

## **BACKGROUND**

As part of its statewide “Connecting to Collections” preservation planning project, the Arizona Connecting to Collections Task Force distributed a web-based survey on July 6, 2010, to determine the preservation needs of the cultural heritage institutions within the state.

Approximately 150 libraries, museums, archives, historical societies, and other collecting organizations participated in the survey project. This represented a 33% response rate among an estimated 470 cultural institutions within the state.

The survey looked at a wide variety of issues, from preservation planning to training, current preservation activities, disaster preparedness, partnering/resource sharing, digital collections, and some demographic issues about the collections.

## **PRESERVATION PLANNING AND FUNDING**

In Arizona, the leading source of funding for conservation, preservation, and collections care is funding from the responding institutions’ own budgets (125 responses, or 83%). While it is admirable that organizations are budgeting operational funds for preservation, during difficult economic times, many organizations may not be able to budget a large amount of funding for collections care. What was very good to see, then, was a “diversification of funding sources” for preservation, as organizations reported donor funding (51 responses or 34%), state grants (37 or 25%) and federal grants (26 or 17%) as other top sources used for preservation funding. The number and percentage of institutions reaching outside of their own budgets for preservation monies was much higher than in many of the other states which were surveyed; historical societies’ diverse funding streams were particularly noticeable. Institutions with lower annual operating budgets were more likely to apply for and utilize a variety of types of grants.

This trend continued as 62 institutions, or 42%, reported making a grant application (whether successful or unsuccessful) for preservation funding in the past five years. While 75 institutions or 50% had not applied, the amount of organizations pursuing grants was again high in comparison with other states, and the percentage of historical societies and historical museums developing grants was high.

The organization which did not apply for grants noted a number of concerns which halted them from grant development. The largest problem was a lack of staff time or expertise to complete an application (51 respondents or 59%). Other organizations reported a need for additional project planning or preparation before applying for a grant (38 or 44%); not knowing enough about funding resources (29 or 33%), or that preservation was not an institutional priority (20 or 23%; many of these were public libraries or other institutions with small annual operating budgets).

Those organizations who did apply had approached a wide variety of funders. While again the institution's own budget was noted as the top preservation funding source, collections care grant funding also came from:

- Individual contributions dedicated to conservation projects (26 or 19%)
- Private foundations (19 or 14%)
- Institute of Museum and Library Services direct grants to recipients (16 or 12%)
- State Archives, Arizona State Historical Records Advisory Board (SHRAB) grants (16 or 12%)
- Library Services and Technology Act grant funding (15 or 11%) and other state funding programs (15 or 11%)

The survey also looked at current staffing for conservation, preservation, and collections care. At the majority of responding institutions (65 or 44%), various paid staff are assigned conservation and preservation duties as needed. Volunteers provide some conservation and preservation services at 39 or 26% of the organizations, including those with smaller budgets. A relatively large number of institutions (compared with other states' survey results) reported having paid staff (either full-time or part-time) whose job duties are predominantly in preservation or conservation (33 or 22%). At 27 institutions, or 18%, no staff member or volunteer has preservation/conservation responsibilities.

## **PRESERVATION TRAINING**

The surveyed institutions were asked to rate the usefulness of various methods of obtaining preservation information for staff. Three resources stood out, being mentioned the most as "very useful": print materials such as books, journals, pamphlets, and newsletters on preservation (67 or 45% of respondents); onsite preservation visits at institutions performed by professional staff from organizations including the Arizona State Archives or Arizona Historical Society (64 respondents – particularly those in the higher budget ranges), and electronic resources on preservation such as journals or reports (62 or 42%). Government agencies and courts particularly took advantage of these resources, and those organizations with larger annual budgets took advantage of electronic resources such as preservation websites and listservs the most.

A majority of institutions reported not having conservation or collections care staff with formal training (103 or 69%), but 18 responding institutions (12%) have staff with experience and training working for a trained conservator, 12 organizations have staff with graduate degrees in museum studies, and 8 organization responding to the survey have staff with graduate degrees in conservation from a recognized training program.

