angeles County Museum of Art
Louis Robidoux Nature Center
Marine Vertebrates Collection, Scripps Institution of Oceanography
Mariposa Museum and History Center, Inc.
Mechanics' Institute Library
Mission Inn Foundation
Moonridge Animal Park
Moore Laboratory of Zoology
Mosquito Association Inc. Library and Archives
Museum of California Foundry History
Museum of Contemporary Art, Los Angeles
Museum of Contemporary Art San Diego
Museum of Natural History Collections, University of California, Santa Cruz
Museum of Vertebrate Zoology
Music Center Archives
National Archives and Records Administration, Pacific Region (Laguna Niguel)
National Archives and Records Administration, Pacific Region (San Francisco)
National City Public Library
National Liberty Ship Memorial/S.S. Jeremiah O'Brien

Natural History Museum of Los Angeles County
North American Radio Archives
Northern Mariposa County History Center
Orange County Resources and Development Management Department Library
Pacific Coast Air Museum
Palo Alto Junior Museum and Zoo
Patterson Township Historical Society Museum
Pelagic Invertebrates Collection, Scripps Institution of Oceanography
Pepperdine University Library
Philosophical Research Society Library
Phoebe Hearst Museum of Anthropology
Point Arena Lighthouse and Museum
Pomona College Museum of Art
Quail Botanical Gardens
Rancho Del Oso Nature and History Center
Ravenswood Historic Site
Reedley Museum
Research Library, Getty Research Institute
Richard Nixon Library and Birthplace
Richmond Public Library
Robert L. Powell Library
Roman Catholic Diocese of Fresno
Ronald Reagan Presidential Library and Museum
Rosicrucian Fellowship Library
Roundhouse Marine Studies Laboratory and Aquarium
Sacramento Public Library
Sahyun Library
San Bernadino County Museum
San Buenaventura Mission Museum
San Diego Archaeological Center
San Diego Automotive Museum
San Diego Museum of Man
San Diego Natural History Museum
San Francisco Art Institute
San Francisco Museum of Modern Art
San Francisco Public Library
San Francisco State University
San Joaquin Valley Library System
Santa Barbara Botanic Garden
Santa Clara City Library
Santa Monica Pier Aquarium
Shadelands Ranch Historical Museum
Shasta County Library
Southwest Museum
Stanford University Libraries
Tallac Historic Site and Museum
Taoist Temple and Museum
Tehama County Library
Tomales Regional History Center
Turtle Bay Exploration Park
University of California, Berkeley Art Museum and Pacific Film Archive
University of California, Berkeley Libraries
University of California, Berkeley University and Jepson Herbaria
University of California, Davis Libraries
University of California, Los Angeles Film and Television Archive
University of California, Los Angeles Libraries
University of California, Riverside Libraries
University Of California, Riverside Nematode Collection
University of California, San Diego Libraries
University of Southern California Libraries
Vallejo Naval and Historical Museum
Vertebrate Exhibit Museum, Gray Lodge Wildlife Area
Vertebrate Museum, California State University, Long Beach
Watsonville Public Library
Wells Fargo History Museum-Los Angeles
Whittier College Libraries
WildCare: Terwilliger Nature Education and Wildlife Rehabilitation
Wilson Riles Archives and Institute for Education
Workman and Temple Family Homestead Museum
World Museum of Natural History, La Sierra University
Yolo County Law Library
Yorba Linda Public Library

Colorado

Beulah Historical Society
Boettcher Mansion
Buena Vista Heritage Museum
Canyons of the Ancients National Monument/Anasazi Heritage Center
Cheyenne Mountain Zoo
Cheyenne Wells Museum
City of Greeley Museums
Colorado College Charles Leaming Tutt Library
Colorado Historical Society
Colorado Legislative Council Library

Colorado Railroad Museum
Colorado State University Libraries
Cortez Cultural Center, Inc.
Cumbres and Toltec Scenic Railroad Commission
Denver Art Museum
Denver Botanic Gardens
Denver Museum of Nature and Science
Denver Public Library
Dinosaur National Monument
East Morgan County Library District
Eastern Colorado Historical Society
Fort Collins Public Library
Garfield County Public Library System
Historic Georgetown
Historic Parish House
Ignacio Community Library District
James A. Michener Library, University of Northern Colorado
Kauffman House/Grand Lake Area Historical Society
Kiowa County Public Library District
Lafayette Miners Museum/Lafayette Historical Society
Lincoln County Historical Society and Museum
Mammalogy Teaching Collection, Colorado State University
Mesa Verde National Park Museum
Mountain Bike Hall of Fame Museum
National Archives and Records Administration, Rocky Mountain Region (Denver)
Old Colorado City Historical Society
Pikes Peak Library District
Pioneer Museum
Pueblo County Historical Society
Regis University Library
Rocky Ford Public Library
Rocky Mountain Arsenal Technical Information
South Platte Valley Historical Society
Spanish Peaks Library District
Third Cavalry Museum
U.S. Air Force Academy Library System
University of Colorado at Boulder Libraries
Western State College of Colorado Libraries
Wheat Ridge Historical Society
Wings Over the Rockies Museum, Hangar 1

Connecticut

American Clock and Watch Museum
Archbishop O'Brien Library
Brainerd Memorial Library
Bridgeport Public Library Historical Collections
Brookfield Museum and Historical Society
Central Connecticut State University Library
Charles B. Graves Herbarium, Connecticut College
Charles E. Shain Library
Children's Museum of Southeastern Connecticut
Connecticut Electric Railway Association, Inc.
Connecticut Historical Society
Connecticut State Library
Connecticut's Beardsley Zoo
Cyrenius H. Booth Library
Dorothy Whitfield Historic Society
Essex Library Association, Inc.
Fairfield Historical Society
Florence Griswold Museum
Herbarium, Biological Sciences Department, Central Connecticut State University
Herbarium, Entomology Department, Connecticut Agricultural Experiment Station
Historical Society of Glastonbury
Jewish Historical Society of New Haven
Killingworth Library
Manchester Historical Society
The Maritime Aquarium at Norwalk
Mattatuck Museum
Mystic Seaport—The Museum of America and the Sea
New Fairfield Historical Society
Norfolk Library
Old Bethlehem Historical Society
Peabody Museum of Natural History
Plumb Memorial Library
Putnam Public Library
Rose Farm Gallery
Scherer Library of Musical Theatre
Shelton Historical Society
Silas Bronson Library
Slater Memorial Museum
Somers Historical Society
Stonington Historical Society
Thomaston Historical Society
Trinity College Library
U.S. Coast Guard Museum
University of Connecticut Libraries
Willoughby Wallace Memorial Library
Winchester Historical Society
Wintonbury Historical Society
Woodstock Historical Society, Inc.

Yale University Art Gallery
Yale University Library

Delaware

Bridgeville Public Library, Inc.
Cultural and Recreational Services Section, Delaware Division of Parks and Recreation
Delaware Art Museum
Delaware Center for Horticulture
Delaware Museum of Natural History
Delaware State Museums
Iron Hill Museum of Natural History
Laurel Public Library
Lewes Historical Society
Lombardy Hall Foundation
New Castle Historical Society
Rehoboth Art League
Sussex County Department of Libraries
University Museums, University of Delaware
University of Delaware Library
Winterthur Museum, Garden and Library

District of Columbia

American Nurses Association Library/Information Center
Anacostia Museum and Center for African American History, Smithsonian Institution
Anderson House Museum/Society of Cincinnati
Architect of the Capitol–Curator's Office
Archives of American Art, Smithsonian Institution
Arthur M. Sackler Gallery/Freer Gallery of Art, Smithsonian Institution
Association of American Medical Colleges Mary H. Littlemeyer Archives
Basilica of the National Shrine of the Immaculate Conception
Bender Library and Learning Resources Center
Catholic University of America Libraries
Center for Folklife and Cultural Heritage, Smithsonian Institution
Corcoran Gallery of Art
Defense Pest Management Information Analysis Center, U.S. Department of Defense
District of Columbia Office of Public Records
Drug Enforcement Administration Library
Dumbarton Oaks
Federal Judicial Center Library
Folger Shakespeare Library
General Services Administration Fine Arts Program
Hirshhorn Museum and Sculpture Garden, Smithsonian Institution
Horticulture Collections Management and Education, Smithsonian Institution
Library of Congress
National Air and Space Museum, Smithsonian Institution
National Archives and Records Administration
National Gallery of Art
National Geographic Society Library
National Museum of African Art, Smithsonian Institution
National Museum of American History, Smithsonian Institution
National Museum of Natural History, Smithsonian Institution
National Museum of the American Indian, Smithsonian Institution
National Portrait Gallery, Smithsonian Institution
National Postal Musuem, Smithsonian Institution
National Register of Historic Places Collection
National Zoological Park, Smithsonian Institution
Naval Historical Center
The Phillips Collection
Smithsonian American Art Museum, Smithsonian Institution
Smithsonian Institution Archives
Smithsonian Institution Libraries
Textile Museum
Trinity University Library
U.S. Army Center of Military History
U.S. Capitol Collections
U.S. Department of Justice Libraries
U.S. House Collection
United States Holocaust Memorial Museum
Washington National Cathedral
Washington Theological Union Library
Women's History and Resource Center

Florida

African American Cultural Society
Air Force Armament Museum
Alachua County Library District
Altamonte Springs City Library
American Entomological Institute
Anton Brees Carillon Library, Historic Bok Sancturay
Archives and Record Services, City of Tampa
Astronaut Hall of Fame

The Bailey-Matthews Shell Museum
The Barnacle Historic State Park
Bradford County Public Library
Bureau of Braille and Talking Book Library Services
Bureau of Natural and Cultural Resources, Florida Division of Recreation and Parks
Clearwater Marine Aquarium
Collier County Public Library
Colonial Spanish Quarter Museum
Columbia County Public Library
Destin Library
Eustis Memorial Library
Fairchild Tropical Garden Library/ Archives
Florida Atlantic University Libraries
Florida Holocaust Museum
Florida Museum of Natural History
Florida State University Libraries
Fort Gadsen State Historic Site
Gifford Arboretum, University of Miami
Gillespie Museum of Minerals
Godfrey Herbarium, Florida State University
Gulf Coast Heritage Association
Gulfport Public Library
Herbarium, Archbold Biological Station
Herbarium, Biology Department, University of South Florida
Highlands Hammock State Park
Historic Bok Sanctuary
Historical Museum of Southern Florida
Indian Temple Mound Museum
John and Mable Ringling Museum of Art
Miami International University of Art and Design
Miami Metrozoo
Miami-Dade Public Library
Montgomery Botanical Center
Morikami Museum and Japanese Gardens
Mounts Botanical Garden
Museum of Arts and Sciences/Center for Florida History
Museum of Florida History
National Museum of Naval Aviation
Navy SEAL Museum
North Miami Public Library
Norton Museum of Art
Okeechobee County Public Library
Orange County Public Library System
Orange County Regional History Center
Orlando Museum of Art
Pasco County Library System
Pinellas County Historical Society
Polk County Historical Museum
Putnam County Library System
Records and Archives Division, City of Hollywood
Rollins College Library
Salvador Dali Museum
Samuel P. Harn Museum of Art, University of Florida
Southeast Archeological Center
St. Vincent de Paul Regional Seminary Library
State Library and Archives of Florida
Stuart Heritage Museum
Tallahassee Museum of History and Natural Science
Timucuan Ecological and Historic Preserve
Tree Hill Jacksonville's Nature Center
U.S. Space Walk of Fame Foundation
University of Florida Libraries
Ybor City Museum Society

Georgia

Andersonville National Historic Site
Antonio J. Waring, Jr. Archaeological Laboratory, State University of West Georgia
Atlanta History Center
Atlanta-Fulton Public Library System
Brooks County Public Library
Bryan-Lang Historical Library
Chattahoochee Technical College Library
Chief John Ross House
Dalton State College Library
Dunwoody Nature Center
Emory University Libraries
Forsyth County Public Library
Fort Morris State Historic Site
Georgia Archives
Georgia Museum of Art
Georgia Music Hall of Fame
Georgia Southern Botanical Garden
Girl Scout First Headquarters
Global Health Odyssey Museum
Hammonds House Galleries
Herbarium, Biology Department, Emory University
Herbarium, Biology Department, Georgia Southwestern State University
High Museum of Art
Jimmy Carter Library and Museum
Kinchafoonee Regional Library System

Madison-Morgan Cultural Center
Medical College of Georgia Library
Ocmulgee National Monument
Ohoopee Regional Library System
Oxbow Meadows Environmental Learning Center
Polk County Historical Society
Robert W. Woodruff Library, Atlanta University Center
Rome Area History Museum
Sandy Creek Nature Center
Ships of the Sea Maritime Museum at William Scarbrough House
Special Collections Department, Georgia State University Library
Steffen Thomas Museum and Archives
Troup County Historical Society and Archives
University of Georgia Libraries
Wesleyan College Library
West Georgia Museum of Tallapoosa
West Georgia Regional Library
William H. Reynolds Memorial Nature Preserve

Guam

Guam Law Library
Guam Public Library System
University of Guam Library

Hawaii

Bishop Museum
Celtic Evangelical Church
Harold L. Lyon Arboretum
Hawai'i Nature Center, 'Iao Valley
Hawaii Chinese History Center Library
Hawaii State Archives
Hawaiian Historical Society
Herbarium, Botany Department, University of Hawaii
Honolulu Academy of Arts
Honolulu Community College Library
Honolulu Police Department Law Enforcement Museum
Honolulu Zoo
Kona Historical Society
Kona Outdoor Circle Educational Center
Lahaina Restoration Foundation
Laupahoehoe Train Museum
National Tropical Botanical Garden
Pacific Tsunami Museum
Panaewa Rainforest Zoo
Supreme Court Law Library
University of Hawaii Libraries

Idaho

The Archives of Falconry
Bannock County Historical Museum
Benewah County District Library
Cassia County Historical Society and Museum
Council Valley Museum
Department of Veterans Affairs Library
Herbarium, Biology Department, Boise State University
Herbarium, Rocky Mountain Research Station
Idaho Legislative Reference Library
Idaho Military History Museum
Idaho Museum of Natural History
Idaho State Historical Society
Ketchum Sun Valley Heritage and Ski Museum
Latah County Historical Museum
Lemhi County Historical Museum
Lewiston City Library
Madison Library District
Mullan Historical Society
Old Mission State Park
Osburn Public Library
Priest Lake Museum Association
Regional History Department, Community Library Association
South Bannock County Historical Center
Special Collections and Archives, University of Idaho Library

Illinois

Abraham Lincoln Presidential Library
Adler Planetarium and Astronomy Museum
Alsip-Merrionette Park Public Library
American College of Surgeons Archives
American Dental Association Library
American Hospital Association Resource Center
Anita Purves Nature Center
Anthropology Museum, Northern Illinois University
Art Institute of Chicago
Beardstown Houston Memorial Library
Blackberry Farms, Pioneer Village
Burkett House/Wabash County Museum
Butterworth Center and Deere-Wiman House
Calumet City Public Library
Canal and Region Historical Collection, Lewis University

Carthage Public Library District
Cary Area Public Library District
Catholic Theological Union Library
Center for Archaeological Investigations, Southern Illinois University
Center for Research Libraries
Central Illinois Landmarks Foundation
Chatsworth Township Library
Chicago and Northwestern Historical Society
Chicago Botanic Garden
Chicago Heights Free Public Library
Chicago Historical Society
Chicago Public Library
Chicago Zoological Park
Collinsville Historical Museum
Cook Memorial Public Library District
Cortland Community Library
David Davis Mansion State Historic Site
Depot Veterans Memorial and Coal Miner's Memorial
Dillon Home Museum
DuSable Museum of African American History
The Elderly Learning and Living Facility
Elmhurst Historical Museum
Evanston Historical Society
Fabyan Villa
Feehan Memorial Library, Mundelein Seminary
Flagg Township Historical Society and Museum
Fox River Grove Public Library District
Frankfort Area Historical Museum
Galena Public Library District
Galter Health Sciences Library
Geneseo Public Library District
Glen Ellyn Public Library
Glen Oak Zoo
Governor Duncan Mansion
Gregg House Museum
Harris Agricultural Museum
Havana Public Library District
Henry County Genealogical Society
Herbarium, Biological Sciences Department, Northern Illinois University
Herbarium, Crop Sciences Department, University of Illinois
Herbarium, Plant Biology Department, University of Illinois
Highland Historical Society
Hyde Park Historical Society
Illinois and Michigan Canal Museum
Illinois Natural History Survey
Illinois State Library
Illinois State Museum
Illinois State Museum Chicago Gallery
Illinois State Water Survey Library
Illinois Transportation Archaeological Research Program
Illinois Wesleyan University
Independent Media Center Urbana-Champaign
Jesuit-Krauss-McCormick Library, Lutheran School of Theology and McCormick Theology Seminary
John A. Logan College Museum
Johnson County Genealogical and Historical Society
Joliet Area Historical Museum
Kishwaukee Genealogists
Klehm Arboretum and Botanic Garden
Kline Creek Farm
Knox College Library
Lake County Discovery Museum
Lake Forest College Library
Lake Forest-Lake Bluff Historical Society
Lakes Region Historical Society
Laws of Nature Natural History Center
Lincoln Home National Historic Site
Lincoln Memorial Garden and Nature Center
Lincoln Park Zoological Garden
Little White School Museum
Main Street Eldorado
Mammal Collection, Southern Illinois University
Martin Township Public Library
McHenry Nunda Public Library District
Messenger Public Library of North Aurora
Milner Library, Illinois State University
Morris Area Public Library District
The Morton Arboretum
Mount Carroll Township Public Library
Mount Olive Public Library
Naper Settlement
National Archives and Records Administration, Great Lakes Region (Chicago)
Newberry Library
O'Fallon Historical Society, Inc.
Odell Public Library District
Oriental Institute Museum
Park Forest Public Library
Paul and Emily Douglas Library, Chicago State University

Pecatonica Historical Society
Peoria County Genealogical Society
Plainfield Public Library District
Quincy Museum
Quincy Public Library
Rick Warren Memorial Public Library
Ruby E. Dare Library, Greenville College
Schiller Park Historical Society
Southern Illinois University Carbondale Libraries
Spertus Museum of Judaica
Spring Valley Nature Center and Heritage Farm
Squaw Grove Public Library District
Sterling Public Library
Stickney-Forest View Public Library District
Theatre Historical Society of America
Tilton Historical Society
Ukrainian National Museum
Universal Oil Products Library and Information Services
University Museum, Southern Illinois University
University of Illinois at Chicago Library
University of Illinois at Springfield Archives
University of Illinois at Urbana-Champaign Library
Valley Public Library District
Vasey Herbarium, Illinois State University
Video Data Bank
Washington Historical Society
Western Illinois University Art Gallery
Wheaton College Libraries
White County Historical Society
William Leonard Public Library District
Willow Branch Township Library
Zoological Collections, Illinois State University

Indiana

Angel Mounds State Historic Site
Archives of Traditional Music
Arthur and Kriebel Herbaria, Purdue University
Artlink, Inc.
Auburn Cord Duesenberg Museum
B.F. Hamilton Library
Bartholomew County Public Library
Brown County Historical Society
Centerville and Center Township Public Library
Children's Museum of Indianapolis
Conner Prairie
Dearborn County Historical Society
Earlham College Libraries
Eiteljorg Museum of American Indians and Western Art
Franklin Township Historical Society
Friesner Herbarium, Butler University
Gas City Historical Society
Gibson County Historical Society
Girls Incorporated
Glenn A. Black Laboratory of Archaeology
Greene-Nieuwland Herbarium, University of Notre Dame
Hannah Lindahl Children's Museum
Herbarium, Biology Department, Indiana University Southeast
Hillforest Historical Foundation, Inc.
Hobart Historical Society Inc.
Hussey-Mayfield Memorial Public Library
Imagination Station
Indiana Historical Society
Indiana State Archives
Indiana State Library
Indiana State Museum
Indiana University Art Museum
Indiana University Bloomington Libraries
Indiana University-Purdue University Indianapolis Libraries
Indiana Veteran's Home Lawrie Library
Indianapolis Museum of Art
Indianapolis-Marion County Public Library
International Circus Hall of Fame
Jeffersonville Township Public Library
Kosciusko County Historical Society Inc.
Lake County Historical Society and Museum
Lincoln Heritage Public Library
Marshall County Historical Society Inc.
Morgan Library, Grace College
North Judson-Wayne Township Public Library
North Manchester Center for History
Orleans Town and Township Public Library
President Benjamin Harrison Home
Randolph County Historical Society
Salem Public Library
Scotland Historical Society Inc
Shelbyville-Shelby County Public Library
Speedway Public Library
Spring Mill State Park Pioneer Village
University of Indianapolis Libraries
Wabash College Archives
Wakarusa-Olive and Harrison Township Public Library

