Chapter 2: Condition of Collections

The Heritage Health Index asked institutions to report on the number and condition of collection items they hold in more than 50 collection categories. Many institutions reported holding specific types of collections but were unable to report the quantity or conditions. The response rate for questions about quantity of holdings ranged from 31% (digital materials) to 64% (microfilm/microfiche) and for questions about condition of collections from 69% (unbound sheets, cataloged in items) to 80% (microfilm/microfiche); these response rates are markedly lower than response rates to most other questions in the survey, which were around 95%.

Since one of the main objectives of the Heritage Health Index was to project the total number of collection items in the United States and their condition, missing data was imputed with values from similar institutions.1

Because institutions holding American art constitute only a portion of the total U.S. collecting institutions (9,187 of 30,827), imputed data that estimates the nationwide quantity and condition of collections is most accurate for the two most commonly held collections for this group: art objects and photographic collections. For other types of collections, need is not expressed as the percentage of collections items in need, but as the percentage of institutions with more than 60% of collections items in unknown condition, no need, need, or urgent need.2

Art Objects

Institutions holding American art collections hold 20,683,358 art objects, including paintings, prints, drawings, sculpture, and decorative arts. Again, because the Heritage Health Index did not ask about specific genres of art, it is not possible to know exactly how many of these pieces can be attributed to American artists. As shown in figure 2.1, museums hold the majority of art objects (76%) and libraries hold 16%; large institutions hold 70%, while small and medium institutions each hold 15%.

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2. Unknown condition: Material has not been recently accessed by staff for visual inspection, and/or condition is unknown. 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 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. 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 playback equipment or hardware/software threaten loss of content.
Overall, 30% of art objects are in unknown condition, 49% have no need, 18% are in need, and 4% are in urgent need (figure 2.2). Because museums and libraries hold the greatest number of art objects, their percentages of collections in need are similar to the figures for all institutions combined (figure 2.3). Although their holdings are smaller, archives, which have about 400,000 art objects, have 57% in unknown condition. Historical societies, which have about 1.1 million art objects, have 45% in unknown condition. In reviewing the Heritage Health Index data on the condition of collections, Heritage Preservation has noted that when unknown condition is lower, need and urgent need tend to be higher, and this could also be true in the case of art objects held by archives and historical societies. Figure 2.4 illustrates condition of art by size of institution; interestingly, large institutions and small institutions have similar percentages in unknown condition at 30% and 35%, respectively. Small institutions have the most in poor condition, with 21% in need and 8% in urgent need. Large institutions have about 14.5 million art objects, while medium and small institutions hold about 3 million. Because most of the institutions with art objects are included in the sub-group of institutions holding American art collections, it is not surprising that the condition of art objects figures—even when viewed by institution type or size—is virtually identical to those of the entire Heritage Health Index data set.

Considering specific types of art objects, the greatest quantity is of art on paper and decorative arts (figure 2.5). Painting and sculpture, which have the lowest percentages in unknown condition, also have the highest percentages in combined need and urgent need (30% of paint-
ings and 26% of sculpture. Other art objects include mixed media, folk art, installations, mosaics, puppets, artists’ materials, or a combination of art objects. Several institutions could only report total art holdings—about 2 million pieces in all—so the chart of art objects by specific types will not total 21 million pieces. That it was challenging for some institutions to report on such basic categories as painting, art on paper, sculpture, and decorative arts indicates a need for improved intellectual control.

Figure 2.6 shows the four types of institutions that have the largest number of art holdings. Art museums and history museums have more than
7 million each, while independent research libraries (including national and state libraries) and historical societies each have about 1 million artworks. Not surprisingly, 96% of independent research libraries’ art collections consist of works of art on paper. Only 8% of art museum art collections are paintings on canvas, panel, or plaster; however, this figure is low because 26% of art museum holdings were reported in total conditions in urgent need vary only by a few percentage points, and collections in need are also around 20%, with the exception of independent research libraries, which have 11% in need.

Figure 2.8 breaks out the collections in need and urgent need into specific collection types. At art museums, paintings and sculpture are in the greatest need at 30%. History museums have 38% of other art objects in need or urgent need; only. Decorative arts are primarily held by history museums and historical societies.

Considering the overall condition of all art in the institutions with the largest number of art holdings, art museums have the lowest percentage in unknown condition at 22%, while almost half of historical societies’ art holdings are in unknown condition (45%) (figure 2.7). The percentages of collections in need or urgent need at institutions with the largest number of art holdings (by type of institution)

![Fig. 2.8 Art Objects in Need or Urgent Need at Institutions with the Largest Number of Art Holdings (by type of institution)](image)

One of the oldest collegiate art collections in the United States and the most comprehensive American art collection in Maine, the collection of the Bowdoin College Museum of Art in Brunswick is a national treasure. Works in the collection include spectacular portraits by Gilbert Stuart of Thomas Jefferson and James Madison, painted around 1805 and bequeathed to the museum in 1811 by the university’s founder, James Bowdoin III. As the museum planned a major renovation to update exhibit spaces and climate-control systems in 2003, the paintings were in need of conservation treatment. With a Conservation Project Support grant from the Institute of Museum and Library Services, the museum was able to contract the services of the Williamstown Art Conservation Center, where the paintings were conserved, with surface and structural treatments where appropriate, making them stable enough to travel for major exhibitions. In June 2006, the museum received a Preservation and Access grant from the National Endowment for the Humanities that will allow the purchase of proper storage and climate-control systems for installation in the newly renovated building, providing this collection of significant American art a safer, more accessible storage environment.