Another positive finding was the 68 institutions (46%) – across all institutional types -- had someone in their organization attend a training program on preservation, conservation or collections care in the past five years. Sixty-six organizations reported not having staff attend preservation training during this same period.

Looking at the demand for future training, the survey posed questions about training needed on specific formats of materials, as well as specific preservation training topics.

Training on the preservation of three formats saw the highest level of need and urgent need. Books and bound volumes (monographs, serials, newspapers, scrapbooks, albums, and pamphlets) and historic/ethnographic objects both were seen as an urgent need by 18 organizations (12%). Unbound

sheets such as archival records, manuscripts, maps, oversized items, ephemera, broadsides, philatelic and numismatic artifacts, and other paper artifacts was a need for 15 organizations (10%). Photographic collections, encompassing microfilm, microfiche, photographic prints, negatives, slides, transparencies, Daguerreotypes, ambrotypes, tintypes, glass plate negatives, and lantern slides attracted 76 respondents (52%) as a need and 16 institutions as an urgent need. For both training by format and topic, institutions with smaller budgets were more likely to express an urgent need for the training.

In the area of preservation training topics, there was a strong interest in a wide variety of choices, across all institution types. Respondents expressed interest in the following topics:

- Preservation management (administration, planning, and assessment) – 92 or 63% expressed need; 21 or 14% urgent need.
- Providing care and handling instruction for staff – 83 or 57% need; 15 or 10% urgent need
- Conservation (physical treatment of collections) – 81 or 55% need; 22 or 15% urgent need
- Disaster preparedness and/or recovery – 79 or 54% need; 27 or 18% urgent need
- Preservation of digital files (including databases, web sites, and image files) – 78 or 54% need; 18 or 12% urgent need
- Digitization/imaging – 76 or 52% need; 24 or 17% urgent need
- Cataloging/data-gathering about objects – 69 or 47% need; 22 or 15% urgent need

When considering the preferred length of time for training sessions, one-day workshops (34 respondents or 23%) or two-day sessions (29 or 19%) were by far the most popular choices. Respondents saw a number of potential barriers which could prevent institutions for sending a staff member to a conservation/preservation/collections care workshop. Chief among these were travel costs (124 respondents or 82%), registration costs (114 or 75%), workshop unavailable in the region (78 or 52%), cannot spare staff time (77 or 51%) and distance (70 or 46%).

Respondents were asked to name the three top cities where they would prefer that training be held. Phoenix was overall the top location; Tucson, Flagstaff, Safford, Yuma, Tempe, Prescott, Sedona, and Mesa also garnered votes as top training sites.

When asked the maximum amount that the respondent or their employer would be willing to pay to attend a preservation training event, the majority of respondents did not know (44 or 29%), but those who did name an amount favored the \$100-199 range.

## **PRESERVATION ACTIVITIES**

In an open-ended question, survey participants were asked to name their top three preservation problems or concerns. The question garnered over 350 answers from the 154 respondents. The top concerns were a lack of suitable storage space, need for environmental controls, lack of a disaster plan, lack of knowledge or training on preservation, cataloging to standards, the need to digitize, a lack of staff time, and a lack of funds. Methods to overcome these problems appeared as needs in preservation training, resource sharing, and other areas of the survey.

The majority (89 or 59%) of responding organizations did not have a written, long-range preservation plan describing a multi-year course of action to meet the institution's overall conservation/preservation needs. However, 17 institutions (11%) had a plan, another 17 had a plan which needed to be updated,

and 14 institutions or 9% of respondents do not have a plan yet but are developing one. Findings were similar on institutions having performed a general conservation survey of their collections. These surveys are done to determine the extent of an institution's preservation problems, including environmental concerns, collection management, security, disaster planning, special collections, and the needs of special formats. Ninety-five institutions (64%) had not had a survey; 23 (15%) had a survey; and 19 (13%) had a survey but it was outdated because significant institutional changes had occurred since the survey was done. Organizations with higher annual operating budgets were more likely to have had preservation needs assessment surveys. Thirty-two institutions said the survey resulted in conservation actions.