Wesselman Woods Nature Preserve
West Lebanon-Pike Township Public Library
William H. Harrison Mansion
William Hammond Mathers Museum
Wylie House Museum
Yorktown-Mt. Pleasant Township Community Library

Iowa

Ada Hayden Herbarium
Albert City Historical Association
Amana Heritage Society
Anamosa Public Library
Armstrong Public Library
Ashton Public Library
Audubon County Historical Society
Beaman Community Memorial Library
Blanden Memorial Art Museum
Clearfield Public Library
Coe College Library
Correctionville Museum
Council Bluffs Public Library
Des Moines Art Center
Des Moines Public Library
Dexter Historical Museum
Dordt College Library
Dubuque Arboretum and Botanical Gardens
Dubuque County Library
Dubuque Museum of Art
Eagle Grove Memorial Library
Elgin Public Library
Emmet County Historical Society
Fayette County Historical Center
Figge Art Museum
Flynn Mansion at Living History Farms
Forest City Public Library
Forest Park Museum
Geisler Library, Central College
Grand Lodge of Iowa Masonic Library
Grand View College Library
Grant Herbarium, Biology Department, University of Northern Iowa
Herbarium, Biology Department, Wartburg College
Herbert Hoover Presidential Library and Museum
Historical Society of Marshall County
Historical Society of Pottawattamie County
Iowa Aviation Museum
Iowa Wesleyan College Library
Jasper County Historical Museum
Johnson County Historical Society
Johnston Public Library
Kellogg Historical Society
Lake Park Public Library
Liberty Hall Historic Center
Living History Farms
Luther College Anthropology Laboratory
Luther College Geology Collection
Monona County Historical Complex
Norway Public Library
Office of the State Archaeologist, University of Iowa
Ottumwa Public Library
Parker Historical Museum of Clay County
Prairie Trails Museum of Wayne County Historical Society
Putnam Museum of History and Natural Science
Rod Library, University of Northern Iowa Library
State Historical Society of Iowa
State Library of Iowa
Steamboat Bertrand Collection
Strawberry Point Public Library
Tabor Public Library
Terrace Hill Historic Site and Governor's Mansion
Tipton Public Library
Union Pacific Railroad Museum
University of Iowa Libraries
University of Iowa Paleontology Repository
University of Northern Iowa Gallery of Art
Ushers Ferry Historic Village
Vander Veer Botanical Park
Vesterheim Norwegian-American Museum
Vinton Public Library

Kansas

Abilene Public Library
Boot Hill Museum
Burnley Memorial Library
Crawford County Historical Museum
Dickinson County Heritage Center
Dwight D. Eisenhower Library and Museum
Dyck Arboretum of the Plains, Hesston College
Elam Bartholomew Herbarium, Fort Hays State University
Ellsworth County Historical Society
Ford County Historical Society/Mueller-Schmidt House Museum
Fort Hays State Historic Site
Grant County Library

Greenwood County Historical Society
Herbarium, Biology Department, Washburn University
Herbarium, Kansas State University
Historic Preserveration Association of Bourbon County
Jackson County Historical Society
Jewell County Historical Museum
Johnson County Library
Kansas Department of Transportation Library
Kansas Museum of History
Kansas State Library
Kansas State University Libraries
Lawrence Public Library
Library and Archives Division, Kansas State Historical Society
Lowell D. Holmes Museum of Anthropology
McPherson County Old Mill Museum
Mid-America Nazarene University Library
Natural History Museum and Biodiversity Research Center
Old Depot Museum
Ottawa Library
Pittsburg Public Library
Prairie Museum of Art and History
Pratt Education Center and Aquarium
Republic County Historical Society Museum
Richmond Public Library
Riley County Kansas Genealogical Society Library
Rooks County Historical Society and Frank Walker Museum
Russell Public Library
Schmidt Museum of Natural History/ Herbarium, Emporia State University
Spencer Museum of Art
Stafford County Historical Society
Sternberg Museum of Natural History
Theodore M. Sperry Herbarium, Pittsburg State University
U.S. Army, Combined Arms Research Library
University of Kansas Libraries
Wakefield Museum Association
Watkins Community Museum of History
Wichita Art Museum
Wichita State University Libraries
Wyandotte County Museum

Kentucky

Allen County Historical and Genealogical Society
American Saddle Horse Museum Association
Augusta Dils York House
Bernheim Arboretum and Research Forest
Bluegrass Railway Museum
Bobby Davis Museum and Park, Inc.
Boyle County Public Library
Campbell County Historical/Genealogical Society
Eastern Kentucky University Libraries
Grayson County Public Library
Herbarium, Biological Sciences Department, Eastern Kentucky University
Highlands Museum and Discovery Center
Hutchins Library, Berea College
Kentucky Department of Parks
Kentucky Historical Society
Kentucky Library and Museum
Kentucky Room, Lexington Public Library
Knott County Public Library
Larue County Historical Society
Lewis County Historical Society
Liberty Hall Historic Site
Locust Grove
Louisville Free Public Library
Louisville Genealogical Society
Louisville Zoological Garden
McCreary County Public Library District
Mount Saint Joseph Museum
Northern Kentucky Talking Book Library
Northern Kentucky University Libraries
Northpoint Training Center Residents' Library
Program in Archaeology Laboratory, University of Louisville
Riverside, The Farnsley-Moremen Landing
Speed Art Museum
Union College Library
University of Kentucky Libraries
University of Louisville Libraries
Western Kentucky University Anthropology Laboratory

Louisiana

Audubon Nature Institute
Audubon Louisiana Nature Center
Beauregard-Keyes House
Diocese of Lafayette, Archives
Fort Polk Military Museum

Herbarium, Department of Ecology and Evolutionary Biology, Tulane University
Historic New Orleans Collection
Homosexual Information Center Library
Iberville Parish Library
Jean Lafitte National Historic Park and Preserve
La Maison Duchamp
Louisiana Department of Environmental Quality Compliance Assistance Library
Louisiana Division of Archaeology
Louisiana Purchase Garden and Zoo
Louisiana State Arboretum
Louisiana State Archives
Louisiana State University Libraries
Middle American Research Institute, Tulane University
New Orleans Museum of Art
Northwestern State University of Louisiana Libraries
R. W. Norton Art Gallery
Southern Forest Products Association Library
Southern Forest Range Program Herbarium
State Library of Louisiana
Tulane University Libraries
Tulane University Museum of Natural History
Walter B. Jacobs Memorial Nature Park
West Baton Rouge Museum
Zoological Collections, Southeastern Louisiana University

Maine

Abbe Museum
Abbot Historical Society
Alexander-Crawford Historical Society
Art Gallery, University of New England
Bagaduce Music Lending Library
Bangor Public Library
Belfast Free Library
Belfast Historical Society and Museum
Bowdoin College Library
Bowdoin College Museum of Art
Bustins Island Historical Society
Chewonki Foundation
Colby College Libraries
Colby College Museum of Art
Denmark Public Library
Episcopal Diocese of Maine Archives
Fairfield Historical Society
Farnsworth Art Museum and Wyeth Center
Friends of Southport Historical Society
Herbarium, Department of Natural and Behavioral Sciences, University of Maine
Hubbard Free Library
Island Falls Historical Society
Katahdin Public Library
Long Island Historical Society
Lubec Historical Society
Maine Folklife Center
Maine Historical Society
Maine State Archives
Maine State Library
Maine State Museum
Milbridge Historical Society
Monhegan Museum
Moosehead Historical Museum
Museum of African Culture
Naples Historical Society
Nickels-Sortwell House
Northeast Historic Film
Pejepscot Historical Society
Penobscot Nation Museum
Phillips Historical Society
Presque Isle Historical Society
Rumford Historical Society
Sagadahoc History and Genealogy
South Portland Public Library
Stanley Museum, Inc.
Thompson Free Library
Thuya Gardens
United Society of Shakers Library and Museum
University of Maine at Presque Isle Library
University of Maine Library
Waterville Historical Society
Woodland Historical Society

Maryland

Adkins Arboretum
Allegany County Historical Society
B&O Railroad Museum
The Baltimore Museum of Art
Beneficial-Hodson Library, Hood College
Berlin Heritage Foundation
Carroll County Farm Museum
City of Bowie Museums
College Park Airpark Museum
Compton School Museum
Cylburn Arboretum
Dorchester County Historical Society

Friends of Jerusalem Mill
Frostburg State University Library
Germantown Historical Society
Hancock Museum
Historic St. Mary's City
Horn Point Laboratory Library, University of Maryland
Jewish Museum of Maryland
Johns Hopkins University Libraries
Langsdale Library, University of Baltimore
Mammal Collection, Frostburg State University
Maryland Archeological Conservation Laboratory/Jefferson Patterson Park and Museum
Maryland Historical Society
Maryland State Archives
Montgomery County Public Libraries
Morgan State University Libraries
Mount Clare Museum House
Nabb Research Center for Delmarva History and Culture
National Capital Region, Museum Resource Center
National Cryptologic Museum
National Library of Medicine
National Oceanographic and Atmospheric Administration Central Library
Norton-Brown Herbarium, University of Maryland
Point Lookout Civil War Museum
Prince George's Community College Library
Saint Mary's College of Maryland Library
Thurgood Marshall Library, Bowie State University
U.S. National Fungus Collections
U.S. National Seed Herbarium
University of Maryland Libraries
Walters Art Museum
Washington County Museum of Fine Arts
Washington County Rural Heritage Museum
Westside Historical Society

Massachusetts

Abington Public Library
Adams National Historical Park
Addison Gallery of American Art
Alden House Historic Site
American Antiquarian Society
Amherst Historical Society/Strong House Museum
Archives and Special Collections, Mount Holyoke College Library
Art Complex Museum
Bancroft Memorial Library
Bay State Historical League
Beauport, Sleeper-McCann House, Historic New England
Belchertown Historical Association
Berkshire Museum
Boston Athenaeum
Boston College Libraries
Boston Public Library
Botanic Garden of Smith College
Botanical Museum and Herbaria, Harvard University
Buttonwood Park Zoo
Buttonwoods Museum
Cambridge Historical Commission
Cape Cod National Seashore
Cardinal Cushing Library, Emmanuel College
Chester C. Corbin Public Library
Chesterwood
Chicopee Public Library
Codman House, Historic New England
Collections and Conservation Center, Historic New England
Danvers Archival Center
Dighton Public Library
Eastham Public Library
Frederick Law Olmstead National Historic Site
George Peabody House Museum
The Gibson Society, Inc.
Gordon Library
Gordon-Conwell Theological Seminary Library
Gore Place Society, Inc.
Hampshire College Library
Harvard Historical Society
Harvard University Art Museums
Harvard University Library
Harvard University Mineralogical and Geological Museum
Harwich Historical Society
Herbarium, Biology Department, University of Massachusetts
Heritage Museums and Gardens
Hingham Historical Society
Isabella Stewart Gardner Museum
John F. Kennedy Library and Museum
Josiah Quincy House, Historic New England
Kingston Public Library
Library and Archives, Historic New England

Longfellow National Historic Site
Lowell National Historical Park
Marine Biological Laboratory and Woods Hole Oceanographic Institution Library
Martha's Vineyard Historical Society
The Mary Baker Eddy Library for the Betterment of Humanity
Massachusetts Archives
Massachusetts Horticultural Society
Massachusetts Institute of Technology Libraries
Massachusetts Museum of Contemporary Art
Massachusetts Trial Court Worcester Law Library
Mattapoisett Historical Society
Milford Town Library
MIT List Visual Arts Center
MIT Museum
Mount Holyoke College Art Museum
Mount Holyoke College Botanic Garden
Museum of Afro-American History
Museum of Comparative Zoology
Museum of Fine Arts
Museum of Fine Arts, Boston
National Archives and Records Administration, Northeast Region (Boston)
Needham Historical Society
Newton History Museum
The Norman Rockwell Museum at Stockbridge
North Andover Historical Society
North Shore Community College Library
Old South Meeting House
Old Sturbridge Village
Otis House Museum
Peabody Institute Library Archives
Peabody Museum of Archaeology and Ethnology
Pembroke Public Library
Plimoth Plantation, Inc.
Pocumtuck Valley Memorial Association
Polly Hill Arboretum
Project SAVE Armenian Photograph Archives
Rehoboth Antiquarian Society
Reuben Hoar Library
Richards Memorial Library
Richmond Historical Society
Rose Art Museum
Rutland Historical Society
Sandy Bay Historical Society and Museum, Inc.
School of Theology Library, Boston University
Smith College Libraries
Smith College Museum of Art
Somerville Hospital Library
Springfield Armory National Historic Site
Springfield Science Museum
State Library of Massachusetts
Stephen Phillips Trust House
Sterling and Francine Clark Art Institute
Stonehill Industrial History Center
Sturgis Library
Swampfield Historical Society
University of Massachusetts at Amherst Libraries
Wayland Historical Society
Willard House and Clock Museum
William Brewster Nickerson Memorial Room, Cape Cod Community College
Williams College Libraries
Williams College Museum of Art
Winchester Public Library
Worcester Art Museum

Michigan

A. E. Seaman Mineral Museum
Ada Historical Society
Albion College Library
Arenac County Historical Society
Bay County Historical Society
Bentley Historical Library
Bloomfield Township Public Library
Brandon Township Public Library
Bridgeport Public Library
Buchanan District Library
Burton Historical Collections at the Main Branch, Detroit Public Library
Center for Adventist Research
Central Michigan University Libraries
Clinton-Macomb Public Library
Cranbrook Institute of Science
Department of Biology, Hope College
Department of Geology Collections, Wayne State University
Detroit Garden Center, Inc. Library
Detroit Historical Museum
The Detroit Institute of Arts
Edwardsburg Museum Group, Inc.
Ferris State University Library
Finnish-American Historical Archives
Flat River Community Library
Flint Institute of Arts
Gerald R. Ford Library
Gerald R. Ford Museum

Governor Warner Museum
Grand Rapids Public Library
Grand Traverse Lighthouse Museum
Heddon Museum
The Henry Ford
Herbarium, Biology Department, Alma College
Herbarium, Biology Department, Eastern Michigan University
Herbarium, Biology Department, University of Michigan–Flint
Hidden Lake Gardens
Holland Museum
Indian River Area Library
Institute for Fisheries Research Division Library
Ishpeming Carnegie Public Library
Jesse Besser Museum
John Ball Zoological Society
Kalamazoo Valley Museum
Kettering University Archives
Leila Arboretum Society
Library of Michigan
Little Traverse Historical Society, Inc.
Marialyce Canonie Great Lakes Research Library
Marquette County Historical Museum
Mason County Historical Society/ Historic White Pine Village
Michigan Historical Center
Michigan State University Herbarium
Michigan State University Libraries
Michigan State University Museum
Michigan Technological University Libraries
Milford Historical Society
Missaukee District Library
Monroe County Historical Museum
Montague Museum
Muskegon Museum of Art
Newaygo Carnegie Library
Northern Michigan University Library
Pictured Rocks National Lakeshore
Port Austin Area Historical Society
Presque Isle County Historical Society
Raven Hill Discovery Center
Rochester College Library
Saint Joseph Public Library
Sanilac District Library
Saugatuck-Douglas District Library
Seven Ponds Nature Center
Sodus Township Library
South Lyon Area Historical Society
Southeast Michigan Council of Governments Library
Spring Lake District Library
Steiner Museum
Synergy Medical Educational Alliance
University of Michigan Herbarium
University of Michigan Museum of Anthropology
University of Michigan Museum of Art
University of Michigan University Library
Van Wylen Library, Hope College
W. E. Upjohn Institute for Employment Research
Western Michigan University Libraries
White Lake Township Library

Minnesota

Anoka County Historical Society
Anoka County Law Library
The Bakken
Beltrami County Historical Society
Beth-el Synagogue Library
Bloom Library, Mount Zion Temple
Carpenter St. Croix Valley Nature Center
Chatfield Brass Band, Music Lending Library
Chippewa County Historical Society
Cloquet Public Library
Cokato Museum
Eloise Butler Wildflower and Bird Sanctuary
Fire-EMS-Safety Center Library, Minnesota State Colleges and Universities
Flaten Art Museum
Freeborn County Historical Society
Goodhue County Historical Society
Great River Regional Library
Herbarium, Biology Department, University of Minnesota
Hibbing Historical Society
Hill Museum and Manuscript Library
Insect Collection, University of Minnesota
International Falls Public Library
Itasca County Historical Society
Macalester College Libraries
Marshall County Historical Society
Martin Luther College Library
Mille Lacs Community Library
Mille Lacs Indian Museum and Trading Post
The Minneapolis Institute of Arts
Minneapolis Public Library
Minnesota Air Guard Museum
Minnesota Historical Society

Minnesota Library for the Blind and Physically Handicapped
Minnesota Orchestra Music Library
Olmsted County Historical Society
Owatonna Public Library
Pennington County Historical Society
Pine County Historical Society
Pope County Historical Society
Rockford Area Historical Society
Roseau County Historical Museum and Interpretive Center
Sacred Heart Area Historical Society
Saint Paul Public Library
Science Museum of Minnesota
Scott County Historical Society
Sherburne County Historical Society
Sinclair Lewis Museum and Interpretive Center
Swift County Historical Society
Tamarack Nature Center
University of Minnesota Libraries
University of St. Thomas Art History Collection
Wadena County Historical Society and Museum
Washington County Historic Courthouse
Westwood Hills Nature Center
Winona County Historical Society

Mississippi

Cobb Institute of Archaeology
Division of Library and Information Resources, Jackson State University Libraries
Herbarium, Biological Sciences Department, Mississippi State University
Herbarium of the Gulf Coast Research Laboratory
Lauren Rogers Museum of Art
Mendenhall Public Library
Meridian Museum of Art
Mississippi Library Commission
Mississippi River Commission History Center
Mississippi State Department of Archives and History
Northeast Mississippi Museum Association
Noxubee County Library System
Planter's Hall
Pullen Herbarium, Biology Department, University of Mississippi
Rowland Medical Library, University of Mississippi
University of Mississippi Libraries

Missouri

Barton County Historical Society
Bootheel Youth Museum
Center for Archaeological Research, Southwest Missouri State University
Christian County Library
Clarksville Museum
Community of Christ
Dickerson Park Zoo
Douglas County Public Library
Episcopal Diocese of Missouri Archives
Fort Osage
Gentry County Library
George A. Spiva Library
Grandview Historical Society Depot Museum
Harry S. Truman Library and Museum
Henry County Museum and Cultural Arts Center
Herbarium, Biology Department, Southeast Missouri State University
Herbarium, Missouri Department of Natural Resources
Hugh Stephens Library, Stephens College
Hunter-Dawson State Historic Site
Inman E. Page Library
Kamphoefner House
Kirkwood Historical Society
Lakeside Nature Center
Linda Hall Library of Science, Engineering and Technology
Little Dixie Regional Libraries
McDonald County Library
Midwestern Baptist Theological Seminary Library
Missouri Botanical Garden
Missouri Historical Society
Missouri State Archives
Missouri State Library
Missouri State Museum
Museum of Art and Archaeology, University of Missouri-Columbia
National Personnel Records Center, National Archives and Records Administration
Nelson-Atkins Museum of Art
New Santa Fe Historical Society
Nodaway County Historical Society
Oakland House Museum
Ozarks Regional Herbarium, Southwest Missouri State University
Ralph Foster Museum