![Gilbert Stuart portrait of James Madison, painted in 1805-1807, after cleaning and relining by Williamstown Art Conservation Center in 2003.](image)
this figure is likely high because many other art objects include collections that institutions couldn't specify. The need of paintings and sculptures at independent research libraries is high (50% and 40% respectively) and, although these types of collections don't account for many pieces of art, perhaps their condition indicates a lack of preservation staff members with expertise in these media. Paintings and art on paper have slightly greater needs than other artworks at historical societies.

Photographic Collections

Institutions holding American art care for 500 million photographic items. While not all of these are art photography or documentary photography related to American art, some priceless and fragile examples of American art history are included in these prints, negatives, slides, transparencies, daguerreotypes, ambrotypes, tintypes, glass plate negatives, and lantern slides. Archives hold the highest percentage of photographs at 36%, followed by libraries and museums. Large institutions hold 81% of photographic materials (figure 2.9).

Given the fragility of photographs and their need for a particular environment, it is disconcerting that the Heritage Health Index found that 41% of photographs are in unknown condition at institutions that hold American art; this is higher than most other types of works of art. Photographs in urgent need are also comparatively high at 7% (figure 2.10). Figure 2.11 shows that
Archives and historical societies are most likely to have photographs in unknown condition, at more than 50%. The condition of photographs at museums, where much of the art photography likely resides, is better known; however, need is also higher at 25% and urgent need is at 4%.

Archives have the highest percentage in urgent need (9%), followed by libraries (8%). Large institutions, which hold more than 400 million photographs, report 45% in unknown condition, 33% in no need, 15% in need, and 8% in urgent need (figure 2.12). There is no major difference between the condition of photographic collections at institutions holding American art and all the institutions included in the Heritage Health Index, though need is slightly higher at small institutions that hold American art.

The quantity and condition of specific types of photographs is outlined in figure 2.13. Black and white prints are most numerous at 182 million, followed by other photographs at 111 million (these are predominantly hard copies of digital images and inkjet prints but also include x-rays, postcards, and stereotype cards). Black and white negatives made before the 1950s are particularly unstable, with some (like cellulose nitrate) requiring frozen storage, and there are about 42 million at institutions holding American art, as well as 90 million negatives from after 1950. These institutions also hold 42 million color prints, negatives, and positives (such as slides and transparencies), which are susceptible to fading and require specialized housing. In fewer numbers are glass plate and lantern slides (8 million) and cased objects (600,000), which include historic photographic formats such as daguerreotypes, ambrotypes, and tintypes.

Almost 40% of black and white negatives from the early days of photography are reported to be in need (29%) or urgent need (10%), so more than a quarter being in unknown condition is cause for concern. Black and white negatives have the highest percentage in urgent
need at 17%. Cased objects have the highest percentage in unknown condition at 47%, and if condition were known, it is likely that the percentage in need or urgent need would increase. That so many digital prints are included in the figure for “other photographs” may explain why the percentage in unknown condition is so high. Again, the “other” category was also often used by institutions that did not know the formats of photographs they had. With exact quantities unknown, it is not surprising that condition is unknown as well.

**Other Collections**

Half of institutions that hold American art care for more than eight different types of collections, and another 32% care for six or seven (figure 2.14). It is useful to look at the condition of some of these collection types, especially those that might document art, such as books and bound volumes, unbound sheets, moving images, recorded sound, digital materials, and historic objects. In the case of contemporary art, some important pieces are contained in audiovisual and digital media. Historic objects and collections on paper (books and unbound sheets) are in almost every institution, while 65% have moving images and 62% have recorded sound. Only about half have digital materials for which they take a preservation responsibility (figure 2.15).

Figure 2.16 shows the percentage of institutions holding American art that report more than 60% of their collections of various media in unknown condition. For example, one-third of institutions have more than 60% of their recorded sound collections in unknown condition. Slightly more than a quarter (28%) do not know the condition of more than 60% of their moving images; the figure at art museums is 37%. Twenty-five percent of institutions with digital materials have more than 60% in unknown conditions, but at art museums and independent research libraries, the figure is closer to 15%.

The percentages of institutions with more than 60% of their collections in need or urgent need are fairly even across types of collections (figure 2.17). When viewed by type of institution, a
notable difference is that only 3% of art museums have more than 60% of their moving image collection in need or urgent need. The percentage of art museums with digital collections in urgent need is slightly lower, not because they are in better condition, but likely because they are in unknown condition. Across the board, the percentage of institutions that have major portions of their collections in unknown condition and need or urgent need are within a few percentage points of the total Heritage Health Index findings, emphasizing that materials of concern are the same for institutions holding American art as for most institutions.

The American art committee brought up a specific concern: the preservation and intellectual control of digital material—both collection objects and data. They noted that digital collections require specialized expertise and will likely need specific and new funding. The Heritage Health Index questionnaire asked how many institutions are even considering the digital material in their preservation mission or program. Institutions holding American art reported that 39% have included digital collections, 48% have not, 6% don’t know, and 7% consider the question not applicable. These aggregate figures are close to the results from art museums and history museums. At historical societies, 57% have not included digital materials in their preservation mission or program, but 77% of independent research libraries and 56% of archives have done so. In considering a list of preservation needs, few institutions holding American art ranked preservation of digital collections as an urgent need (11%), indicating that perhaps more education is necessary.