Many Arizona organizations, particularly those with higher budget ranges, have taken action to prolong the life of their collections. Top among these activities were installing storage furniture (shelving and cabinetry) with 60 respondents or 41%; rehousing (such as refolding, reboxing, or making better storage mounts) at 59 or 40%; moving collections (49 or 34%); cataloging and data-gathering about objects (44 or 31%); providing care and handling instruction for staff (43 or 30%); disaster preparedness and or recovery planning (43 or 29%); and environmental monitoring (42 or 29%). Top activities which responding institutions planned to do were digitization and imaging (38 or 27%); preservation of digital files (31 or 22%); disaster preparedness and/or recovery (30 or 20%); and cataloging/data-gathering about objects (28 or 20%).

### **PRESERVATION ENVIRONMENT, SECURITY, AND DISASTER PREPAREDNESS**

A wide variety of questions helped to focus the need for environmental, security, and fire safety equipment in Arizona cultural heritage institutions.

When asked about controlling environmental factors for preservation, light levels were controlled by a majority of institutions in some, but not all areas (62 organizations, 42%) as was temperature (59 or 40%). As a group, art museums did the best in monitoring and controlling these conditions. A majority of institutions did not control air quality via particulate or gaseous filtration (82 or 55%) and 68 or 46% did not control relative humidity in any areas.

Findings in a related question were of great concern. Institutions were asked, from a preservation perspective, how much of their collection they would estimate is adequately stored in a secure, environmentally-controlled space, on appropriate mounts, containers, and storage furniture with enough space to accommodate non-damaging access to the materials. Twenty-nine institutions (19%) said none of their collections were adequately stored; 34 or 23% said only 1-24% was stored well, and 20, or 13% said 25-49%. Overall, then, 55% of respondents felt that less than half of their collections were adequately stored.

Fire extinguishers (105 respondents or 70%), fire alarms (98 institutions or 66%), and smoke detectors (91 institutions or 61%) have been installed in institutions for fire protection. Having these systems is good, because 37 institutions or one-quarter of all respondents, noted that they had experienced a disaster that damaged collection materials in the past five years. Independent non-profit archives seemed to be the group where most organizations were hit by emergencies and disasters. More positively, 108 respondents or 72% had not. A large majority of those that experienced disasters had only 1-24% of institutional collections damaged (35 or 78% of those answering the question).

By far the biggest cause of disasters was water. Leaks from pipe and roof damage (29 institutions or 67%) and flooding (7 respondents, 16%) were listed as the most prevalent causes, especially among institutions with larger budgets. When disasters struck, either internal staff by themselves (27 or 40%) or internal staff and others (20 or 30%) took care of cleaning up materials.

As in many surveyed states, a majority of Arizona institutions across all budget ranges did not have a disaster plan for the protection and recovery of their collections (64 institutions or 43%). Public libraries, historical societies, and natural history museums were the groups where the largest percentage of institutions was lacking these plans. However, 45 or 30% did have a plan, and 28 or 19% were preparing a plan. So, if the plans in preparation are completed and implemented, a majority of the surveyed institutions will have a plan. Independent non-profit archives, the group with the highest percentage of reported disasters, also had a relatively high number and percentage of disaster plans, as did art museums and archaeological museums.

Security systems and practices in use include control of access to collections (82 respondents or 56%); alarm systems (76 respondents or 51%); employee and volunteer screening (71 or 49%); and control of items brought into collections (70 or 48%).

### **PRESERVATION RESOURCE SHARING**

Participants in the Arizona Connecting to Collections survey were asked what shared services for preservation or collections care they would like to see. Top choices were:

- State-sponsored preservation workshops (116 respondents, 80%)
- Ongoing state support for preservation grants to individual institutions (115 or 79%)
- Assistance with disaster planning and recovery (96 or 66%)
- Sources to contact for preservation information (89 or 61%)
- On-site visits by a preservation professional (85, 59%)

In another scenario, organizations were asked, if it was possible to collectively contract for preservation or collections care services within Arizona, what contracts institutions would like to see negotiated statewide or regionally. The options receiving the most positive responses were:

- Preservation/collections care supplies (99 or 67%)
- Disaster recovery services (including vacuum freeze-drying and onsite cleanup) at 88 or 59%
- Electronic data storage (74 or 50%)
- Disaster response supplies (72 or 49%)
- Collection storage (63 or 43%)