Ray County Historical Society
Saint Louis County Library
Saint Louis Public Library
Saint Louis Science Center
Saint Louis University Libraries
Scott Joplin House State Historic Site
St. Charles County Historical Society
State Historical Society of Missouri
University of Missouri Botanic Garden
University of Missouri Museum of Anthropology
University of Missouri-Columbia Libraries
Washington University Bernard Becker Medical Library
Washington University Libraries
Western Historical Manuscript Collection, University of Missouri-Columbia
Wild Canid Survival and Research Center
World Aquarium

Montana

Archie Bray Foundation for the Ceramic Arts
Bozeman Public Library
Butte-Silver Bow Public Archives
Fly Fishing Discovery Center
Glacier National Park
Headwaters Heritage Museum
Hockaday Museum of Art
K. Ross Toole Archives, University of Montana
Lambert Historical Society
Mai Wah Society, Inc.
Montana Historical Society
Montana Museum of Art and Culture
Montana State Library
Montana State University Libraries
Museum of the Rockies
O'Fallon Historical Museum
Rocky Mountain Laboratories Library
Upper Musselshell Historical Society
Wildlife Laboratory, Montana State University
Yellowstone Art Museum

Nebraska

Arbor Lodge State Historical Park
Ashfall Fossil Beds State Historical Park
Benne Memorial Museum/Jesse C. Bickle House
Brown County Historical Society
Buffalo Bill Ranch State Historical Park
Dawson County Historical Society
Edgerton Explorit Center
Fairbury City Museum
G. W. Frank House
Garfield County Historical Society
Gilman Park Arboretum
Gothenburg Historical Society
Hall County Historical Society
Harold W. Manter Laboratory of Parasitology, University of Nebraska-Lincoln
Hitchcock County Historical Society
Holt County Historical Society
Hooker County Library
House of Yesteryear
International Quilt Study Center
Kilgore Memorial Library
Mari Sandoz High Plains Heritage Center
McPherson County Historical Society
Midwest Archeological Center
Nebraska City Historical Society
Nebraska Health Care Association Library
Nebraska Library Commission
Nebraska State Historical Society
Omaha Public Library
Paxton Public Library
Pierce Historical Society
Pioneers Park Nature Center
Potter Museum
Raymond A. Whitwer Tilden Public Library
Rock County Historical Society
Saunders County Historical Complex
Sheldon Memorial Art Gallery and Sculpture Garden
Shelton Township Library
Sidney Public Library
Union College Library
University of Nebraska at Omaha University Library
University of Nebraska-Lincoln Libraries
University Place Art Center
Valley County Historical Society
Verdigre Heritage Museum
Washington County Historical Association
Willa Cather Pioneer Memorial and Educational Foundation
Wood River Valley Historical Society

Nevada

Archaeological Collections, University of Nevada, Las Vegas
Douglas County Historical Society

Fourth Ward School Museum
Herbarium, Biological Sciences Department, University of Nevada
Herbarium, University of Nevada, Reno
Las Vegas-Clark County Library District
Liberace Museum
Lost City Museum
Nevada Historical Society
Nevada Museum of Art
Nevada State Library and Archives
Nevada State Museum and Historical Society
Northeastern Nevada Museum
Sparks Heritage Foundation and Museum
Special Collections and Archives Department, University of Nevada-Reno Libraries
Spring Mountain Ranch State Park
University of Nevada, Las Vegas Libraries
Virgin Valley Heritage Museum

New Hampshire

The Art Gallery, University of New Hampshire
Bedford Historical Society
Canterbury Shaker Village
Church Media Center
Currier Museum of Art
Derry Public Library
Dunbar Free Library
Enfield Free Public Library
Gafney Library Inc.
Hall Memorial Library
Hampstead Public Library
Hampton Historical Society
Herbarium, Biology Department, Keene State College
Historical Society of Cheshire County
Hood Museum of Art
Horatio Colony House Museum and Nature Preserve
Jackson Public Library
Morrison House Museum
New Hampshire Archeological Society
New Hampshire Division of Archives and Records Management
New Hampshire Historical Society
New Hampshire State Library
Philip Read Memorial Library
Portsmouth Naval Shipyard Library, U.S. Navy
Saint-Gaudens National Historic Site
Sanbornton Public Library
Seacoast Science Center
Silsby Free Public Library
Strawbery Banke Museum
University Museum, University of New Hampshire
Wadleigh Memorial Library
Webster Memorial Library
Whipple House Museum/Ashland Historical Society

New Jersey

Allaire Village, Inc.
Bernardsville Public Library
Branchburg Historical Society
Burlington County Library
Carteret Public Library
Cedar Grove Free Public Library
Collingswood Free Public Library
Delaware River Basin Commission Library
Department of Ecology, Evolution and Natural Resources, Rutgers University
Dixon Homestead Library
Edgewater Free Public Library
Edison National Historic Site
Essex County Law Library
Gloucester City Library
Hancock House State Historic Site
Historical Society of Ocean Grove
Historical Society of Princeton
Hopewell Public Library
Institute of Electrical and Electronics Engineers History Center
Irvington Public Library
Long Branch Free Public Library
Madison Township Historical Society
Metuchen Public Library
Monmouth County Archives
Monroe Township Public Library
Mount Olive Public Library
New Jersey Historical Society
New Jersey Room, Fairleigh Dickinson University Library
New Jersey Room, Jersey City Public Library
New Jersey State Archives
New Jersey State Library
New Jersey State Museum
The Newark Museum
Passaic County Community College Art Galleries
Paterson Free Public Library
Poricy Park
Ramsey Free Public Library

Rutgers University Libraries
Sea Isle City Historical Museum
Sister Mary Grace Burns Arboretum
Summit Historical Society
Talbott Library, Rider University
Tinton Falls Public Library
Yankee Air Force/Yankee Air Museum Northeast Division

New Mexico

Anderson Museum of Contemporary Art
Anthropology Laboratory, New Mexico Highlands University
Bolack Museum of Fish and Wildlife
Bureau of Geology and Mineral Resources
Carlsbad Museum and Art Center
Chaco Cultural National Historical Park
Espanola Public Library
Georgia O'Keeffe Museum
Hubbard Museum of the American West
Las Cruces Natural History Museum
Los Alamos County Historical Museum
Maxwell Museum of Anthropology
Millicent Rogers Museum of Northern New Mexico
Museum of New Mexico
Museum of Southwestern Biology
New Mexico Farm and Ranch Heritage Museum
New Mexico Museum of Natural History
New Mexico State Library
New Mexico State Records Center and Archives
New Mexico Supreme Court Law Library
Randall Davey Audubon Center
Range Science Herbarium, New Mexico State University
Roswell Museum and Art Center Library
San Juan County Archaeological Research Center at Salmon Ruins
Special Collections Library, Albuquerque-Bernalillo County Library System
Thomas Branigan Memorial Library
Tinkertown Museum
University of New Mexico University Libraries
Vietnam Veterans National Memorial

New York

Agricultural Research Service Collection of Entomopathogenic Fungal Cultures, U.S. Department of Agriculture
Alley Pond Environmental Center
American Bible Society Library
American Folk Art Museum
American Museum of Natural History
The American Numismatic Society
Argyle Free Library
Baker-Cederberg Museum and Archives
Bayard Cutting Arboretum
Bayside Historical Society
Blount Library Inc.
The Branch Libraries, The New York Public Library
Brooklyn Botanic Garden
Brooklyn Historical Society
Brooklyn Museum
C. V. Starr East Asian Library
Canajoharie Library and Art Gallery
Canastota Canal Town Corporation
Cayuga Museum of History and Art
The Center for Jewish History
Centers for Nature Education, Inc.
Chautauqua County Historical Society
Chenango County Historical Society
Columbia County Historical Society
Columbia University Libraries
Conrad N. Hilton Library, Culinary Institute of America
Cooper-Hewitt, National Design Museum, Smithsonian Institution
Cornell University Insect Collection
Cornell University Library
Cornell University Museum of Vertebrates
Cradle of Aviation Museum
Crosby Public Library
Crouse Hospital Library
Crown Point State Historic Site
Cutler Botanic Gardens
Department of Biological Sciences, State University of New York
Discovery Center of Science and Technology
Dobbs Ferry Public Library
Dowd Fine Arts Gallery, State University of New York College at Cortland
Educational Resources Center, Clarkson University
Experimental Television Center
The Explorers Club Library and Archives
Fort Plain Free Library
Fort Plain Museum
The Frances Lehman Loeb Art Center, Vassar College

Franklin D. Roosevelt Presidential Library and Museum
Franklin Furnace Archive
Frick Collection
Gannett-Tripp Library, Elmira College
George Eastman House International Museum of Photography and Film
Godwin-Ternbach Museum
Graycliff
Greece Historical Society
Greene County Historical Society
Hall of Fame for Great Americans
Halsey Thomas House and Southampton Historical Museum
The Handweaving Museum and Arts Center
Heckscher Museum of Art
Hepburn Library of Lisbon
Herbarium, Monroe County Parks Department
Herbarium, Planting Fields Arboretum State Historic Park
Herbert F. Johnson Museum of Art
Herkimer County Historical Society
Herkimer Home State Historic Site
Historical Society of Newburgh Bay and the Highlands
Hofstra University Special Collections
Holy Trinity Orthodox Seminary and Monastery Library
Home Sweet Home Museum
Hornby Museum
International Center of Photography
International Trademark Association Library
Ischua Valley Historical Society
Ithaca College Library
Jacques Marchais Museum of Tibetan Art
Jewish Museum
Johnson Hall State Historic Site
Johnstown Public Library
The Landmark Society of Western New York
Lefferts Historic House
Leo Baeck Institute
Lesbian Herstory Archives
The Lewiston Museum
Lewiston Public Library
Long Beach Public Library
Lorenzo State Historic Site
Mahopac Library
Marcella Sembrich Opera Museum
Martin House Restoration Corporation
Mayfield Historical Society
Memorial Art Gallery
Metropolitan Museum of Art
Middleville Free Library
Midmarch Arts Press, Women Artists Archives
Mooers Free Library
Morris Raphael Cohen Library, City College of the City University of New York
Morris-Jumel Mansion
Museum at the Fashion Institute of Technology
Museum of Arts and Design
Museum of disABILITY History
Museum of Jewish Heritage–A Living Memorial to the Holocaust
Museum of Modern Art
Museum of the City of New York
Nanticoke Valley Historical Society
Naples Library
National Archives and Records Administration, Northeast Region (New York)
National Baseball Hall of Fame and Museum
National Bottle Museum
New Castle Historical Society
New City Free Library
New Museum of Contemporary Art
New York Academy of Medicine Library
New York Aquarium
The New York Botanical Garden
New York City Municipal Archives
New York Historical Society
New York Museum of Transportation
New York School of Interior Design Library
New York State Archives
New York State Library
New York State Museum
New York University Libraries
North Collins Historical Society
Ogdensburg Public Library
Olana State Historic Site
Old Fort Niagara Association
Ossining Public Library
Palmyra Historical Museum
Parishville Museum
The Parrish Art Museum
Pat Parker-Vito Russo Center Library
Pfeiffer Nature Center and Foundation
Pierpont Morgan Library
Queen Sofia Spanish Institute, Inc.
Queens County Farm Museum

Randolph Free Library
Rare Books and Special Collections Library, University of Rochester Libraries
Raynham Hall Museum
The Research Libraries, The New York Public Library
Rhizome.org
Rice Creek Field Station, State University of New York College at Oswego
Rochester Civic Garden Center
Rochester Museum and Science Center
Rockefeller Archives Center
Roeliff Jansen Historical Society
Rome Historical Society
Roosevelt-Vanderbilt National Historic Sites
Rose Museum at Carnegie Hall
Sackets Harbor Battlefield State Historic Site
Sagamore Hill National Historic Site
Saint John Fisher College Lavery Library
Saint Mark's Library
Salamanca Public Library
Senate House State Historic Site
Seneca Falls Historical Society
Seneca Park Zoo
Seward House
Shaker Museum and Library
Sidney Historical Association
Six Nations Indian Museum
Skidmore College Libraries
Solomon R. Guggenheim Museum
Somers Historical Society
Staatsburgh State Historic Site
Staten Island Historical Society
Sterling Historical Society
Strong Museum
Town of Crawford Free Library
Town of Esopus Public Library
Town of Gainesville Public Library
Trolley Museum of New York
Tyler Art Gallery, State University of New York at Oswego
United States Military Academy Library
University Art Museum, State University of New York at Albany
University at Albany Libraries, State University of New York
University at Buffalo-SUNY Libraries, State University of New York
Utica Public Library
Utica Zoo
Wallace Library, Rochester Institute of Technology
Walworth-Seely Public Library
Ward O'Hara Agricultural Museum of Cayuga County
Washington's Headquarters State Historic Site
Waterloo Library and Historical Society
Waterman Conservation Education Center
Wayne County Historical Society
West Winfield Library
Whaling Museum Society
William Pryor Letchworth Museum
The Yager Museum

North Carolina

Ackland Art Museum
Appalachian Regional Library
Archeology Laboratories, Wake Forest University
Asheville Art Museum
Asheville-Buncombe Library System
Battleship North Carolina
Beaufort Historical Association, Inc.
Caldwell County Public Library
Cape Fear Museum
Department of Entomology, North Carolina State University
Department of Zoology, North Carolina State University
Dr. Josephus W. Hall House
Duke University Libraries
Forsyth County Public Library
Fort Macon State Park
Greensboro Historical Museum
Harnett County Public Library
Herbarium, Biology Department, Duke University
Herbarium, Biology Department, University of North Carolina
Herbarium, Botany Department, North Carolina State University
Hickory Museum of Art, Inc.
Hickory Public Library
Highlands Nature Center
Horizons Unlimited
House in the Horseshoe State Historic Site
Hunter Library, Western Carolina University
James Addison Jones Library/Brock Museum
James H. Carson Library
Mint Museum of Art
Moravian Music Foundation Library

Mountain Heritage Center, Western Carolina University
Murphy Public Library
National Railroad Museum and Hall of Fame
Newbold-White House
North Carolina Collection Gallery, University of North Carolina
North Carolina Maritime Museum at Southport
North Carolina Museum of Art
North Carolina Museum of History
North Carolina Railway Museum
North Carolina State Archives
North Carolina State Museum of Natural Sciences
North Carolina State University Libraries
North Carolina Wesleyan Pearsall Library
North Carolina Zoological Park
Old Wilkes Jail
Perquimans County Library
Public Library of Johnston County and Smithfield
Randolph Public Library
Reed Gold Mine State Historic Site
Reynolda House Museum of American Art
Sampson-Livermore Library, University of North Carolina, Pembroke
Sarah P. Duke Gardens, Duke University
Schiele Museum of Natural History, Inc.
Sciworks of Forsyth County
Scottish Tartans Museum and Society
Thomas Wolfe Memorial
Tryon Palace Historic Sites and Gardens
University Galleries, North Carolina A&T State University
University of North Carolina at Charlotte Botanical Gardens
University of North Carolina-Chapel Hill Library
Vertebrate Collection, Department of Biology, Wake Forest University
Vertebrate Collections and David J. Sieren Herbarium, University of North Carolina
Wake County Public Library System
Wake Forest College Birthplace
Western Piedmont Community College
Wilson County Public Library

North Dakota

Archaeology Technologies Laboratory
Bagg Bonanza Farm
Cass County Historical Society Museum
Chahinkapa Zoo
Department of Biological Sciences, North Dakota State University
Enderlin Municipal Library
Fort Union Trading Post National Historic Site
Gateway to Science Center, Inc.
Grand Forks Public City-County Library
Joachim Regional Museum
McLean County Historical Society Museum
North Dakota State Library
North Dakota State University Libraries
Plains Art Museum
State Historical Society of North Dakota
Three Affiliated Tribes Museum
University of North Dakota Library
Wells County Historical Society

Northern Mariana Islands

Commonwealth of the Northern Mariana Islands Museum of History and Culture
Joeten-Kiyu Public Library
Northern Marianas College/Public Library-Tinian

Ohio

Akron, Canton & Youngstown Railroad Historical Society
Akron Department of Planning and Urban Development Library
Akron-Summit County Public Library
Amherst Historical Society
Ashland University Archives
Ashtabula County District Library
Athens County Historical Society and Museum
Aurora Historical Society, Inc.
Barberton Public Library
Bedford Historical Society Museum and Library
Belmont County Historical Society, Inc.
Belmont Historical Society
Belpre Historical Society
Black River Historical Society
Bosveld Library on Applied Poetry
Brother Edmond Drouin Library
Brukner Nature Center
Carillon Historical Park
Cincinnati Art Museum
Cincinnati Museum Center at Union Terminal
Cincinnati Zoo and Botanical Garden
Cleveland Museum of Art
Cleveland Museum of Natural History
Cleveland Public Library

Cleveland State University Library
Clinton County Historical Society and Museum
Columbus Zoo and Aquarium
COSI Columbus
Cuyahoga County Public Library
Dayton Metro Library
Dayton Society of Natural History
Department of Sociology and Anthropology, Wright State University
Enon Historical Society
Folklife Archives, Ohio State University
Gnadenhutten Historical Society and Museum
Granville Historical Society
Greater Buckeye Lake Historical Society
Greene County Historical Society
Greenville Public Library
Herbarium, Biological Sciences Department, Kent State University
Herbarium, Biology Department, Denison University
Heritage Village Musem
Historic Costume and Textiles Collection, Ohio State University
Historic New Richmond, Inc.
Historical Society of Germantown
Hubbard Historical Society
Kelso House Museum
Kelton House Museum and Garden
Kent State University Museum
Kinsman Historical Society
Lake Farmpark
Lakeside Heritage Society
Lakewood Historical Society
Law Library Association of Geauga County
Lewisburg Historical Society
Licking County Historical Society
Logan County Historical Society and Museum
Marblehead Lighthouse Historical Society
Marion County Historical Society
Marlboro Township Historical Society
Massillon Public Library
Medical Heritage Center, Ohio State University
Merry-Go-Round Museum
Mesopotamia Historical and Memorial Association
Miami University Art Museum
Minerva Public Library
Minster Historical Society
Museum of Biological Diversity
National Packard Museum
National Underground Railroad Freedom Center
Nature Center at Shaker Lakes
New Knoxville Historical Society
Newcomerstown Historical Society
Oberlin College Archives
Oberlin College Libraries
Oberlin Heritage Center/O.H.I.O.
Ohio Agricultural Research and Development Center
Ohio Department of Transportation Library
Ohio Genealogical Society Library
Ohio Historical Society
The Ohio State University Libraries
Ohio University Chillicothe Quinn Library
Ohio University Libraries
Pioneer and Historical Society of Muskingum County
Public Library of Cincinnati and Hamilton Coounty
Puskarich Public Library
Ritter Public Library
Riverside Historical Society
Robert S. Marx Law Library
Rockford Carnegie Library
Russell Township Historical Society
Seville Historical Society
Sisters of Charity of Cincinnati
Slovak Institute and Reference Library
Society for the Preservation of Ohio One-Room Schools
Spangler Library, Ohio Dominican University
Stan Hywet Hall and Gardens
Stanley M. Rowe Arboretum
Stark County District Library
State Library of Ohio
Struthers Historical Society
Swedenborg Memorial Library, Urbana University
Taft Museum of Art
Toledo Zoo
University of Cincinnati Libraries
University of Toledo Libraries
Vinton County Historical and Genealogical Society
Way Public Library
Western Reserve Historical Society
Westlake Porter Public Library
Wildwood Manor House
Wright State University Libraries
Wyandot County Historical Society

Oklahoma

Bartlesville Public Library
Break O'Day Farm and Metcalfe Museum, Inc.
Carl Albert Center Archives, University of Oklahoma
Cherokee Heritage Center
Colbert Historical Museum
Collection of Vertebrates, Oklahoma State University
Cordell Public Library
Covington Historical Museum
Creek Council House Museum
Eastern Oklahoma District Library System
Fort Supply Historic Site
Gardner Mansion
Gilcrease Museum
Grady County Historical Museum
Honey Springs Battlefield
Joe M. Anderson Herbarium, Northeastern State University
Julian P. Kanter Political Commercial Archive
Kanza Museum Kaw Tribal Complex
McAlester Public Library
Museum and Herbarium, Biology Department, University of Central Oklahoma
Museum of the Red River
Nash Library
National Rod and Custom Car Hall of Fame
Newkirk Community Museum
Oklahoma Archeological Survey
Oklahoma City Museum of Art
Oklahoma City National Memorial
Oklahoma Department of Libraries
Pawnee Bill Ranch Site
Payne County Historical Society
Percussive Arts Society
Philbrook Museum of Art
Sac and Fox National Public Library
Sam Noble Oklahoma Museum of Natural History
Santa Fe Depot Museum
Shattuck Windmill Museum and Park
Tulsa Air and Space Museum
Tulsa Zoo and Living Museum
Waynoka Historical Society
Western Plains Library System
William Fremont Harn Gardens
Wynnewood Historical Society

