# **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 assessmentthe 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." 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

<sup>1.</sup> 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, newspa-
- · 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 Her-

itage 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 selfstudy exercise that helped them think through funding requests, ways of presenting preservation needs to institutional leadership, and longrange 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.<sup>3</sup> 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

<sup>2.</sup> 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.

<sup>3.</sup> 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 Webbased 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

# **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 longterm 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 forprofit 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).