Finally in this section, institutional interest in some other collaborative preservation services was rated. Those topics receiving the highest number of responses for “great deal of interest” were:

- Developing collaborative grant projects
- Developing mutual assistance agreements for disaster response
- Building collaborative digital collections
- Developing collaborative exhibitions
- Setting up regional special interest groups

In addition, two other topics scored high in the “some interest” category for this question: learning to mentor employees/volunteers, and sharing technical equipment. A very interesting note is that the organizations with the largest annual operating budget ranges were among the biggest supporters of these preservation resource sharing concepts.

## **DIGITAL COLLECTIONS**

Survey participants were asked what digital formats they own. Top responses were photographs (90 respondents or 61%); video/audio (82 or 55%); sound recordings (75 or 51%); documents (72 or 49%); and collection records (65 or 44%).

When asked what type of materials the institution has digitized, photographs (75 or 55%) and documents (66 or 49%) were in the lead, followed by collections records (48 or 35%), video/audio (44 or 32%), and sound recordings (41 or 30%).

A large majority (86 respondents or 64%) did not have a plan in place for managing digital assets for 10 years or more; 26 or 19% did not know if their institution had such a plan, and 22 or 16% did have a plan. Also in the area of digital preservation, 76 respondents (56%) do not operate an institutional digital repository; 39 or 29% do; and 20 or 15% did not know.

Backup files of digital materials are created once a week or more often by 63 institutions or 44% of respondents; the next highest response (34 institutions or 24%) did not know the regularity with which the collections were backed up. One of the most evenly-ranked set of answers in this survey concerned where backup files are stored. A troubling result was that 38 institutions don't know. A positive finding was that 38 or 17% said backup files are stored at multiple places. Additionally, 36 or 25% said files were stored offsite, and 31 or 22% said onsite.

## **INSTITUTIONAL INFORMATION**

Respondents were asked to estimate the size of their collections of various formats of materials. In review of this data, the survey analyst tried to determine “combined collection sizes” for the formats asked about in the survey. The numbers shown below are the midpoint calculations for number of items held (number of respondents multiplied by the median amount of materials in each answer category, and the base number of the highest category). The estimates below may be conservative, as some collections may be bigger. Also, since the survey had a 33% response rate, it may be possible that the overall number of items held in Arizona's cultural heritage repositories is three times the amount of each category shown. The formats “measured” included:

- Books and bound volumes (monographs, serials, newspapers, scrapbooks, albums, pamphlets) – 13,496,650 volumes
- Unbound sheets (archival records, manuscripts, maps, etc) – 188,080 cubic feet
- Photographic collections (microfilm/fiche, photographic prints, negatives, slides, transparencies, daguerreotypes) – 8,481,100 items
- Moving image collections (motion picture film, videotape, laser disk, CD, DVD, minidisk) – 142,630 items
- Recorded sound collections (cylinder, phonodisc, cassette, open reel tape, DAT, CD, DVD, MP3) – 118,135 items

- Digital materials collections (floppy discs, CD-R, DVD-R, data tape) – 155,220 files
- Art objects (paintings, prints, drawings, sculpture, decorative arts including fine metalwork, jewelry, timepieces) – 120,100 items
- Historic and ethnographic objects (textiles, costumes and accessories, ceramics, glass) – 238,390 items
- Archaeological collections – 98,600
- Natural science specimens (zoological, botanical, geological, paleontological, paleobotany specimens – 56,395

It is important to note that this question mainly serves to enumerate the number of items in the State's cultural heritage collections. It does not note that all of these materials are in a specific condition (excellent or poor, for example), or specifically in need of repair or treatment. This information does, however, show the size and scope of Arizona's collections, and can help planners in determining the type of information, education, and service offerings which might be of assistance to the largest number of collection items.

Survey respondents noted that an estimated 75-99% of their collections had been cataloged or processed at 50, or 33 % of reporting institutions. A few organizations, however, said none of the collection was cataloged (10 or 7%). Only 1-24% was cataloged at 18, or 12% of the institutions. The institution types where the lowest percentage of materials were cataloged included government agencies, historical societies, and history museums.