Oregon

Agness-Illahee Museum
Baker Cabin Historical Society
Brownsville Community Library
Confederated Tribes of Grand Ronde Library
Curry Public Library District
Dolly Wares Doll Museum
E.W. McMillan Library
Echo Historical Museum
Echo Public Library
Episcopal Diocese of Oregon Archives
Gold Hill Historical Society Museum
Hallie Ford Museum of Art
Hendricks Park Rhododendron Garden
Heritage Station
Hoyt Arboretum
Ichthyological and Herpetological Collections, Oregon State University
Jacknife-Zion-Horseheaven Historical Society
Jefferson County Historical Society Museum
Kam Wah Chung Museum
Library and Media Services
Marshfield Sun Printing Museum
Mount Angel Abbey Library
Newport Public Library
North Bend Public Library
North Lincoln County Historical Museum
Oregon Air and Space Museum
Oregon Historical Society
Oregon State Archives
Oregon State Library
Oregon State University Libraries
Oregon Supreme Court Law Library
Oregon Trail Library District
Pacific University Museum
Pine Valley Community Museum
Portland Art Museum
Portland Police Historical Society
Portland State University Libraries
Reed College Library
Sandy Public Library
Stanley Parr Archives and Records Center
The Museum at Warm Springs
Tillamook County Pioneer Museum
Tualatin Public Library
Umatilla Public Library
Vertebrate Museum
Watzek Library, Lewis & Clark College
Willamette University Libraries

Pennsylvania

Academy of Natural Sciences of Philadelphia

Air and Waste Management Association Library
American Philosophical Society Library
Auditor General Law Library
Awbury Arboretum Association
Barnes Foundation
Bartram's Garden
Beaver County Historical Research and Landmarks Foundation
Brandywine River Museum
Brownsville Free Public Library
Carnegie Free Library
Carnegie Library of Pittsburgh
Carnegie Museum of Art
Carnegie Museums of Natural History
Center for American Music, University of Pittsburgh
Chanticleer
Chester County Historical Society
College of Physicians of Philadelphia
The Conestoga Area Historical Society
Conneaut Valley Area Historical Society
Cornwall Iron Furnace
Crafton Public Library
Dimmick Memorial Library
Elk County Historical Society
Equinunk Historical Society
Erie County Historical Society
Eva K. Bowlby Public Library
Everhart Museum of Natural History, Science and Art
Exeter Community Library
The Fabric Workshop and Museum
Fireman's Hall Museum
Forest Resources School Bird and Mammal Collections, Pennsylvania State University
Fort Necessity National Battlefield
Francis Harvey Green Library
Franklin Institute
Franklin Public Library
Freeport Area Historical Society
Frick Art and Historical Center
Frost Entomological Museum
Gen. John Burrows Historical Society of Montoursville
Gertrude Kistler Memorial Library
Gettysburg National Military Park
Girard College Founders Hall
Glenolden Library
Goschenhoppen Folklife Library and Museum
Governor Wolf Historical Society
Hastings Public Library
Herbarium, Biological Sciences Department, University of the Sciences in Philadelphia
Herbarium, Biology Department, Slippery Rock University
Hermitage Historical Society
Hershey Gardens
Highlands Historical Society
Historic Shaefferstown
Historical Society of Berks County
Historical Society of Pennsylvania
Historical Society of the Phoenixville Area
Historical Society of Western Pennsylvania
The Horticulture Center
Huntingdon County Historical Society
Independence National Historical Park
J. Lewis Crozer Library
Jacobsburg Historical Society
Jenkins Arboretum
King's College D. Leonard Corgan Library
Lackawanna Historical Society
Lancaster County Historical Society
Lehigh University Library and Technology Services
Liberty Forge Arboretum
Libraries at the University of Pittsburgh
Library Company of Philadelphia
Linesville Historical Society
Logue Library, Chestnut Hill College
Longwood Gardens
Luzerne County Historical Society
Mars Area History and Landmarks Society
Martin Art Gallery
McKean County Historical Society
Mifflinburg Buggy Museum Association, Inc.
Mill Grove Audubon Center
Mineral Collections, Bryn Mawr College
Minersville Public Library
Monongahela Area Library
Moravian Archives
Mount Joy Area Historical Society
Mütter Museum
New Castle Public Library
North East Historical Society
Northampton County Historical and Genealogical Society
Northern York County Historical and Preservation Society
Northwestern Pennsylvania Steam and Antique Equipment Association

Old York Road Historical Society
Parkesburg Free Library
Penn Wynne Library
Pennsylvania Academy of the Fine Arts
Pennsylvania German Society
Pennsylvania Historical and Museum Commission
Pennsylvania Historical and Museum Reference Library
Pennsylvania Hospital Archives
Pennsylvania State University Libraries
Pennypacker Mills
Philadelphia Museum of Art
Philadelphia Orchestra Library
Philadelphia Sketch Club
Philip Schaff Library
Phipps Conservatory and Botanical Garden
PinnacleHealth System Library at Harrisburg Hospital
Please Touch Museum
Polisher Research Institute Library
Portage Area Historical Society
The Print Center
Quaint Corner Children's Museum
Reading Company Technical and Historical Society
Red Lion Area Historical Society
Reformed Presbyterian Theological Seminary Library
Rena M. Carlson Library
Rice Avenue Community Public Library
Ridley Township Public Library
Rosenbach Museum and Library
Ryerss Museum and Library
Samuel W. Smith Memorial Public Library
Sayre Historical Society
Schuylkill Canal Association, Inc.
Schwenkfelder Library and Heritage Center
The Scott Arboretum, Swarthmore College
Scottish Historical and Research Society of Delaware Valley
Shadek-Fackenthal Library, Franklin & Marshall College
Shippensburg University Vertebrate Museum
Sisters of the Holy Family of Nazareth
State Library of Pennsylvania
Strasburg Heritage Society
Trinity Episcopal School for Ministry Library
U.S. Army Corps of Engineers District Library
Union County Library System
Uniontown Public Library
University of Pennsylvania Museum of Archaeology and Anthropology
Upper Darby Historical Society
Upper Dublin Public Library
Valley Forge National Historic Park
Wagner Free Institute of Science
Wallenpaupack Historical Society
Waymart Area Historical Society
Wayne County Public Library
Wayne E. Manning Herbarium, Bucknell University
Wharton Esherick Museum
Wood Turning Center
Woodmere Art Museum
Yeadon Public Library
Zelienople Historical Society

Puerto Rico

Archivo General de Puerto Rico
Cayey University College Library
Department of Biology, University of Puerto Rico
Department of Marine Sciences Museum, University of Puerto Rico
Encarnación Valdés Library, Pontifical Catholic University of Puerto Rico
International Institute of Tropical Forestry, U.S. Department of Agriculture
Laboratory of Primate Morphology and Genetics, University of Puerto Rico
Museo de Arte de Ponce
Museo de las Americas
Museo del Cafe de Puerto Rico, Inc.
Museum of Contemporary Art of Puerto Rico
San Juan National Historic Site
Universidad Central del Caribe

Rhode Island

Brown University Libraries
East Smithfield Public Library
Greenville Public Library
Herbarium, Biological Sciences Department, University of Rhode Island
James P. Adams Library, Rhode Island College
Jamestown Philomenian Library
Little Compton Historical Society
Museum of Natural History and Planetarium
New England Institute of Technology Library
Newport Restoration Foundation

Providence Public Library
Rhode Island Historical Society
Rhode Island School of Design Library
The Rhode Island School of Design Museum
Rhode Island State Archives
Roger Williams University Library
United States Naval War College Library

South Carolina

Anderson College Library
Anderson County Museum
Audubon Center at Francis Beidler Forest
Beaufort County Public Library System
Central Heritage Society
Charleston Library Society
Cheraw Lyceum Museum
Clemson University Library
Columbia Museum of Art
Darlington County Historical Commission
Florence Museum of Art, Science and History
G. Allen Fleece Library, Columbia International University
Hampton Museum and Visitors' Center
Herbarium, Biology Department, Converse College
Herbarium, Biology Department, Newberry College
Ida Jane Dacus Library
Ives Herbarium, Furman University
Kalmia Gardens, Coker College
Kaminski House Museum
Keowee-Toxaway State Park
Lancaster County Library
Newsfilm Library, University of South Carolina
Oconee County Library
Pendleton Historic Foundation
South Carolina Cotton Museum Inc.
South Carolina Department of Archives and History
South Carolina State Library
South Carolina State Museum
South Carolina Tobacco Museum
Wessels Library, Newberry College
Winthrop University Galleries
Zoological Collections, Furman University

South Dakota

Augustana College Libraries
Black Hills Institute of Geological Research
Bramble Park Zoo
City of Deadwood–Archives
Codington County Historical Society
Community Historical Center and Museum
Czech Heritage Preservation Society
Dakota Sunset Museum
Dakotas Conference of the United Methodist Church Archives and History Library
Dalessburg Lutheran Church Archive Committee
Fall River County Historical Museum
Great Plains Native Plant Society
Herbarium, Biology Department, South Dakota State University
Heritage Center Inc.
I. D. Weeks Library, University of South Dakota
Kaiser-Ramaker Library, North American Baptist Seminary
Karl E. Mundt Library, Dakota State University
Lommen Health Sciences Library, University of South Dakota
Mammalogy Teaching Collection, South Dakota State University
McCook County Historical Society and Museum
Moody County Genealogical Association
Moody County Historical Society
Mount Rushmore National Memorial
Museum of the South Dakota State Historical Society
Museum of Wildlife Science and Industry
Newell Museum
Presentation Sisters Archives
South Dakota Art Museum
South Dakota State Archives
South Dakota State Library
South Dakota State University Library
Timber Lake and Area Historical Society
Tripp County Library-Grossenburg Memorial
Washington Pavilion of Arts and Science
White Area Historical Society

Tennessee

Albert Gore, Sr. Research Center
American Museum of Science and Energy
Anderson County Archives
Beck Cultural Exchange Center
Belle Meade Plantation
Big South Fork National River and Recreation Area
Briceville Public Library
Chattanooga African American Museum
Chattanooga-Hamilton County Bicentennial Library
Clay County Public Library

Country Music Hall of Fame and Museum
Cumberland County History and Genealogical Society
The Dixon Gallery and Gardens
East Ridge City Library
Erlanger Health System Library
Fisk University Library
Gordon Browning Museum and Genealogical Library
Herbarium, Department of Biology, University of the South
Jewish Federation of Nashville and Middle Tennessee Archives
Knox County Public Library System
Lawrence County Archives
Lewis County Public Library
Lincoln County Archives
Little River Railroad and Lumber Company Museum
Madison County Archives
Mckee Library, Southern Adventist University
The Museum at Mountain Home, East Tennessee State University
Nashville Public Library
National Ornamental Metal Museum
Paul L. Hollister Herbarium, Tennessee Technological University
Project Preservation
Robertson County Archives
Rocky Mount Museum
Shelby County Archives
Southern Baptist Historical Library and Archives
Tennessee Valley Authority Archives
Tennessee Sports Hall of Fame and Museum
Tennessee State Library and Archives
Tennessee State Museum
University of Tennessee Libraries
Vanderbilt University Libraries
Waggoner Library, Trevecca Nazarene University
Washington County-Jonesborough Library
Wayne County Historical Society
White County Archives

Texas

A. Frank Smith Jr. Library Center
Agricultural Heritage Center and Museum
Alamo
American Heart Association Library
Angelo State Natural History Collection
Archdiocese of San Antonio Catholic Archives
Archives of the Episcopal Church
Armstrong Browning Library, Baylor University
Arnulfo L. Oliveira Memorial Library
Art Museum of Southeast Texas
The Art Studio, Inc.
Austin County Library System
Austin Public Library
Barnard's Mill Art Museum
Bedford Public Library
Botanical Research Institute of Texas
Buffalo Gap Historic Village
Childress County Heritage Museum
City of Wolfforth Library
Coke County Library
Collection of Recent Mammals, Midwestern State University
Collin County Historical Society, Inc./Collin County History Museum
Concordia University at Austin Founders Library
Culture Collection of Algae, University of Texas at Austin
Dallas Municipal Archives
Dallas Museum of Art
Dallas Public Library
Deaf Smith County Historical Society
Denton Public Library
Depot Museum
Dinosaur Valley State Park
Diocese of Amarillo Diocesan Archives
Dr. Pepper Museum and Free Enterprise Institute
Dripping Springs Community Library
East Texas Oil Museum
El Paso Museum of Art
El Paso Public Library
El Paso Zoo
El Progreso Memorial Library
Ellen Trout Zoo
Ethel L. Whipple Memorial Library
Fairfield Library Association
Farmers Branch Manske Library
Fayette Public Library
First Presbyterian Church Library
Fort Bend County Libraries George Memorial
Fort Clark Historical Society
Fort Concho National Historic Landmark
Fort Croghan Museum
Fort Richardson State Historical Park
Fort Sam Houston Museum

Fort Stockton Public Library
Friona Public Library
Fulton Mansion
Gladys City Boomtown
Grace Armantrout Museum
Gregg County Historical Museum
Harrie P. Woodson Memorial Library
Harry Ransom Humanities Research Center
Herbarium (ASTC), Biology Department, Stephen F. Austin State University
Herbarium, Biological Sciences Department, Tarleton State University
Herbarium, Biology Department, Our Lady of the Lake University
Herbarium, Biology Department, Texas A&M University
Herbarium, Plant Resources Center, University of Texas
Horlock History Center and Museum
Houston County Historical Commission Archives
Houston Public Library
Insect Collection, Texas A&M University
Irving Public Library
Jack S. Blanton Museum of Art
Jacksonville Public Library
James Gilliam Gee Library, Texas A&M University-Commerce
Kell House Museum
Lady Bird Johnson Wildflower Center
Lake Meredith Aquatic and Wildlife Museum
Lunar and Planetary Institute
Lyndon Baines Johnson Library and Museum
Mansfield Public Library
Mary Couts Burnett Library, Texas Christian University
McFaddin-Ward House
McNamara House Museum
Melissa Public Library
Mickelsen Libraries, United States Army Air Defense Artillery School
Museum of Fine Arts Houston
National Archives and Records Administration, Southwest Region (Fort Worth)
Panhandle-Plains Historical Museum
Panna Maria Historical Society/St. Joseph School Museum
Quitman Public Library
Rice University
Richard Wade and Glen Vyck McKinney Library
Round Rock Public Library System
San Antonio Museum of Art
San Antonio Zoological Gardens and Aquarium
San Marcos Public Library
Seagoville Public Library
Sherman County Depot Museum
Special Collections/Archives Department, Prairie View A&M University
Stark Museum of Art
Texas A&M University Libraries
Texas Archeological Research Laboratory
Texas Cooperative Wildlife Collection
Texas Medical Center Library
Texas Memorial Museum
Texas State Library and Archives Commission
Texas Tech University Libraries
Texas Tech University Museum
Texas Zoo
U.S. Army Medical Department Museum
University of Texas at Arlington
University of Texas at Arlington Library
The University of Texas at Austin Libraries
University of Texas at El Paso Library
University of Texas at San Antonio Library
Val Verde County Library
Vertebrate Natural History Collection, Sam Houston State University
Victoria Public Library
Welder Wildlife Foundation
Whitehouse Community Library
William T. Cozby Library

U.S. Virgin Islands

Elaine Ione Sprauve Public Library and Museum
Ralph M. Paiewonsky Library
Saint Croix Campus Library
Virgin Islands National Park

Utah

Anasazi State Park Museum
Brigham Young Winter Home and Office
Camp Floyd/Stagecoach Inn State Park and Museum
Canyonlands National Park
Dinosaur National Monument
Donner Reed Pioneer Museum
Herbarium, Biology Department, Utah Valley State College
Herbarium, Fishlake National Forest

Herbarium, U.S. Department of Agriculture Forest Service Region 4
Heritage Museum of Layton
Intermountain Herbarium
J. Willard Marriott Library, University of Utah
John Wesley Powell River History Museum
Manti-Iasal National Forest Herbarium
Midvale Historical Society
Museum of Natural Science
Natural History Museum, Dixie College
Nora Eccles Harrison Museum of Art
Ogden Nature Center
Richfield Public Library
Salt Lake City Arts Council
Sandy Museum
Stevens Henager College Library
Territorial Statehouse State Park Museum
Utah Field House of Natural History State Park
Utah Museum of Fine Arts
Utah Museum of Natural History
Utah State Historical Society
Utah State Library Division
Western Heritage Museum

Vermont

The Bennington Museum
Billings Farm and Museum
Biology and Life Sciences Department, Norwich University
Birds of Vermont Museum
Black River Academy Museum and Historical Society
Chimney Point State Historic Site
Concord Historical Society
Crystal Lake Falls Historical Association
Davies Memorial Library
East Middlebury Historical Society
Elmore Historical Society
Fairbanks Museum and Planetarium
Green Mountain Club, Inc.
Green Mountain Perkins Academy and Historical Association
Herbarium, Natural Sciences Department, Lyndon State College
Holland Historical Society Museum
Hubbardtown Battlefield State Historic Site
Isle La Motte Historical Society
Kreitzberg Library, Norwich University
Lake Champlain Maritime Museum
Latham Memorial Library/Thetford Town Library
Mount Holly Community Historical Museum
North Hero Historical Society
Peacham Historical Association
Pittsford Historical Society
Plymouth Historical Society
Rokeby Museum
Salisbury Historical Society
Shelburne Museum
St. Johnsbury Athenaeum
Tyson Library
University of Vermont Libraries
Vermont State Archives
West Haven Historical Society

Virginia

Alexandria Black History Museum
Allen E. Roberts Masonic Library and Museum
Amelia County Historical Society
Amherst County Museum
Archeological Society of Virginia
Augusta County Historical Society
Augusta Military Academy Museum
Bedford City County Museum
Blue Ridge Community College Arboretum
Blue Ridge Division Historical Holdings
Boatwright Memorial Library, University of Richmond
Campbell County Public Library
Cape Henry Lighthouse
Caroline Historical Society
Catholic Historical Society of the Roanoke Valley
Cherry Hill Farm
Chesapeake & Ohio Historical Society
Chrysler Museum of Art
Colonial National Historical Park
Colonial Williamsburg
Contemporary Art Center of Virginia
Department of Geology and Environmental Science, James Madison University
Fairfax County Public Library
Fairfax Museum and Visitor Center
Fluvanna County Public Library
Foundation for Historic Christ Church
Franklin County Historical Society
George Mason University Libraries
Green Springs Gardens
Hampton University Museum and Archives
Hanover Tavern Foundation

Herbarium, Biological Sciences Department, Mary Washington College
Herbarium, Biology Department, College of William and Mary
Herbarium, Biology Department, James Madison University
Herbarium, Biology Department, Virginia Military Institute
Herbarium, George Mason University
Herbarium, Virginia Commonwealth University
Highland Historical Society
Historic Smithfield
Historical Society of Washington County
James Graham Leyburn Library, Washington and Lee University
Langhorne House
Lee Chapel and Museum
The Library of Virginia
Maier Museum of Art
Marine Corps University Research Archives
Massey Herbarium, Virginia Polytechnic Institute and State University
Melvin Sabshin Library and Archives
Menokin Foundation, Home of Francis Lightfoot Lee
Mill Mountain Zoo
Monticello
Mount Vernon
Museum of the Confederacy
National Science Foundation Library
The Newsome House Museum and Cultural Center
Norfolk Public Library
The Old Coast Guard Station
Old Dominion University Libraries
Petersburg Museums
Pittsylvania Historical Society
Powhatan County Historical Society
Prince William County Genealogical Society
Prince William Forest Park
Science Museum of Virginia-Danville Science Center
Seed Laboratory, Virginia Department of Agriculture and Consumer Services
Shenandoah County Historical Society
Stone House Foundation
Suffolk Museum
Thomas Balch Library
Tidewater Arboretum
U.S. Army Quartermaster Museum
U.S. Geological Survey Library
University of Virginia, Alderman Library
Valentine Richmond History Center
Virginia Commonwealth University Libraries
Virginia Department of Historic Resources, Archives
Virginia Historical Society
Virginia Institute of Marine Science
Virginia Living Museum
Virginia Museum of Fine Arts
Virginia Museum of Natural History
Virginia's Explore Park
William R. and Norma B. Harvey Library, Hampton University
Williamsburg Regional Library