The types of organization completing the survey ranged widely. Government agencies (on the state and local level) were the largest respondent group, with 41 or 27% of the total organizations; public libraries (25 or 17%), history museums (19 or 113%), historical societies (14 or 9%), academic libraries or archives (12 or 8%), and art museums (8 or 5%) were the other categories with good representation. A small number of independent non-profit archives, district courts, special libraries, historical houses/sites, natural history museums, science/technology museums, general museums, archaeological museums/repositories/research collections, cultural centers, and arboretums/botanical gardens/nature centers/zoos/aquariums also participated.

When looking at the organizational type or affiliation of the respondents, the largest group was local/municipal/county government (63 or 42%); private non-profit/non-government (52 or 35%) and state government (20 or 13%).

A surprisingly large group of institutions had responsibility for additional important cultural structures and materials. Fifty-one institutions (65% answering this question) were responsible for a historic structure; 33 institutions were responsible for outdoor sculptures, and the same amount for oversized objects such as farm vehicles, mining stamp mills, and railroad engines. Monuments were present at 17 sites (22%) and archaeological sites at 12 or 15% of those answering.

In general institutional staffing and budgeting, there were a wide variety of answers. Thirty-one institutions (21%) had overall annual operating budgets of \$50,001-250,000, a middling level for the survey. However, the same number and percentage reported having the highest budget level in the survey ((\$5,000,001 and above) and 21 institutions (14%) reported \$1,000,001-5,000,000 budgets.

Results were at the low end of the scale when the institutions' annual budgets for preservation supplies were requested. By far the largest percentage of organizations (40 respondents or 26%) reported a

preservation supply budget of \$1-500; the next largest group (23 or 15%) reported no preservation budget. In addition, 21 or 14% had preservation budgets of \$501-1,000, and the same number had budgets ranging from \$1,001-2,500.

When the institutional budget for preservation staffing was reported, the results were even more dire. 79 institutions or 52% reported no budget for preservation staffing, and 22 or 14% reported only \$1-5,000.

### **COMMENTS FROM SURVEY RESPONDENTS**

One of the most important parts of Arizona's Connecting to Collections survey was the ability for the respondents to make comments about the preservation conditions and needs of their collections. The candid comments can serve as further justification for future preservation action within the state. A selection of the 47 comments included in the survey results:

- "Free or low cost workshops or tutorials on practical approaches for institutions where this is not a primary activity (are needed)."
- "As a public library, we are interested in growing our digital and local history collections; however, we are not suited to be an archive."
- "Our institution is currently organizing an Archive collection. It would benefit us to have access to seminars/mentors/reference materials that could answer questions in this area."
- "There is a general lack of conservators in this state for different kinds of objects."
- "Smaller art institutions struggle to meet the needs of conservation in a fiscally weak environment. Any support that could be made to help open funding avenues for storage equipment, intern or volunteer preservation training, supplies, collaborative encouragement and other ways to house and preserve these significant contributors to educating the public about Arizona's rich cultural and artistic heritage will be greatly appreciated. Also educating our Board members and Legislative Representatives would serve to help support these efforts as well. Museums bring in tourism \$\$, (and) educate our children and the public about our state's cultural contributions."
- "With the severe budget cuts that have occurred over the last several years, reduced staffing is one of the biggest obstacles to proper conservation/preservation planning and implementation. You can have the best, state-of-the-art building, but without adequate staff you can't do the necessary hands-on work that conservation requires."
- "We are a one employee operation struggling to keep our doors open. While all of this (preservation activity) is important, if we don't focus on fund raising above all else, none of it will matter. It's a sad and difficult situation."
- "We have approximately 175 wagons, buggies, etc. in our collection. Funds are desperately needed to ensure restoration is done with a minimum of delay."
- "We are a very small museum in a small mining community, with very limited resources. That said ... we are in (the) process of improving all aspects on a day-to-day basis."
- "We have a desperate need to get our entire collection input into our computer system but that takes manpower."

### **CONCLUSION**

The Arizona Connecting to Collections web survey had a very good response rate of 33%. There was also an extremely wide variation among the types of institutions responding, with sixteen types represented. In addition, a wide variety of operating budget levels were reported by the responding institutions.

While Arizona stayed true to national trends with the leading source of preservation funding coming from the responding institutions' own budgets, the state had a very diverse array of other funding sources, including donor funding, state, and federal grants. Through published case histories and workshop instruction on grantwriting and fundraising, this variety of preservation funding should continue to be encouraged. Educational activities in this area can focus on learning about funding resources, building staff knowledge about writing successful grants, and grant project management.

Among the activities paid for through preservation funding is staff time where, again, Arizona had better results than many states with 33 paid staff reported as concentrating on preservation duties. To keep these preservation staff members current, and to train others on key preservation issues, another area needing future support is continuing education and professional development for those with preservation responsibility. Almost half of the responding institutions had some staff attend preservation training in the past year, and there is a strong demand for future training on a variety of preservation, conservation, and collections care topics.

The highest level of need and urgent need were expressed for preservation training on formats including books and bound volumes, unbound sheets/archival records, and photographic materials. Topics where a strong need was evident included preservation management, care and handling instruction, conservation, disaster preparedness, preservation of digital files, digitization, and cataloging. Among key topics for education and preservation action are development of preservation plans and preservation needs assessment surveys. Preservation activities which organizations are planning to do, and could use further education on before implementing, include digitization, digital preservation, disaster preparedness, and cataloging/data-gathering about objects.

In developing a training curriculum for the state, planners should focus on offering one- or two-day workshops in locations including Phoenix, Tucson, Flagstaff, and other smaller towns and cities across the state. Offering the workshops in a number of geographically-diverse locations can reduce two of the top perceived training barriers, travel costs and lack of workshops being offered in the area.

With the high temperatures and strong sunlight for which Arizona has become known, it was very good to see that many institutions control these two environmental factors. Humidity and air quality were not controlled as often; measurement and effects of these forces should be explained to institutions via information and education.

Environmental factors may be one of the concerns leading 55% of the survey respondents to note that less than half of their collections are adequately stored. When coupled with the space and storage concerns which topped the "three top preservation problems" question, this is an area of primary focus for preservation and consulting.

Another strong focus for future activities should be on disaster planning. A majority of respondents do not have a plan, or were just developing one. With the high incidence of water leaks and flooding surfaced in the survey, development of disaster plans must be completed quickly for institutions where they are absent, and updated in all institutions.

Survey participants were very interested in shared services and contract services for preservation. Interest in state-supported preservation workshops and preservation grants to individual institutions was extremely high. Also highly-rated (and logically following other survey results) was assistance with disaster planning and recovery, resources to contact for preservation information, and on-site visits by preservation professionals. Utilizing this set of answers alone to design a statewide preservation program would provide an excellent baseline to meet many Arizona institutions' needs.

Contract services for preservation/collections care supplies and disaster recovery services were highly desired; also popular was electronic data storage, disaster response supplies, and collection storage. Collaborative preservation activities were also of interest, including grant projects, disaster response mutual aid agreements, collaborative digital collections and exhibitions, and development of regional preservation interest groups.

In the area of digitization, almost two-thirds of responding institutions did not have a plan for long-term management and preservation of digital materials. This lends strong credence to the need for more information and education in digitization and digital preservation, beginning with backup routines and offsite storage of digital files.

Arizona was one of the first states to look at responsibility for additional cultural collections as part of their Connecting to Collections survey process. There were many organizations which were found to be responsible for historic structures, outdoor sculptures, oversized objects including vehicles, and monuments.

While some preservation policies and actions can be done at no- or low-cost, many improvements do require funding. Harkening back to early results in the survey, grantwriting, fundraising, and institutional budget planning for preservation should be utilized to build up both preservation supply and preservation staffing budgets.

With these results in mind, Arizona's Connecting to Collections Task Force should strongly consider building a program to help the wide variety of cultural heritage and collections-holding institutions in the state build their preservation budgets, gain preservation information and education, develop preservation policies, and work collaboratively to batter the deterioration and loss of their important collections materials.