Washington

Aberdeen Museum of History
Adams County Historical Society Museum
Arnold Digital Library
B Reactor Museum Association
Bellingham Public Library
Burke Museum of Natural History and Culture
Camp 6 Logging Museum
Carpenter House and Cle Elum Telephone Museums
Chastek Library
Chewelah Historical Museum
Chimpanzee and Human Communication Institute
Colville Confederated Tribe Library
Colville Tribal History Repository, Archives and Museum
Des Moines Historical Society
Dr. Frank R. Burroughs Home and Depot Museums
Elisabeth C. Miller Horticultural Library
Franklin County Historical Society and Museum
Herbarium, Biology Department, Western Washington University
Jefferson County Rural Library District
Johnson Farm
Kalama Public Library
Kitsap County Historical Society
Log House Museum
Lopez Island Historical Museum
Lopez Island Library
Marian Gould Gallagher Law Library
Maryhill Museum of Art
Mason County Historical Society Museum
Monte Cristo Preservation Association
Museum of Anthropology, Washington State University

Museum of Flight
Museum of History and Industry
Mycological Herbarium, Plant Pathology Department, Washington State University
National Archives and Records Administration, Pacific Alaska Region (Seattle)
North Clark Historical Museum
Ohme Gardens
Orcas Island Historical Museum
Our Lady of the Rock Library
Puget Sound Coast Artillery Museum
Rhododendron Species Botanical Garden
Samish Tribal Archives
Seattle Art Museum
Seattle Genealogical Society Library
Seattle Municipal Archives
Skagit County Historical Museum
Sky Valley Historical Society
Sno-Isle Genealogical Society
Stillaguamish Tribal Library
Stillaguamish Valley Genealogical Society
Tacoma Public Library
Tumwater Historical Association
University of Washington Fish Collection
University of Washington Libraries
W.W. Seymour Botanical Conservatory/Wright Park Arboretum
Walla Walla County Rural Library District
Washington State Archives
Washington State Historical Society
Washington State Jewish Historical Society
Washington State Library
Washington State University Libraries
Whatcom Museum of History and Art
Whitman College Libraries
Wing Luke Asian Museum
Yakima Valley Genealogical Society Library

West Virginia

Avampato Discovery Museum
Brooks Memorial Arboretum
Cabell County Public Library
Cass Scenic Railroad State Park
Core Arboretum
Gauley Bridge Historical Society
Grave Creek Mound Archaeological Complex
Harpers Ferry National Historical Park
Herbarium, Biology Department, West Virginia University
Keyser-Mineral County Public Library
Library Services, West Virginia Library Commission
Living Heritage Museum
Ohio County Public Library
Pocahontas County Free Library
West Augusta Historical Society
West Virginia Division of Culture and History
West Virginia Mammal Survey
West Virginia University Libraries

Wisconsin

Amery Historical Society
Arboretum, University of Wisconsin-Madison
Archives and Area Research Center, University of Wisconsin-Parkside
Arvid E. Miller Memorial Library/ Museum
Ashland Historical Society and Museum
Aztalan Museum
Barbershop Harmony Society Old Songs Library
Bay Beach Wildlife Sanctuary
Beaver Creek Reserve
Boerner Botanical Gardens
Brigham Memorial Library
Buffalo County Historical Society
Charles A. Wustum Museum of Fine Arts
Charles Allis/Villa Terrace Art Museums
Chippewa Falls Public Library
Clintonville Area Historical Society
Dane County Legal Research Center
Dartford Historical Society
DeForest Area Historical Society
Door County Maritime Museum
Edward U. Demmer Memorial Library
Elvehjem Museum of Art
Fox Lake Historical Museum
Frederic Area Historical Society
Friends of Schumacher Farm, Inc.
Geology Museum, Department of Geology and Geophysics, University of Wisconsin–Madision
George W. Brown Jr. Ojibwe Museum and Cultural Center
Greenfield Historical Society
H. H. Bennett Studio and History Center
Helen Louise Allen Textile Collection
Herbarium, Department of Biological Sciences, University of Wisconsin- Milwaukee
Herbarium, University of Wisconsin- Madison
Historic Indian Agency House

Hoard Historical Museum
Insect Research Collection, University of Wisconsin-Madison
Iola Village Library
John Michael Kohler Arts Center
Jordan Park Nature Center
Jump River Valley Historical Society
Lacrosse County Historical Society
Lakeland College Library
Leo Dehon Library
Logan Museum of Anthropology
Madison Public Library
Marathon County Public Library
Marquette University Libraries
Mason Area Historical Society
Merrill Historical Museum
Milwaukee Art Museum
Milwaukee County Zoological Gardens
Milwaukee Public Library
Milwaukee Public Museum
Murphy Library Resource Center, University of Wisconsin-La Crosse
Neenah Historical Society/Smith Octagon House
New Holstein Public Library
Omro Area Historical Society
Oneida Nation Museum
Oshkosh Public Museum
Outagamie County Historical Society
Pewaukee Historical Society
Racine Art Museum
Ripon Public Library
Sinsinawa Dominican Archives
Sterling North Society
University of Wisconsin-Madison General Library System
Waupaca Historical Society
Waupun Public Library
West Bend Community Memorial Library
Wisconsin Automotive Museum
Wisconsin Historical Society
Wisconsin Maritime Museum
Wright Museum of Art

Wyoming

American Heritage Center
Buffalo Bill Historical Center
Carbon County Library System
Central Wyoming College Herbarium
Chugwater Museum
Fort Bridger State Historic Site
Grand Encampment Museum Inc.
Homesteaders Museum
Museum of the Mountain Men
National Museum of Wildlife Art
Park County Archives
Robert A. Peck Art Center
Saratoga Museum
Sweetwater County Library System
Teton County Library
University of Wyoming Archaeological Repository
University of Wyoming Insect Museum
University of Wyoming Libraries
Wyoming State Archives
Wyoming State Law Library
Wyoming State Library
Wyoming State Museum
Yellowstone National Park Heritage and Research Center

* In addition, 511 institutions asked to remain anonymous.

Appendix F—Heritage Health Index Survey Instrument, Instructions, and Frequently Asked Questions

Heritage Health Index
a partnership between Heritage Preservation and the Institute of Museum and Library Services

Heritage Preservation

The National Institute for Conservation

With support from:
Institute of Museum and Library Services
Getty Grant Program
The Henry Luce Foundation
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Samuel H. Kress Foundation
Peck Stacpoole Foundation
Gladys Krieble Delmas Foundation

Advisory Committee:
American Association for State and Local History
American Association of Museums
American Institute for the Conservation of Historic and Artistic Works
American Library Association
Association of Art Museum Directors
Association of Moving Image Archivists
Association of Regional Conservation Centers
Association of Research Libraries
Center for Arts and Culture
Council on Library and Information Resources
National Association of Government Archives and Records Administrators
National Conference of State Historic Preservation Officers
National Preservation Institute
National Trust for Historic Preservation
Natural Science Collections Alliance
Regional Alliance for Preservation
RLG
Society for Historical Archaeology
Society for the Preservation of Natural History Collections
Society of American Archivists

Ex Officio:
Library of Congress
National Archives and Records Administration
National Commission on Libraries and Information Science
National Endowment for the Arts
National Gallery of Art
National Historical Publications & Records Commission
Smithsonian Institution

August 16, 2004

Dear Director,

The survey you have just opened represents a historic opportunity for archives, museums, libraries, historical societies, and scientific research organizations in the United States. The Heritage Health Index, sponsored by Heritage Preservation in partnership with the Institute of Museum and Library Services, is the first attempt to prepare a comprehensive picture of the condition and preservation needs of this country's collections.

We strongly encourage you to take the time to complete this survey because:

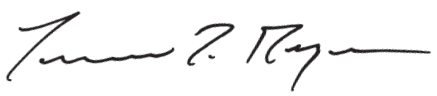
- The survey results will be used extensively in the years ahead as administrators, policy makers, government agencies, and private funding sources make decisions that affect the preservation of collections.
- The Heritage Health Index will assess collections in all media, in all formats, in all types of institutions, and in every state. We need your help to ensure that institutions of your type are accurately represented in the final results.
- Institutions that tested the questionnaire found it to be a thorough self-assessment, helping them gather information that was useful for long-range planning and funding requests.
- In appreciation of your time, probably one to three hours, we will send you a copy of the final survey report that will be publicized nationwide.

Please complete the questionnaire by October 12, 2004. We encourage you to submit the questionnaire online at www.heritagehealthindex.org. Your institution's password is Doing the survey online gives you helpful tools and instant access to some of the preliminary results. If you prefer, you may complete the enclosed form and return it in the postage-paid envelope provided.

Information that will help you complete the questionnaire may be found on the inside cover and enclosed blue sheets. For additional assistance, contact Kristen Laise (klaise@heritagepreservation.org, 202-233-0824, or 202-233-0800) or another member of the Heritage Health Index staff at 202-233-0800.

We appreciate the gift of your time and information. Thank you for participating in this important project to document the needs and condition of our nation's cultural and scientific heritage.

Sincerely,



Lawrence L. Reger
President
Heritage Preservation
www.heritagepreservation.org

Robert S. Martin, Ph.D.
Director
Institute of Museum and Library Services
www.imls.gov

A. Institutional Identifying Information

A1. Name: _____

A2. Address 1: _____

A3. Address 2: _____

A4. Address 3: _____

A5. City, State and Zip: _____

A6. Name of parent institution, if applicable:_____

A7. Web site password:

Instructions

Submitting the Survey

We encourage you to submit your responses online at www.heritagehealthindex.org. If you prefer, you may complete the paper questionnaire and return it using the enclosed, addressed, stamped envelope. If the envelope is misplaced, please send your survey to: RMC Research Corporation, 1000 Market Street, Building 2, Portsmouth, NH 03801, attn: HHI.

Confidentiality

RMC Research Corporation will keep your individual responses, whether submitted online or on paper, completely confidential. Only the aggregate data will be reported; your individual responses will never be published or identified by Heritage Preservation, the Institute of Museum and Library Services (IMLS), or any organization cooperating in this project.

Why Should You Participate?

The data you provide will communicate the scope and nature of the preservation needs of collections nationwide and will guide the efforts of decision-makers and funders to address those needs. The results of the Heritage Health Index will show you your preservation needs in the context of those of your peers in a form that can be used as a tool for raising institutional awareness and promoting long-range planning for the care of collections.

Scope of the Questionnaire

- Complete the questionnaire for the collecting institution identified above in question A1.
- If you are one entity within a parent institution, fill out the survey only for your own holdings, not those of other collecting entities in your parent institution. They may receive their own surveys. For example, a library and a museum belonging to the same university may each receive separate surveys.
- If you are not under a parent institution, include information on all collections at your institution. For example, a museum that has its own library and archives should fill out one survey, including information on all of its museum, library, and archival holdings.
- Complete the questionnaire for collections that are a permanent part of your holdings or for which you have accepted preservation responsibility.
- Do not include living collections and historic structures in your responses to this questionnaire, even if they are a part of your institution's preservation responsibilities.

How to Complete the Questionnaire

- For questions that ask for a number or dollar amount, please provide your best estimate. Remember, these figures will constitute a national profile, so even a rough estimate is useful.
- For questions about issues such as institutional budget and staffing, you may need to consult your colleagues.
- If your responses will not fit in the spaces provided, please write them on the attached blank page.
- Do not leave questions blank. If there are questions that you cannot answer, select "Don't Know." If there are questions that are not applicable to your institution, select "Not Applicable."

More Information

When you see the ⓘ , refer to the enclosed blue sheets, which define terms used throughout the survey and provide answers to "Frequently Asked Questions" (FAQs). For questions about the survey, contact Kristen Laise at 202-233-0824, 202-233-0800, or klaise@heritagepreservation.org or another member of the Heritage Health Index staff at 202-233-0800. For technical assistance with online submissions, contact RMC at 800-258-0802 or HHITA@rmcres.com.

B. Description of Collecting or Holding Institution

B1. For purposes of comparing you with your peers, which of the following most closely describes your **primary function** or service? *(**select one**)*

- ❑ a. Archives
- ❑ b. Public library
- ❑ c. Academic library
- ❑ d. Independent research library
- ❑ e. Special library
- ❑ f. Historical society
- ❑ g. Historic house/site
- ❑ h. History museum
- ❑ i. Art museum (including art gallery, art center, or arts organization)
- ❑ j. Children's/youth museum
- ❑ k. Natural history museum
- ❑ l. Science/technology museum
- ❑ m. General museum (collection represents 2 or more disciplines)
- ❑ n. Museum with one narrowly defined discipline, please specify:_____
- ❑ o. Archaeological repository or research collection
- ❑ p. Agency or university department with scientific specimen/artifact collections
- ❑ q. Arboretum or botanical garden
- ❑ r. Aquarium
- ❑ s. Nature center
- ❑ t. Planetarium
- ❑ u. Zoo
- ❑ v. Other, please specify one function _____

B2. Which **additional functions or services** do you provide? (***select all that apply***)

- ❑ a. Archives
- ❑ b. Library
- ❑ c. Historical society
- ❑ d. Historic house/site
- ❑ e. Museum (including art gallery, art center, or arts organization)
- ❑ f. Archaeological repository or research collection
- ❑ g. Agency or university department with scientific specimen/artifact collections
- ❑ h. Aquarium, Zoo, Arboretum, Botanical Garden, Nature Center or Planetarium
- ❑ i. Other, please specify: _____
- ❑ j. None

B3. Does your institution have Internet access?

❑ a. Yes ❑ b. No

B4. Does your institution have a Web site?
❑ a. Yes ❑ b. No

B5. Which of the following most closely describes your institution's governance? (*select one*)
❑ a. College, university or other academic entity
❑ b. Non-profit, non-governmental organization or foundation
❑ c. Corporate or for-profit organization
❑ d. Federal
❑ e. State
❑ f. Local (county or municipal)
❑ g. Tribal

B6. If you are controlled by a college, university, or other academic entity, which of the following most closely describes your governance? (*select one*)
❑ a. Private college or university
❑ b. State college or university
❑ c. County or municipal college or university
❑ d. Other, please specify: _____
❑ e. Not applicable (not controlled by an academic entity)

C. Environment ⓘ

C1. Do you use environmental controls to meet **temperature** specifications for the preservation of your collection? (*select one*)
❑ a. Yes, in all areas
❑ b. In some, but not all areas
❑ c. No, in no areas
❑ d. Don't know
❑ e. Not applicable

C2. Do you use environmental controls to meet **relative humidity** specifications for the preservation of your collection? (*select one*)
❑ a. Yes, in all areas
❑ b. In some, but not all areas
❑ c. No, in no areas
❑ d. Don't know
❑ e. Not applicable

C3. Do you control **light levels** to meet the specifications for the preservation of your collection? (*select one*)
❑ a. Yes, in all areas
❑ b. In some, but not all areas
❑ c. No, in no areas
❑ d. Don't know
❑ e. Not applicable

C4. What estimated percentage of your collection is stored in areas you consider to be **adequate** (large enough to accommodate current collections with safe access to them and appropriate storage furniture, if necessary)? (*select one*)
❑ a. 0 %
❑ b. 1-19%
❑ c. 20-39%
❑ d. 40-59%
❑ e. 60-79%
❑ f. 80-99%
❑ g. 100%
❑ h. Don't know

C5. For the storage areas that are not adequate, indicate the degree of improvement needed in each of the following four categories. If all of your storage areas are adequate, select "no need." ⓘ

	No need	Need	Urgent need	Don't know	Not applicable
a. Additional on-site storage	❑	❑	❑	❑	❑
b. New or additional off-site storage	❑	❑	❑	❑	❑
c. Renovated storage space (either on-site or off- site)	❑	❑	❑	❑	❑
d. New or improved storage furniture/ accessories (*e.g., shelves, cabinets, racks*)	❑	❑	❑	❑	❑

D. Preservation Activities

D1. Does the **mission** of your institution include preservation of your collection? (*select one*)
- ❑ a. Yes
- ❑ b. No
- ❑ c. Don't know

D2. Does your institution have a **written, long-range preservation plan** for the care of the collection (a document that describes a multi-year course of action to meet an institution's overall preservation needs for its collection)? (*select one*)
- ❑ a. Yes
- ❑ b. Yes, but it is not up-to-date
- ❑ c. No, but one is being developed
- ❑ d. No, but preservation is addressed in overall long-range plan
- ❑ e. No
- ❑ f. Don't know

D3. Has a **survey of the general condition** of your collection been done (an assessment based on visual inspection of the collection and the areas where it is exhibited or held)? (*select one*)
- ❑ a. Yes
- ❑ b. Yes, but only of a portion of the collection
- ❑ c. Yes, but it is not up-to-date
- ❑ d. Yes, but only of a portion of the collection, and it is not up-to-date
- ❑ e. No
- ❑ f. Don't know

D4. Does your institution have a **written emergency/disaster plan** that includes the collection? (*select one*)
- ❑ a. Yes
- ❑ b. Yes, but it is not up-to-date
- ❑ c. No, but one is being developed
- ❑ d. No
- ❑ e. Don't know

D5. If you **have a written emergency/disaster plan**, is your staff trained to carry it out? (*select one*)
- ❑ a. Yes
- ❑ b. No
- ❑ c. Don't know
- ❑ d. Have no written emergency/disaster plan

D6. Are copies of **vital collection records** (*e.g., inventory, catalog, insurance policies*) stored offsite? (*select one*)
- ❑ a. Yes
- ❑ b. Some, but not all
- ❑ c. No
- ❑ d. Do not have copies
- ❑ e. Don't know
- ❑ f. Do not have collection records

D7. Do you have adequate **security systems** (*e.g., security guard, staff observation, intrusion detection*) to help prevent theft or vandalism of collections? (*select one*)
- ❑ a. Yes
- ❑ b. In some, but not all areas
- ❑ c. No
- ❑ d. Don't know

D8. Which of the following most closely describes your current **staffing for conservation/preservation**? (*select all that apply*)

- ❑ a. Paid conservation/preservation staff (full-time or part-time)
- ❑ b. Volunteers (full-time or part-time)
- ❑ c. Conservation/preservation duties assigned to various staff as needed
- ❑ d. Conservation/preservation services obtained through external provider
- ❑ e. No staff person has conservation/preservation responsibilities

D9. Indicate the internal staff who perform conservation/preservation activities. Please select an **estimate** from the ranges provided. If the number of FTE falls between possible responses, round to the nearest whole number. ⓘ

- Include all workers who perform conservation/preservation activities whether full-time, part-time, seasonal, work study, interns, etc.
- Express the total amount of staff time spent on conservation/preservation in full-time equivalents (FTEs) (*e.g., two part-time staff who each work 20 hours a week on conservation/preservation activities would be counted as 1 full-time equivalent staff person*).

Professional conservation/ preservation staff (*e.g., preservation administrators, conservators, research scientists*)

- ❑ a. 0 FTE
- ❑ b. up to 1 FTE
- ❑ c. 2-5 FTE
- ❑ d. 6-10 FTE
- ❑ e. 11-20 FTE
- ❑ f. More than 20 FTE
- ❑ g. Don't know

Support conservation/preservation staff (*e.g., collections care assistants, technical assistants, handlers*)

- ❑ a. 0 FTE
- ❑ b. up to 1 FTE
- ❑ c. 2-5 FTE
- ❑ d. 6-10 FTE
- ❑ e. 11-20 FTE
- ❑ f. More than 20 FTE
- ❑ g. Don't know

Volunteers (*e.g., unpaid conservation/preservation workers, unpaid interns*)

- ❑ a. 0 FTE
- ❑ b. up to 1 FTE
- ❑ c. 2-5 FTE
- ❑ d. 6-10 FTE
- ❑ e. 11-20 FTE
- ❑ f. More than 20 FTE
- ❑ g. Don't know

D10. What does your conservation/preservation program include? (*select all that apply*) ⓘ

	Done by institution staff	**Done by external provider**	**Not done currently, but planned**	**Not done**	**Not applicable**
a. Preventive conservation (*e.g., housekeeping, holdings maintenance, rehousing, environmental monitoring*)	❑	❑	❑	❑	❑
b. Preservation management (*e.g., administration, planning, assessment*)	❑	❑	❑	❑	❑
c. Conservation treatment (*e.g., repair, mass deacidification, specimen preparation*)	❑	❑	❑	❑	❑
d. Preservation reformatting (*e.g., preservation photocopying, microfilming*)	❑	❑	❑	❑	❑
e. Preservation of audio-visual media and playback equipment (*e.g., preservation copies of media, maintaining equipment*)	❑	❑	❑	❑	❑
f. Preservation of digital materials and electronic records collections (*e.g., migrating data to current software*)	❑	❑	❑	❑	❑

D11. Does your institution's conservation/preservation mission or program include the **responsibility to preserve digital collections** (*computer based representation of text, numbers, images, and/or sound, e.g., optical discs, Web sites, electronic books*)? (*select one*)

- ❑ a. Yes
- ❑ b. No
- ❑ c. Don't know
- ❑ d. Not applicable

D12. Please indicate your institution's **level of need** in the following areas related to conservation/preservation. ⓘ

	No Need	Need	Urgent Need	Don't know	Not applicable
a. Finding aids or cataloging of collections	❑	❑	❑	❑	❑
b. Condition surveys or assessments of collection	❑	❑	❑	❑	❑
c. Staff training	❑	❑	❑	❑	❑
d. Security	❑	❑	❑	❑	❑
e. Environmental controls (*e.g., heating, air conditioning, de-humidifying, humidifying*)	❑	❑	❑	❑	❑
f. Improvements to reduce collections' exposure to light	❑	❑	❑	❑	❑
g. Conservation treatment (*include specimen preparation*)	❑	❑	❑	❑	❑
h. Preservation of digital collections (*digitized and born-digital*)	❑	❑	❑	❑	❑
i. Integrated pest management (*approaches to prevent and solve pest problems in an efficient and ecologically sound manner*)	❑	❑	❑	❑	❑

D13. For all your collections that are **currently in need of treatment** identify all the causes of the damage or loss of access to them. ⓘ

	No damage or loss	Some damage or loss	Significant damage or loss	Don't know
a. Handling (*e.g., by researchers, staff, in shipping*)	❑	❑	❑	❑
b. Water or moisture (*e.g., mold, stains, warping*)	❑	❑	❑	❑
c. Light (*e.g. fading, discoloration*)	❑	❑	❑	❑
d. Airborne particulates or pollutants (*e.g., dust, soot*)	❑	❑	❑	❑
e. Fire	❑	❑	❑	❑
f. Improper storage or enclosure (*e.g., bent, creased, adhered together*)	❑	❑	❑	❑
g. Pests	❑	❑	❑	❑
h. Vandalism	❑	❑	❑	❑
i. Physical or chemical deterioration (*due to temperature, humidity, aging, e.g., brittle paper, flaked paint, cracked leather, degradation of electronic media*)	❑	❑	❑	❑
j. Obsolescence of playback equipment, hardware, or software	❑	❑	❑	❑
k. Prior treatment(s) or restoration	❑	❑	❑	❑

D14. Do you **promote awareness** of conservation/preservation activities using the following?

	Yes	No	Not done currently, but planned	Don't know	Not applicable
a. Educating donors and/or trustees about preservation activities (*e.g., in tours, demonstrations*)	❑	❑	❑	❑	❑
b. Presenting preservation activities to members' or friends' groups (*e.g., in educational programming, printed/promotional materials*)	❑	❑	❑	❑	❑
c. Highlighting preservation activities in exhibitions or other programs for the public	❑	❑	❑	❑	❑
d. Serving as a source for conservation/preservation information to the public (*e.g., responding to queries*)	❑	❑	❑	❑	❑
e. Using conservation/preservation as part of a strategy for earned income (*e.g., selling archivally safe materials in shop, providing conservation on a fee-for-service basis*)	❑	❑	❑	❑	❑
f. Featuring preservation work on Web site	❑	❑	❑	❑	❑

E. Expenditures and Funding

E1. Do you have funds specifically allocated for **conservation/preservation activities** in your annual budget? ⓘ (*select one*)

❑ a. Yes

❑ b. No specific line-item in budget, but other budgeted funds are available

❑ c. No

❑ d. Don't know

E2. What was the **total annual operating budget** of the entity indicated on page 1, question A1 for the **most recently completed fiscal year**? If exact amount is unknown, please provide an **estimate**. ⓘ

Most recently completed fiscal year (*select one*)

❑ a. FY 2002 ❑ b. FY 2003 ❑ c. FY 2004

Total annual operating budget

$ _____

E3. For the **most recently completed fiscal year**, what was your institution's **annual budget for conservation/preservation**? (*round off or provide an estimate*) ⓘ

- If you have no specific line-item in the budget, but use other budgeted funds for **conservation/preservation**, **estimate** the amount of budgeted funds used for **conservation/preservation**.
- *Include*: budgeted funds for staff (for those staff documented on page 4, question D9), supplies and equipment, surveys, treatment, preservation reformatting, commercial binding, consultants or contractors, and other preservation costs related to your collection(s). *Include* grants and any other temporary funding.
- *Do not include*: budgeted funds for utilities, security, capital projects or overhead.

Most recently completed fiscal year (*select one*)

❑ a. FY 2002 ❑ b. FY 2003 ❑ c. FY 2004

Annual budget for conservation/preservation

$ _____

E4. In the last three years, have any of your conservation and preservation expenditures been met by drawing on income from **endowed funds**? (*select one*)

❑ a. Yes

❑ b. No

❑ c. Don't know

E5. From which of the following **external sources** have you received funding that you have used to support **conservation or preservation activities during the last 3 years** (whether you applied for it or not)? (*select all that apply*)

- ❑ a. Federal
- ❑ b. State
- ❑ c. Municipal
- ❑ d. Corporation or company
- ❑ e. Foundation
- ❑ f. Individual donor or private philanthropist
- ❑ g. Other external source, please specify: _____

  _____
- ❑ h. Have received no funding from external sources
- ❑ i. Don't know

E6. Has your institution made an application, whether successful or unsuccessful, for conservation/preservation funding from any public or private source **in the last 3 years**? (*select one*)

- ❑ a. Yes
- ❑ b. No
- ❑ c. Don't know

E7. If your institution **did not make** a grant application for conservation/preservation funding from any public or private source **in the last 3 years**, which of the following factors influenced the decision **not** to apply? (*select all that apply*)

- ❑ a. Not aware of appropriate funding sources
- ❑ b. Lack of staff time or expertise to complete application
- ❑ c. Additional project planning or preparation necessary before requesting grant funds
- ❑ d. Conservation/preservation not an institutional priority
- ❑ e. Currently have sufficient sources of funding
- ❑ f. Have applied for grant(s) from external sources in the past but have been unsuccessful
- ❑ g. Other, please specify: _____

  _____
- ❑ h. Not applicable
- ❑ i. Don't know

F. Collections and Holdings

F1. What estimated percentage of the collection is accessible through a **catalog** (*research tool or finding aid that provides intellectual control over collection through entries that may contain descriptive detail, including physical description, provenance, history, accession information, etc.*)? (*select one*)

- ❑ a. 0 %
- ❑ b. 1-19%
- ❑ c. 20-39%
- ❑ d. 40-59%
- ❑ e. 60-79%
- ❑ f. 80-99%
- ❑ g. 100%
- ❑ h. Don't know

F2. What estimated percentage of the collection's **catalog** is accessible **online** (*whether for institutional use, or made accessible to the public through your institution or a service provider*)?

- ❑ a. 0 %
- ❑ b. 1-19%
- ❑ c. 20-39%
- ❑ d. 40-59%
- ❑ e. 60-79%
- ❑ f. 80-99%
- ❑ g. 100%
- ❑ h. Don't know

F3. Do you provide **online** access to the **content** of any of your collections or holdings (*e.g., online exhibitions, interactive resources, digital art, digitally scanned photographs, documents, books, and other artifacts*)?

- ❑ Yes
- ❑ No, but will have access within the next year
- ❑ No
- ❑ Don't know

ⓘ = refer to "More Information" on the enclosed blue sheets

F4. Does your institution hold collections of the following types?	Yes	No
a. **Books and Bound Volumes**—*monographs, serials, newspapers, scrapbooks, albums, pamphlets*	❑	❑
b. **Unbound Sheets**—*archival records, manuscripts, maps, oversized items, ephemera, broadsides, philatelic and numismatic artifacts, other paper artifacts*	❑	❑
c. **Photographic Collections**—*microfilm, microfiche, photographic prints, negatives, slides, transparencies, daguerrotypes, ambrotypes, tintypes, glass plate negatives, lantern slides*	❑	❑
d. **Moving Image Collections**—*motion picture film, video tape, laser disc, CD, DVD, minidisc*	❑	❑
e. **Recorded Sound Collections**—*cylinder, phonodisc, cassette, open reel tape, DAT, CD, DVD, MP3*	❑	❑
f. **Digital Material Collections**—*floppy discs, CD-R, DVD-R, data tape, online collections*	❑	❑
g. **Art Objects**—*paintings, prints, drawings, sculpture, decorative arts (e.g., fine metalwork, jewelry, timepieces, enamels, ivories, lacquer)*	❑	❑
h. **Historic and Ethnographic Objects**—*textiles (including flags, rugs, costumes and accessories), ceramics, glass (including stained glass), ethnographic artifacts (e.g., leather, skin, baskets, bark), metalwork (e.g., arms and armor, medals, coins), furniture, domestic artifacts (including frames, household tools/machines, dolls/toys, musical instruments), technological and agricultural artifacts, medical and scientific artifacts, transportation vehicles*	❑	❑
i. **Archaeological Collections**	❑	❑
j. **Natural Science Specimens**—*zoological, botanical, geological, paleontological, paleobotany specimens*	❑	❑

F5. In the following chart, please indicate the estimated number **for each type of collection you hold**. ⓘ

- Include only collections that are a permanent part of your holdings or for which you have accepted preservation responsibility.
- **Estimate** your total holdings in each category. For types of collections not listed, record under the appropriate "other" category. If possible, please specify what you have included.
- **Do not leave any category blank;** where applicable, check "have no holdings" or "quantity unknown."
- For each collection, note the **estimated percentage that is in need of preservation.** It is not necessary for your institution to have done a condition survey on all or part of your collections to provide this estimate. If you do not know the condition of your materials and cannot even provide an estimate, enter 100% in "unknown condition."
- On each line, the percentages indicating condition **should total 100%.**

Books and Bound Volumes *(record in volumes)*	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Books/monographs	❑		❑	%	%	%	%
Serials/newspapers (*on paper*)	❑		❑	%	%	%	%
Scrapbooks, albums, pamphlets	❑		❑	%	%	%	%
Other books and bound volumes (*please specify*)	❑		❑	%	%	%	%

_____

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_____

Unbound Sheets	Have no holdings	Approx. # of units	Quantity unknown	% in unknown condition	% in no need	% in need	% in urgent need
Archival records/manuscripts (*record in linear/ cubic feet*)	❑	ft	❑	%	%	%	%
Maps and oversized items (*record in linear/ cubic feet*)	❑	ft	❑	%	%	%	%
Ephemera and broadsides (*record in items*)	❑		❑	%	%	%	%
Philatelic and numismatic artifacts (*record in items*)	❑		❑	%	%	%	%
Other paper artifacts (*please specify*)	❑		❑	%	%	%	%

_____

_____

_____

Photographic Collections (record in items)	Have no holdings	Approx. # of units	Quantity unknown	% in unknown condition	% in no need	% in need	% in urgent need
Microfilm and Microfiche (*record number of units*)	❑		❑	%	%	%	%
Black and white prints, all processes (*e.g., albumen, collodion, silver gelatin*)	❑		❑	%	%	%	%
Black and white film negatives, pre-1950 (*e.g., cellulose nitrate, cellulose acetate*)	❑		❑	%	%	%	%
Black and white film negatives, post-1950 (*e.g., cellulose acetate, polyester*)	❑		❑	%	%	%	%
Color prints, negatives, and positives (*including slides and transparencies*)	❑		❑	%	%	%	%
Cased objects (*e.g., daguerreotype, ambrotype, tintype*)	❑		❑	%	%	%	%
Glass plate negatives and lantern slides	❑		❑	%	%	%	%
Other photographic collections (*e.g., digital and inkjet prints*) (*please specify*)	❑		❑	%	%	%	%

_____

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_____

ⓘ = refer to "More Information" on the enclosed blue sheets

Moving Image Collections *(record in items, e.g., reel, can, cassette)*	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Motion picture film (*record in items, e.g., reels, cans*)	❑		❑	%	%	%	%
Magnetic tape (*e.g., Beta video, VHS video, digital*)	❑		❑	%	%	%	%
Disc (*e.g., laser, CD, DVD, minidisc*)	❑		❑	%	%	%	%
Other moving image collections (*please specify*)	❑		❑	%	%	%	%

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Recorded Sound Collections *(record in items, e.g., reel, cassette, disc)*	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Grooved media (*e.g., cylinder, phonodisc*)	❑		❑	%	%	%	%
Magnetic media (*e.g., cassette, open reel tape, DAT*)	❑		❑	%	%	%	%
Optical media (*e.g., CD, DVD*)	❑		❑	%	%	%	%
Digital media (*e.g., MP3s*)	❑		❑	%	%	%	%
Other recorded sound collections (*e.g., wire, dictabelts*) (*please specify*)	❑		❑	%	%	%	%

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_____

Digital Material Collections *(record in items, do not include moving images or recorded sound)*	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Floppy discs	❑		❑	%	%	%	%
Other discs	❑		❑	%	%	%	%
CD-R/DVD-R	❑		❑	%	%	%	%
Data tape (*record in cassettes or reels*)	❑		❑	%	%	%	%
Online collection (*record in number of files*)	❑		❑	%	%	%	%
Other digital collections (*please specify*)	❑		❑	%	%	%	%

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Art Objects ***(record in items)***	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Painting (*e.g., on canvas, panel, plaster*)	❑		❑	%	%	%	%
Art on paper (*e.g., prints, drawings, watercolors*)	❑		❑	%	%	%	%
Sculpture (*include carvings, indoor and outdoor sculpture in all media*)	❑		❑	%	%	%	%
Decorative arts (*e.g., fine metalwork, jewelry, timepieces, enamels, ivories, lacquer*)	❑		❑	%	%	%	%
Other art objects (*please specify*)	❑		❑	%	%	%	%

_____

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_____

Historic and Ethnographic Objects ***(record in items)***	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Textiles (*include flags, rugs, costumes and accessories*)	❑		❑	%	%	%	%
Ceramics and glass artifacts (*include stained glass*)	❑		❑	%	%	%	%
Ethnographic and organic collections (*e.g., leather, skin, baskets, bark*)	❑		❑	%	%	%	%
Metalwork (*e.g., arms and armor, medals, coins*)	❑		❑	%	%	%	%
Furniture	❑		❑	%	%	%	%
Domestic artifacts (*include frames, household tools/machines, dolls/toys, musical instruments*)	❑		❑	%	%	%	%
Science, technology, agricultural, medical artifacts (*include transportation vehicles*)	❑		❑	%	%	%	%
Other historic and ethnographic objects *(please specify)*	❑		❑	%	%	%	%

_____

_____

_____

ⓘ = refer to "More Information" on the enclosed blue sheets

Archaeological Collections, Individually Cataloged ***(record in items)***	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Individually cataloged organic based material (*e.g., textile, fiber, wood, bone, shell, feather*)	❑		❑	%	%	%	%
Individually cataloged inorganic based material (*e.g., ceramic, glass, metal, plastics*)	❑		❑	%	%	%	%

Archaeological Collections, Bulk ***(record in cubic feet)***	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Bulk organic material (*e.g., textile, fiber, wood, bone, shell, feather*) (*record in cubic feet*)	❑	ft^3	❑	%	%	%	%
Bulk inorganic material (*e.g., ceramic, glass, metal, plastics*) (*record in cubic feet*)	❑	ft^3	❑	%	%	%	%

Natural Science Specimens ***(record in items)***	**Have no holdings**	**Approx. # of units**	**Quantity unknown**	**% in unknown condition**	**% in no need**	**% in need**	**% in urgent need**
Zoological specimens: dry, glass slide, and frozen	❑		❑	%	%	%	%
Zoological specimens: wet preparations	❑		❑	%	%	%	%
Botanical specimens: dry, glass slide, frozen, culture, and modern palynology materials	❑		❑	%	%	%	%
Botanical specimens: wet preparations	❑		❑	%	%	%	%
Geological specimens (*e.g., rocks, gems, minerals, and meteorites*)	❑		❑	%	%	%	%
Vertebrate paleontological specimens	❑		❑	%	%	%	%
Invertebrate paleontological specimens (*include appropriate microfossils and nannofossils*)	❑		❑	%	%	%	%
Paleobotany specimens (*include appropriate microfossils, nannofossils, and fossil palynology materials*)	❑		❑	%	%	%	%
Other natural science specimens (*please specify*)	❑		❑	%	%	%	%

_____

_____

_____

G. Respondent Information

G1. How many **staff are currently employed** in your collecting institution (as identified on page 1, question A1)? Do not express in full-time equivalents (FTEs). Indicate "0" if you have no staff in a category.

	Number of staff	Don't know
a. Full-time paid staff	_____	❑
b. Part-time paid staff	_____	❑
c. Full-time unpaid staff	_____	❑
d. Part-time unpaid staff	_____	❑

G2. How many **visitors or users** did you serve last year? Indicate "0" if you had no visitors or users in a category. ⓘ

	Number of visitors or users	Don't know
a. On site	_____	❑
b. Off site (*e.g., traveling exhibitions, bookmobiles, educational programs*)	_____	❑
c. Electronic (*e.g., visits to Web site, electronic distribution lists, electronic discussion groups*)	_____	❑

To be completed by lead person completing or coordinating the survey.

This information will be used only if RMC Research Corporation needs to clarify a response. RMC Research Corporation will keep this information, like all the information you provided in this survey, completely confidential. Only aggregate data will be reported. Your individual responses will never be published or identified by Heritage Preservation, the Institute of Museum and Library Services, or any other organization cooperating in this project.

G3. Name of lead person completing or coordinating survey (*will remain confidential*)_____

G4. Title _____

G5. Responsibility for preservation activities _____

G6. Phone number _____ G7. Fax number _____

G8. Email address _____

G9. Did more than one person complete this survey?
❑ a. Yes ❑ b. No

G10. May we have permission to include the name of your institution on a published list of survey participants? Your survey responses will not be linked to your name; results will be reported only in aggregate.
❑ a. Yes ❑ b. No

G11. (*optional*) Use the space below to explain your most pressing conservation/preservation need.

_____

_____

_____

_____

THANK YOU!

ADDITIONAL SPACE FOR RESPONSES (IF NEEDED):

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About Heritage Preservation—Heritage Preservation is a non-profit organization dedicated to preserving our nation's heritage. Its members include libraries, museums, archives, historic preservation organizations, historical societies, conservation organizations, and other professional groups concerned with saving the past for the future. For information on the Heritage Health Index, contact Kristen Overbeck Laise, Heritage Preservation, 1012 14th Street, NW, Suite 1200, Washington, DC 20005, 202-233-0800, klaise@heritagepreservation.org, or www.heritagepreservation.org.

About the Institute of Museum and Library Services—IMLS is an independent Federal agency that fosters leadership, innovation, and a lifetime of learning by supporting the nation's museums and libraries. Created by the Museum and Library Services Act of 1996, P.L. 104-208, IMLS administers the Library Services and Technology Act and the Museum Services Act. The Institute receives policy advice from the Presidentially appointed, Senate confirmed National Museum and Library Services Board. Over the last two decades, IMLS has made more than 5,200 grants for conservation through their Conservation Project Support grant and Conservation Assessment Program. For more information, including grant applications, contact IMLS at 1100 Pennsylvania Avenue, NW, Washington, DC 20506, 202-606-8536, or www.imls.gov.

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More Information

Definitions

As you complete the survey, you may wish to refer to the definitions and comments below for further clarification of certain questions and terminology.

Throughout the survey, we have used the following definitions for conservation and preservation:

Conservation: The treatment of materials, aided by examination and research, and the study of the environments in which they are placed.

Preservation: The protection of materials through activities that minimize chemical and physical deterioration and damage and/or that prevent loss of informational content.

Question C5: Storage Needs (page 4)

Need: Improvement required to reduce risk of damage or deterioration to collections.

Urgent Need: Major improvement required to prevent damage or deterioration to collections.

Question D10: What Your Conservation/Preservation Program Includes (page 5)

Institution staff: Workers at the entity indicated on page 1, question A1. Include temporary, hourly, and volunteer workers but do not include hired consultants.

External providers: Workers, including volunteers, from outside the entity indicated on page 1, question A1, or its parent institution(s) that provide conservation/preservation services, such as consultants and workers at another institution or firm.

Question D12: Conservation/Preservation Needs (page 6)

Need: Improvement required to reduce risk of damage or deterioration to collections.

Urgent Need: Major improvement required to prevent damage or deterioration to collections.

Question D13: Collections in Need of Treatment (page 6)

Some damage or loss: Change(s) in an item's physical or chemical state requiring minor treatment.

Significant damage or loss: Change(s) in an item's physical or chemical state necessitating major treatment or reformatting or resulting in total loss of access.

Question F5: Estimated Quantity and Condition of Holdings (page 9)

- Enter the number or an estimate of items in each category, unless another unit of measurement is noted.
- For object and scientific collections, documentary evidence should be recorded in appropriate categories (e.g., photographs, archival records, recorded sound tapes).
- Use the following definitions:

  No need: Material is stable enough for use and is housed in a stable environment that protects it from long-term damage and deterioration.

  Need: Material may need minor treatment to make it stable enough for use, and/or the collection needs to be rehoused into a more stable enclosure or environment to reduce risk of damage or deterioration.

  Urgent Need: Material needs major treatment or reformatting to make it stable enough for use, and/or the material is located in an enclosure or environment that is causing damage or deterioration. For machine-readable collections, deterioration of media and/or obsolescence of play-back equipment or hardware/software threatens loss of content.

  Unknown: Material has not been recently accessed by staff for visual inspection and/or condition is unknown.

Frequently Asked Questions

What do you mean by "collections for which you accept preservation responsibility"?

Not all collections that are important to your institution are meant to be preserved. Some are meant to be used by visitors or patrons and are disposed of or replaced if they are lost or damaged. Others are not accessioned into the collection because they fall outside the institution's mission or could be replaced if necessary. Some examples of collections for which you do **not** accept preservation responsibility might be:

- current books, magazines, video tapes, sound recordings of which multiple copies exist at the institution and/or could be replaced if lost or damaged and/or are deemed expendable
- reference books or materials that aid in staff research but are not part of the accessioned collections
- teaching aids or collections (e.g., commonly found specimens, hands-on exhibits at a youth museum)
- replicas of historic objects.

Our collecting institution has very few collection items that we take a preservation responsibility for; should we still complete the questionnaire?

Yes, please complete the questionnaire. We expect that some institutions take preservation responsibility for only a few items. It is important that such institutions are represented in the Heritage Health Index data. If your institution has **no** collections for which you take preservation responsibility, please return the survey with this noted.

Our collecting institution has various types of collections; should we complete the Heritage Health Index for all of them?

Yes, but some exceptions and clarifications apply, such as:

- If you are a botanical garden, arboretum, zoo, aquarium, or nature center that has living collections, complete the questionnaire only for your **nonliving collections**.
- If your institution has historic buildings, complete the questionnaire only for your collections, **not your historic buildings** (even if those buildings are a part of your institution's preservation responsibility or are accessioned as collections).
- If you are a public library system with branches, you should include collections held at branches for which your system accepts preservation responsibility.
- If you are a library with an archives, history room, or other collections, include all collections for which you accept preservation responsibility.
- If you are a museum or historical society that has an archives or library as part of your institution, include the archival and/or library materials for which you accept preservation responsibility.

Our collecting institution is part of a university; should we include other campus collections in the survey?

Every college or university is organized differently, but Heritage Preservation has attempted to identify the separate entities on campus that should receive the Heritage Health Index. If the entity identified on page 1, question A1, of the questionnaire is distinct from other university collections, complete the questionnaire for all collections that are held by this entity. It is possible that other university collections will receive their own survey.

Some specific examples:

- If the entity identified on page 1, question A1, is "University Natural History Museum," that entity should complete the survey for all collections under its care, including its library and archival collections. Do not include collections not under your care that are instead held by other museums, libraries, or archives within the university.
- If the entity identified on page 1, question A1, is "University Main Library," and this library is only one entity in a system of university libraries, which has centralized many library functions, such as cataloging, gathering statistics, and preservation activities, then the survey should be completed for **all the libraries and archives in the university library system**. Do not include any departments or schools that are not included in central operations of this library system.
- If the entity identified on page 1, question A1, is a scientific research collection that is operated by a specific department, complete the questionnaire just for this collection. Other research collections on campus may receive their own survey.

The environmental and storage conditions in our collecting institution vary greatly from building to building, or even room to room. How should we handle questions that ask for one response covering several different sets of conditions?

- On page 3, questions C1 through C3 address three components of environmental controls, and it might be most appropriate for your institution to select "in some, but not all areas."

- On page 3, question C4, you can identify how much storage at your institution is adequate.
- On page 4, question C5, you should average the amount of need your institution has in the various areas. If you have a small collection that is in "urgent need" of new or improved storage furniture/accessories, but most of the collection has lower level "need" for storage furniture/accessories, it may be most accurate to choose "need" as an institutional average. Use your best judgment.

In a few months our collecting institution will begin to address some of the preservation issues brought up in the Heritage Health Index. Should we report what we are currently doing or what we plan to do?

Heritage Preservation understands that preservation is an ongoing process. The Heritage Health Index is planned to be repeated every four years, so that we will be able to track national progress in addressing preservation needs.

Some questions allow you to indicate that certain activities are being planned (page 5, question D10, and page 7, question D14).

All other questions should be answered for the current situation and condition of your collections **unless the work is already in progress**. For example, you should report on preservation staff that are currently working, not staff you plan to hire or who no longer work with you. Estimates for the need to do preservation activities should reflect your current conditions, unless one of those needs is currently being addressed. For example, on page 6, question D12, row "e," if your institution is currently undergoing a renovation to install new environmental controls, it may be most accurate to select "no need." The estimate of condition should, again, reflect the current state of your collections unless improvement is in progress (e.g., black and white photographs currently being rehoused in appropriate sleeves and boxes).

We often hire paid, part-time student workers to assist with simple preservation tasks; however, they are only temporary workers. Should we include them in our preservation staff?

Yes. Temporary workers should be included in your response on page 5, question D9. In the case of student workers, they would likely be considered "support conservation/preservation staff." For example, if you **currently** have two paid student workers who each work 10 hours a week for 6 months, then the full-time equivalent of your support conservation/preservation staff is .25 (2 workers x 10 hours=20 hours or .5 FTE) (.5 FTE x .5 year=.25 FTE). Remember that estimates are acceptable. Note that 1 FTE = a year-round worker who works an average of 40 hours per week.

If your number of FTE falls between possible responses (e.g., between 1 and 2 FTE or between 5 and 6 FTE), round to the nearest whole number.

Our institution is open April to October only, and we have trained some volunteers to do routine housekeeping. Are they preservation staff?

Yes. Any volunteers who assist with the care of collections should be counted on page 5, question D9. For instance, if two volunteers each work 5 hours a week for 6 months, then the full-time equivalent would be approximately .13 (2 workers x 5 hours = 10 hours or .25 FTE) (.25 FTE x .5 year = .13 FTE).

Should we report on the operating budget of our entire institution?

You should report on the total annual operating budget for the entity identified on page 1, question A1. You should not provide the operating budget for a parent institution, if your institution has one. For example, if the entity identified on page 1, question A1 is "University Natural History Museum," just the total annual operating budget for the museum should be reported—**not the entire university's budget**. If you have corrected the entity on page 1, question A1, please report on the entity you identified.

Our institution doesn't have a line item for preservation and conservation, but we do use budgeted funds for staff and supplies. Last year we also received some grant funding for a preservation and conservation project. How should we complete question E3 on page 7?

Whether or not your institution has a specific budget line-item for preservation and conservation, you should complete question E3 on page 7. Again, estimates are acceptable. To calculate staff costs, use the figures for

preservation/conservation staff that you indicated on page 5, question D9. Include any portion of your institution's supply or equipment budget that was used to purchase items relating to preservation and conservation. Include any expenditures made for preservation and conservation activities, whether done internally or by an external provider. You should include any grant funds or other temporary funding used for preservation and conservation. Do not include utilities, security, capital expenditures, or overhead in your response to question E3.

Our institution has undertaken a major conservation treatment project this year, and our conservation/preservation budget and staffing levels are higher than usual. Should we record this figure even if it is not typical?

The Heritage Health Index is meant to be a snapshot of current activities, and we expect to capture dips and peaks in staffing and funding levels. While your institution's project may not be typical, it will give us important information about the level of preservation activity nationally. However, note the instructions on page 7, question E3, about what should and should not be included in the preservation budget (e.g., capital expenditures not included).

Some of the categories on pages 9-13, question F5, do not match the categories our institution uses in cataloging. How should we answer the question?

Every institution organizes its collection in a way that is meaningful to them. Therefore, the categories listed on pages 9-13, question F5, may not exactly match the system you use. If you have collections that do not fit in the specified categories, please record them in the appropriate "other" category and briefly indicate the type of collection they are.

We have not cataloged some of our collections. How should we go about determining the approximate number of units for question F5 on pages 9-13?

An **estimate** is fine. The number is important so that Heritage Preservation can determine the scope of national preservation needs. Even figures such as "10, 100, 1,000, 5,000" are useful for the purposes of this questionnaire. If it is not possible to provide an estimate, check "quantity unknown." Make sure to check "have no holdings" if your institution has no collections in that category.

Our institution has object collections organized by subject matter and archives identified by subject or person. Within these collections there are many media and formats, including manuscripts, photographs, ephemera, and art on paper, but we don't know the exact quantity and condition of these items. How should these collections be recorded in question F5 on pages 9-13?

Archival records and manuscripts should be recorded in linear feet in the "Unbound Sheets" section on page 10. If it is feasible to quantify or estimate other specific formats (e.g., photographs, domestic artifacts) by number of items, please record them in the relevant category and exclude them from the estimate of linear footage. If your thematic collections contain various media, provide estimates and record them in the appropriate categories.

We have never done a condition assessment of our collections. How can we determine the percentages of materials in need of preservation?

Even if you have not undertaken a condition assessment of all or part of your collections, provide your best estimate of the need of collections in each category, based on your working knowledge of the materials in your care. Make sure that the percentages indicating condition in each line add up to 100%. If it is not possible to provide an estimate of need for all or part of the collection, indicate that percentage in the "unknown condition" column.

Our digital collections include back-up copies and online journal subscriptions. How should these be counted in question F5 "Digital Material Collections" on page 11?

Again, you should include all collections for which you accept preservation responsibility. This would include service or back-up copies, since they would need to be maintained (e.g., through migration to another format).

However, you should not include digital materials that your institution makes available through a subscription service, such as electronic journals or databases, unless you or your parent institution maintains master digital files for these resources. In the case of most online or database subscriptions, the service provider would have the responsibility for preserving those materials, not your institution.

For example, if your institution owns original survey maps, purchased CD-ROMs with digital copies of these maps from a vendor, integrated those scanned maps into your online catalog, and subscribes to a database of survey maps from around the country, you would want to complete question F5 to record the original number of maps, number of CDs, and number of online files. You would not record the database subscription.

Our digital collections include digital images of some photographs that are in our collection. How should these be counted in question F5 "Digital Material Collections" on page 11?

You should consider whether these digital copies are a permanent part of your collection for which you take preservation responsibility. If they are, record the media on which they are stored in the "Digital Materials Collections" section of question F5 on page 11.

The original photographs should also be recorded under "Photographic Collections" in question F5 on page 10.

We are a large museum that has many millions of visitors per year. We also have a library and an archives. Question G2a on page 14 asks for onsite visitors; should we include only those researchers and users who access the collections for research purposes?

The response to question G2a should include all visitors/users who come to the institution identified in question A1. In your case, record all museum visitors including researchers who use the museum's library and archives.

There are several questions we cannot answer. Do you still want us to respond to the survey?

Heritage Preservation hopes that you will be able to provide responses to each question. In many cases, we have given you the option of selecting "don't know" or "unknown." Please complete the survey to the best of your ability and return it as directed, even if there are questions you cannot answer.

I have additional questions. Who can help me?

You may contact Kristen Laise at 202-233-0824, 202-233-0800, or klaise@heritagepreservation.org or another member of the Heritage Health Index staff at 202-233-0800.

Submit Your Heritage Health Index Questionnaire Online at www.heritagehealthindex.org

Advantages of the online survey:

- Ability to save your responses so that you may complete the questionnaire in multiple sessions
- Reminders of which sections are completed and which ones are in progress
- Helpful tools, such as a calculator that computes your full-time equivalent (FTE) staff
- Access to a running tally of some preliminary results and returns by state and type of institution
- Convenient way to have staff members contribute to data gathering
- Printable version of the completed questionnaire for your records
- One-click access to definitions and Frequently Asked Questions
- Instant and confidential data submission

Find your unique password on page 1 of the survey booklet.

Technical questions? Contact RMC at 800-258-0802 or HHITA@rmcres.com.

Questions about the survey? Contact Kristen Laise at 202-233-0824, 202-233-0800, or klaise@heritagepreservation.org or another member of the Heritage Health Index staff at 202-233-0800.

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Appendix H—N Values for Data Shown in Report Figures

The following indicates the weighted number of institutions that are included in the data shown in the figures of the Heritage Health Index.

Fig. 3.1 Heritage Health Index Respondents n=3,370, weighted n=30,827 (hereafter n= weighted number of institutions unless otherwise noted)

Fig. 3.2 Representation by Specific Type of Institution n=30,827 institutions

Fig. 3.3 Representation by Type of Institution n=30,827 institutions

Fig. 3.4 Representation by Size n=30,827 institutions

Fig. 3.5 Representation by Annual Operating Budget n=26,709 institutions

Fig. 3.6 Average Staff Size

Full-time Paid Staff n=26,980 institutions

Part-time Paid Staff n=26,751 institutions Full-time Unpaid Staff n=23,511 institutions

Part-time Unpaid Staff n=24,640 institutions

Fig. 3.7 Representation by Region n=30,827 institutions

Fig. 3.8 Institutions' Number of Additional Functions n=30,827 institutions

Fig. 3.9 Institutions' Additional Functions or Services n=30,827 institutions

Fig. 3.10 Representation by Governance n=30,411 institutions

Fig. 3.11 Representation of Academic Institutions n=5,168 institutions

Fig 3.12 Representation Including Academic Entities in Governance n=30,259 institutions

Fig 4.1 U.S. Institutions Have Taken Responsibility to Preserve 4.8 Billion Collections Items

Books and Bound Volumes n=16,288 institutions

Microfilm/Microfiche n=7,737 institutions

Natural Science Specimens n=3,100 institutions

Photographic Collections n=9,974 institutions

Archaeological Collections, Individually Cataloged n=3,059 institutions

Unbound Sheet, Cataloged in Items n=4,036 institutions

Online Files n=1,890 institutions

Historic Objects n=9,894 institutions

Recorded Sound n=9,273 institutions

Unbound Sheets, Cataloged in Linear Feet n=9,467 institutions

Moving Images n=11,308 institutions

Art Objects n=11,697 institutions

Digital Materials n=3,497 institutions

Archaeological Collections, Bulk Cataloged n=1,486 institutions

Fig 4.2 Collections Held by U.S. Institutions (by type) n=4,845,774,889 collections items

Fig 4.3 Collections Held by U.S. Institutions (by size) n=4,845,774,889 collections items

Fig. 4.4 Institutions with a Written, Long-range Plan for the Care of the Collection n=30,426 institutions

Fig. 4.5 Collections Items in Unknown Condition, Fig. 4.6 Collections Items in No Need, Fig. 4.7 Collections Items in Need, Fig. 4.8 Collections Items in Urgent Need & Fig. 4.9 Collections Items in Need and Urgent Need

Books and bound volumes n=21,408 institutions
Unbound sheets-cataloged in linear feet n=14,365 institutions
Unbound sheets-cataloged in items n=7,811 institutions
Microfilm/Microfiche n=9,608 institutions
Photographic collections n=15,821 institutions
Moving image collections n=14,594 institutions
Recorded sound collections n=13,155 institutions
Digital material collections n=7,899 institutions
Online files n=3,857 institutions
Art objects n=14,785 institutions
Historic and ethnographic objects n=13,704 institutions
Archaeological collections-individually cataloged n=5,108 institutions
Archaeological collections-bulk cataloged n=3,140 institutions
Natural science specimens n=4,553 institutions

Fig. 4.10 Institutions Care for 1.7 Billion Books and Bound Volumes n=16,288 institutions
Fig. 4.11 Condition of Books and Bound Volumes n=21,408 institutions
Fig. 4.12 Condition of Books and Bound Volumes (by specific type)
Quantity n=16,288 institutions
Condition n=21,408 institutions
Fig. 4.13 Institutions Care for 44 Million Linear Feet of Unbound Sheets n=9,467 institutions
Fig. 4.14 Condition of Unbound Sheets Measured in Linear Feet n=14,365 institutions
Fig. 4.15 Condition of Unbound Sheets Measured in Linear Feet (by specific type)
Quantity n=9,467 institutions
Condition n=14,365 institutions
Fig. 4.16 Institutions Care for 96 Million Items of Unbound Sheets n=4,036 institutions
Fig. 4.17 Condition of Unbound Sheets in Items n=7,811 institutions
Fig. 4.18 Condition of Unbound Sheets in Items (by specific type)
Quantity n=4,036 institutions
Condition n=7,811 institutions
Fig. 4.19 Institutions Care for 1 Billion Microfilm and Microfiche n=7,737 institutions
Fig. 4.20 Condition of Microfilm and Microfiche n=9,608 institutions
Fig. 4.21 Institutions Care for 727 Million Photographic Items n=9,974 institutions
Fig. 4.22 Condition of Photographic Items n=15,821 institutions
Fig. 4.23 Condition of Photographic Items (by specific type)
Quantity n=9,974 institutions
Condition n=15,821 institutions
Fig. 4.24 Institutions Care for 40 Million Moving Image Items n=11,308 institutions
Fig. 4.25 Condition of Moving Image Items n=14,594 institutions

Fig. 4.26 Condition of Moving Image Items (by specific type)
Quantity n=11,308 institutions
Condition n=14,594 institutions
Fig. 4.27 Institutions Care for 40 Million Recorded Sound Items n=9,273 institutions
Fig. 4.28 Condition of Recorded Sound Items n=13,155 institutions
Fig. 4.29 Condition of Recorded Sound Items (by specific type)
Quantity n=9,273 institutions
Condition n=13,155 institutions
Fig. 4.30 Institutions Care for 9 Million Digital Material Items n=3,497 institutions
Fig. 4.31 Condition of Digital Material Items n=7,899 institutions
Fig. 4.32 Institutions Care for 55 Million Online Files n=1,890 institutions
Fig. 4.33 Condition of Online Files n=3,857 institutions
Fig. 4.34 Condition of Digital Material Items (by specific type)
Quantity (digital material items) n=3,497 institutions
Condition (digital material items) n=7,899 institutions
Quantity (online files) n=1,890 institutions
Condition (online files) n=3,857 institutions
Fig. 4.35 Institutions that Include Responsibility to Preserve Digital Collections in Conservation/Preservation Mission or Program n=30,093 institutions
Fig. 4.36 Need for Preservation of Digital Collections n=30,157 institutions
Fig. 4.37 Institutions with Collections Currently in Need of Treatment Due to Obsolescence of Playback Equipment, Hardware, or Software n=29,840 institutions
Fig. 4.38 Institutions Care for 21 Million Art Objects n=11,697 institutions
Fig. 4.39 Condition of Art Objects n=14,785 institutions
Fig. 4.40 Condition of Art Objects (by specific type)
Quantity n=11,697 institutions
Condition n=14,785 institutions
Fig. 4.41 Institutions Care for 48 Million Historic and Ethnographic Objects n=9,894 institutions
Fig. 4.42 Condition of Historic and Ethnographic Objects n=13,704 institutions
Fig. 4.43 Condition of Historic and Ethnographic Objects (by specific type)
Quantity n=9,894 institutions
Condition n=13,704 institutions
Fig. 4.44 Institutions Care for 198 Million Archaeological Items n=3,059 institutions
Fig. 4.45 Condition of Archaeological Collections (individually cataloged) n=5,108 institutions
Fig. 4.46 Institutions Care for 2.6 Million Cubic Feet of Archaeological Collections n=1,486 institutions
Fig. 4.47 Condition of Archaeological Collections (bulk cataloged) n=3,140 institutions
Fig. 4.48 Condition of Archaeological Collections (by specific type)
Quantity (individually cataloged) n=3,059 institutions
Condition (individually cataloged) n=5,108 institutions
Quantity (bulk cataloged) n=1,486 institutions
Condition (bulk cataloged) n=3,140 institutions

Fig. 4.49 Institutions Care for 820 Million Natural Science Specimens n=3,100 institutions
Fig. 4.50 Condition of Natural Science Specimens n=4,553 institutions
Fig. 4.51 Condition of Natural Science Specimens (by specific type)
Quantity n=3,100 institutions
Condition n=4,553 institutions
Fig. 5.1 Institutions' Use of Environmental Controls for the Preservation of Collections
Temperature n=28,588
Relative Humidity n=28,483
Light n=28,251
Fig. 5.2 Institutions Using No Environmental Controls for the Preservation of Collections (by type) n=7,788
Archives n=95 institutions
Libraries n=5,225 institutions
Historical Societies n=533 institutions
Museums n=1,632 institutions
Archaeological Repositories/Scientific Research Collections n=303 institutions
Fig. 5.3 Use of Temperature Controls for the Preservation of Collections (by type) n=28,588 institutions
Archives n=1,029 institutions
Libraries n=11,912 institutions
Historical Societies n=3,146 institutions
Museums n=11,407 institutions
Archaeological Repositories/Scientific Research Collections n=1,094 institutions
Fig. 5.4 Use of Humidity Controls for the Preservation of Collections (by type) n=28,483
Archives n=1,020 institutions
Libraries n=11,861 institutions
Historical Societies n=3,105 institutions
Museums n=11,417 institutions
Archaeological Repositories/Scientific Research Collections n=1,081 institutions
Fig. 5.5 Control of Light Levels for the Preservation of Collections (by type) n=28,251
Archives n=1,011 institutions
Libraries n=11,830 institutions
Historical Societies n=3,049 institutions
Museums n=11,402 institutions
Archaeological Repositories/Scientific Research Collections n=960 institutions
Fig. 5.6 Use of Temperature Controls for the Preservation of Collections (by size) n=28,588 institutions
Large n=2,621 institutions
Medium n=4,996 institutions
Small n=20,970 institutions

Fig. 5.7 Use of Humidity Controls for the Preservation of Collections (by size) n=28,483 institutions
Large n=2,619 institutions
Medium n=4,985 institutions
Small n=20,879 institutions

Fig. 5.8 Control of Light Levels for the Preservation of Collections (by size) n=28,251 institutions
Large n=2,624 institutions
Medium n=4,901 institutions
Small n=20,727 institutions

Fig. 5.9 Institutions Using No Environmental Controls for the Preservation of Collections (by size) n=7,788 institutions
Large n=513 institutions
Medium n=1,148 institutions
Small n=6,127 institutions

Fig. 5.10 Use of Environmental Controls in All Areas Where Collections are Held (by region)
Temperature n=28,588 institutions
- Northeast n=2,917 institutions
- Mid-Atlantic n=4,942 institutions
- Southeast n=5,458 institutions
- Midwest n=6,651 institutions
- Mountain-Plains n=4,331 institutions
- West n=4,288 institutions

Relative Humidity n=28,483 institutions
- Northeast n=2,917 institutions
- Mid-Atlantic n=4,944 institutions
- Southeast n=5,414 institutions
- Midwest n=6,687 institutions
- Mountain-Plains n=4,255 institutions
- West n=4,266 institutions

Light n=28,251 institutions
- Northeast n=2,894 institutions
- Mid-Atlantic n=4,898 institutions
- Southeast n=5,349 institutions
- Midwest n=6,602 institutions
- Mountain-Plains n=4,240 institutions
- West n=4,268 institutions

Fig. 5.11 Institutions Using No Environmental Controls for the Preservation of Collections (by governance) n=7,788 institutions

Nonprofit n=2,841 institutions

Federal n=234 institutions

State n=1,153 institutions

County/Municipal n=3,354 institutions

Tribal n=89 institutions

(Not shown: Corporate/For Profit n=115 institutions)

Fig. 5.12 Institutions with Urgent Conservation/Preservation Needs

Environmental controls n=30,282 institutions

Finding aids/cataloging collections n=30,264 institutions

Condition surveys/assessments n=30,207 institutions

Conservation treatment n=30,102 institutions

Staff training n=30,210 institutions

Security n=30,121 institutions

Reduce exposure to light n=30,224 institutions

Integrated pest management n=30,125 institutions

Preservation of digital collections n=30,157 institutions

Fig. 5.13 Institutions' Conservation/Preservation Program Includes Preventive Conservation n=29,738 institutions

Fig. 5.14 Institutions Reporting Causes of Significant Damage to Collections

Improper storage or enclosure n=29,954 institutions

Water or moisture n=30,003 institutions

Light n=29,994 institutions

Obsolescence of playback equipment, hardware, or software n=29,840 institutions

Airborne particulates or pollutants n=29,996 institutions

Handling n=29,892 institutions

Pests n=29,987 institutions

Prior treatment(s) or restoration n=29,137 institutions

Vandalism n=29,890 institutions

Fire n=29,920 institutions

Fig. 5.15 Institutions Reporting Causes of Damage to Collections from Environmental Factors

Water or moisture n=30,003 institutions

Light n=29,994 institutions

Airborne particulates or pollutants n=29,996 institutions

Pests n=29,987 institutions

Fig. 6.1 Percentages of Institutions' Collections Stored in Areas Large Enough to Accommodate Them Safely and Appropriately n=30,454 institutions

Fig. 6.2 Institutions' Collections Stored in Areas Large Enough to Accommodate them Safely and Appropriately (by type) n=30,454 institutions

Archives n=1,033 institutions

Libraries n=13,137 institutions

Historical Societies n=3,258 institutions

Museums n=11,916 institutions

Archaeological Repositories/Scientific Research Collections n=1,110 institutions

Fig. 6.3 Institutions' Collections Stored in Areas Large Enough to Accommodate them Safely and Appropriately (by size) n=30,454 institutions

Large n=2,684 institutions

Medium n=5,223 institutions

Small n=22,547 institutions

Fig. 6.4 Institutions' Need for Storage Improvements

Additional on-site storage n=21,670 institutions

New/additional off-site storage n=9,266 institutions

Renovated storage space n=18,505 institutions

New/improved storage furniture n=22,085 institutions

Fig. 6.5 Institutions Reporting Causes of Damage to Collections from Storage Conditions

Handling n=29,892 institutions

Improper storage or enclosure n=29,954 institutions

Fig. 7.1 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by type) n=24,228 institutions

Archives n=717 institutions

Libraries n=10,288 institutions

Historical Societies n=3,000 institutions

Museums n=9,272 institutions

Archaeological Repositories/Scientific Research Collections n=951 institutions

Fig. 7.2 Collections at Risk Because Institutions Do Not Have Emergency Plans (by type) n=24,228 institutions

Archives n=717 institutions

Libraries n=10,288 institutions

Historical Societies n=3,000 institutions

Museums n=9,272 institutions

Archaeological Repositories/Scientific Research Collections n=951 institutions

Fig. 7.3 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by size) n=24,228 institutions

Large n=1,600 institutions

Medium n=3,478 institutions

Small n=19,149 institutions

Fig. 7.4 Collections at Risk Because Institutions Do Not Have Emergency Plans (by size) n=24,228 institutions

Large n=1,600 institutions

Medium n=3,478 institutions

Small n=19,149 institutions

Fig. 7.5 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by region) n=24,228 institutions

Northeast n=2,305 institutions

Mid-Atlantic n=4,181 institutions

Southeast n=4,392 institutions

Midwest n=5,785 institutions

Mountain-Plains n=3,886 institutions

West n=3,678 institutions

Fig. 7.6 Institutions with No Emergency Plan with Staff Trained to Carry It Out (by governance) n=24,228 institutions

Nonprofit n=12,871 institutions

Federal n=743 institutions

State n=3,343 institutions

County/Municipal n=6,697 institutions

Tribal n=170 institutions

(Not shown: Corporate/For Profit n=404 institutions)

Fig. 7.7 Institutions with Copies of Vital Collections Records Stored Off-Site n=28,960 institutions

Fig. 7.8 Institutions with Copies of Vital Collections Records Stored Off-Site (by size) n=28,960 institutions

Large n=2,645 institutions

Medium n=5,163 institutions

Small n=21,152 institutions

Fig. 7.9 Institutions with No Copies of Vital Collections Records Stored Off-Site (by governance) n=10,861 institutions

Nonprofit n=5,838 institutions

Federal n=283 institutions

State n=1,549 institutions

County/Municipal n=2,914 institutions

Tribal n=73 institutions

(Not shown: Corporate/For Profit n=204 institutions)

Fig. 7.10 Adequacy of Security Systems n=30,227 institutions

Fig. 7.11 Adequacy of Security Systems (by size) n=30,227 institutions

Large n=2,669 institutions

Medium n=5,254 institutions

Small n=22,524 institutions

Fig. 7.12 Need for Security Improvements n=30,121 institutions

Fig. 8.1 Most Institutions Care for More than Six Types of Collections n=30,827
Fig. 8.2 Institutions' Staffing for Conservation/Preservation n=30,503 institutions
Fig. 8.3 Institutions' Staffing for Conservation/Preservation (by type) n=30,503 institutions
Archives n=1,029 institutions
Libraries n=13,139 institutions
Historical Societies n=3,272 institutions
Museums n=11,962 institutions
Archaeological Repositories/Scientific Research Collections n=1,101 institutions
Fig. 8.4 Institutions' Staffing for Conservation/Preservation (by size) n=30,503 institutions
Large n=2,651 institutions
Medium n=5,252 institutions
Small n=22,600 institutions
Fig. 8.5 Institutions' Staffing for Conservation/Preservation (by governance) n=30,503 institutions
Nonprofit n=15,429 institutions
Federal n=1,078 institutions
State n=4,610 institutions
County/Municipal n=8,724 institutions
Tribal n=233 institutions
(Not shown: Corporate/For Profit n=429 institutions)
Fig. 8.6 Institutions' Staffing for Conservation/Preservation (by academic governance) n=5,178 institutions
Private College/University n=2,311 institutions
State College/University n=2,676 institutions
County/Municipal College/University n=148 institutions
Other n=43 institutions
Fig. 8.7 Institutions' Internal Staff who Perform Conservation/Preservation Activities
Professional staff n=29,041 institutions
Support staff n=28,478 institutions
Volunteers n=29,324 institutions
Fig. 8.8 Average Number of Internal Staff who Perform Conservation/Preservation Activities n=26,474 institutions
Fig. 8.9 Average Number of Internal Staff who Perform Conservation/Preservation Activities (by type) n=26,474 institutions
Archives n=826 institutions
Libraries n=11,979 institutions
Historical Societies n=2,556 institutions
Museums n=10,077 institutions
Archaeological Repositories/Scientific Research Collections n=1,036 institutions

Fig. 8.10 What Institutions' Conservation/Preservation Program Includes
Preventive conservation n=29,738 institutions
Preservation management n=29,822 institutions
Conservation treatment n=29,859 institutions
Preservation reformatting n=29,991 institutions
Preservation of A/V media and playback equipment n=29,947 institutions
Preservation of digital materials n=29,894 institutions

Fig. 8.11 Institutions' Need for Staff Training n=30,210 institutions

Fig. 8.12 Institutions' Need for Staff Training (by type) n=30,210 institutions
Archives n=1,019 institutions
Libraries n=12,999 institutions
Historical Societies n=3,221 institutions
Museums n=11,875 institutions
Archaeological Repositories/Scientific Research Collections n=1,095 institutions

Fig. 8.13 Institutions' Need for Staff Training (by size) n=30,210 institutions
Large n=2,630 institutions
Medium n=5,261 institutions
Small n=22,319 institutions

Fig. 8.14 Institutions' Need for Conservation treatment n=30,102

Fig. 8.15 Institutions' Need for Conservation treatment (by type) n=30,102
Archives n=1,019 institutions
Libraries n=12,986 institutions
Historical Societies n=3,198 institutions
Museums n=11,799 institutions
Archaeological Repositories/Scientific Research Collections n=1,100 institutions

Fig. 9.1 Institutions with Funds Allocated for Conservation/Preservation in Annual Budget n=30,158 institutions

Fig. 9.2 Institutions with Funds Allocated for Conservation/Preservation in Annual Budget (by size) n=30,158 institutions
Large n=2,639 institutions
Medium n=5,191 institutions
Small n=22,328 institutions

Fig. 9.3 Institutions' Annual Budget for Conservation/Preservation (most recently completed fiscal year) n=26,709 institutions

Fig. 9.4 Institutions' Annual Budget for Conservation/Preservation (most recently completed fiscal year) (by type) n=26,709
Archives n=856 institutions
Libraries n=11,655 institutions
Historical Societies n=2,763 institutions
Museums n=10,444 institutions
Archaeological Repositories/Scientific Research Collections n=990 institutions

Fig. 9.5 Institutions' Annual Budget for Conservation/Preservation (most recently completed fiscal year) (by size) n=26,709

Large n=2,419 institutions

Medium n=4,833 institutions

Small n=19,457 institutions

Fig. 9.6 Institutions with Annual Budgets for Conservation/Preservation Less than $3,000 n=18,138 institutions

Public Libraries n=6,326 institutions

Historical Societies n=2,150 institutions

Special Libraries n=1,463 institutions

Archaeological Repositories/Scientific Research Collections n=620 institutions

History Museums/Historic Sites/Other Museums n=4,686 institutions

Academic Libraries n=1,198 institutions

Science Museums/Zoos/Botanical Gardens n=635 institutions

Art Museums n=649 institutions

Independent Research Libraries n=43 institutions

Archives n=368 institutions

Fig. 9.7 Institutions with Annual Budgets for Conservation/Preservation Less than $3,000 (most recently completed fiscal year) (by governance) n=18,138 institutions

Nonprofit n=8,696 institutions

Federal n=418 institutions

State n=2,467 institutions

County/Municipal n=6,196 institutions

Tribal n=142 institutions

(Not shown: Corporate/For Profit n=219 institutions)

Fig. 9.8 Average Percentage of Annual Operating Budget Allocated to Conservation/Preservation (most recently completed fiscal year) (by type) n=26,092 institutions

Archives n=833 institutions

Libraries n=11,447 institutions

Historical Societies n=2,701 institutions

Museums n=10,205 institutions

Archaeological Repositories/Scientific Research Collections n=906 institutions

Fig. 9.9 Proportion of Total Annual Operating Budgets to Total Conservation/Preservation Budgets (most recently completed fiscal year) (by type) n=25,215 institutions

Archives n=802 institutions

Libraries n=11,172 institutions

Historical Societies n=2,550 institutions

Museums n=9,859 institutions

Archaeological Repositories/Scientific Research Collections n=832 institutions

Fig. 9.10 Institutions that Used Income from Endowed Funds for Conservation/Preservation (last three years) n=29,672 institutions

Fig. 9.11 Institutions that Used Income from Endowed Funds for Conservation/Preservation (last three years) (by governance) n=23,780 institutions
Nonprofit n=11,382 institutions
Federal n=941 institutions
State n=3,579 institutions
County/Municipal n=7,333 institutions
Tribal n=169 institutions
(Not shown: Corporate/For Profit n=376 institutions)
Fig. 9.12 Sources of Support for Institutions that Have Received External Conservation/Preservation Funding (last three years) n=29,057 institutions
Fig. 9.13 Whether Institutions Have Applied for Conservation/Preservation Funding (last three years) n=29,526 institutions
Fig. 9.14 Reasons Why Institutions Have Not Applied for Conservation/Preservation Funding (last three years) n=17,211 institutions
Fig. 9.15 Institutions that Promote Awareness of Conservation/Preservation Using the Following Activities
Educating donors/trustees n=30,121 institutions
Presentations to members/friends groups n=30,083 institutions
Feature in exhibitions n=30,074 institutions
Serving as source for information n=30,113 institutions
Part of strategy for earned income n=30,076 institutions
Feature on Web site n=29,986 institutions
Fig. 10.1 Institutions' Percentage of Collections Accessible Through a Catalog n=30,246 institutions
Fig. 10.2 Institutions' Percentage of Collections Accessible Through a Catalog (by type) n=30,246 institutions
Archives n=993 institutions
Libraries n=13,104 institutions
Historical Societies n=3,237 institutions
Museums n=11,815 institutions
Archaeological Repositories/Scientific Research Collections n=1,096 institutions
Fig. 10.3 Institutions' Percentage of Collections Accessible Through a Catalog (by size) n=30,246 institutions
Large n=2,620 institutions
Medium n=5,270 institutions
Small n=22,356 institutions
Fig. 10.4 Need for Finding Aids of Cataloging of Collections n=30,264 institutions
Fig. 10.5 Institutions' Percentage of Collections Catalog Available Online n=29,460 institutions

Fig. 10.6 Institutions' Percentage of Collections Catalog Available Online (by type) n=29,460 institutions

Archives n=946 institutions

Libraries n=12,823 institutions

Historical Societies n=3,143 institutions

Museums n=11,466 institutions

Archaeological Repositories/Scientific Research Collections n=1,081 institutions

Fig. 10.7 Institutions' Percentage of Collections Catalog Available Online (by size) n=29,460 institutions

Large n=2,663 institutions

Medium n=5,273 institutions

Small n=22,262 institutions

Fig. 10.8 Institutions That Provide Online Access to the Content of Any of Their Collections or Holdings n=30,199 institutions

Fig. 10.9 Institutions That Provide Online Access to the Content of Any of Their Collections or Holdings (by type) n=30,199 institutions

Archives n=1,004 institutions

Libraries n=13,062 institutions

Historical Societies n=3,241 institutions

Museums n=11,796 institutions

Archaeological Repositories/Scientific Research Collections n=1,096 institutions

Fig. 10.10 Institutions That Provide Online Access to the Content of Any of Their Collections or Holdings (by size) n=30,199 institutions

Large n=2,663 institutions

Medium n=5,273 institutions

Small n=22,262 institutions

Fig. 10.11 Institutions that Have Done a Survey of the General Condition of Their Collections n=30,382 institutions

Fig. 10.12 Institutions that Have Done a Survey of the General Condition of Their Collections (by type) n=30,382 institutions

Archives n=1,024 institutions

Libraries n=13,154 institutions

Historical Societies n=3,253 institutions

Museums n=11,843 institutions

Archaeological Repositories/Scientific Research Collections n=1,109 institutions

Fig. 10.13 Institutions that Have Done a Survey of the General Condition of Their Collections (by size) n=30,382 institutions

Large n=2,656 institutions

Medium n=5,256 institutions

Small n=22,469 institutions

Fig. 10.14 Need for Condition Surveys or Assessments of Collections n=30,207 institutions

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