

2011

Toward a Nevada Digital Collaborative

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Recommended Citation

Vaughan, Jason (2011) "Toward a Nevada Digital Collaborative," *Journal of Western Archives*: Vol. 2 : Iss. 1 , Article 4.
Available at: <https://digitalcommons.usu.edu/westernarchives/vol2/iss1/4>

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Footer Logo

Toward a Nevada Digital Collaborative

Cover Page Footnote

The author wishes to acknowledge the diligent work of the members of the Nevada Statewide Digital Advisory Committee as well as Liz Blshoff and Tom Clareson, all of whom were involved with the drafting, vetting, and/or review of the extensive report documents associated with the group's overall work.

Toward a Nevada Digital Collaborative

Jason Vaughan

ABSTRACT

In mid-2008, a statewide committee was formed to engage in a comprehensive, Nevada statewide digital planning process. This group consisted of broad membership from the range of Nevada cultural heritage institutions, and was focused on creating a five year digital plan for the state, with an emphasis on collaboration amongst various cultural heritage institutions, increased digitization, and adoption of a digital preservation strategy. This article describes the initial work of the parent committee and two subsequent working groups, funded by the Library Technology and Services Act and aided by outside consultants. Early steps included a comprehensive planning survey and various meetings to understand the capabilities and desires of both primary stakeholders and the community at large. While several challenges not necessarily unique to Nevada arose over the first couple of years, a clear path forward for additional progress has been charted.

In mid-2008, through Library Services and Technology Act funding, the Nevada State Library and Archives brought together members for a newly established Nevada Statewide Digital Advisory Committee (hereafter referred to as “NSDAC”) to engage in a comprehensive, statewide digital planning process. As stated in the charge, “Advisory committee members participate in the identification of issues regarding digitization in Nevada, collaborate in the planning and development of a statewide digital initiative...and contribute to effective communication among the key digital stakeholders in Nevada.”¹ By design, the committee included members from a diverse stakeholder pool representative of various cultural heritage institutions within the state. During the first two years of its existence, committee membership evolved but ultimately included academic librarians, public librarians, museum managers, archivists, and representatives from the State Historic Records Board and the State Council on Libraries and Literacy. The first two years of work were also supported by outside consultants, Liz Bishoff of the Bibliographical Center for Research (BCR) and Tom Clareson of LYRASIS. This paper discusses the early work, challenges, and successes of this group. While several examples of successful statewide collaboratives exist (e.g., the Mountain West Digital Library, under the auspices of the Utah

1. A full version of the charge is provided in Appendix A.

Academic Library Consortium), there are also stories of collaboratives whose success has been increasingly challenged. Similarly, while digitization of primary source materials and posting for broad access has become somewhat normal over the past decade, there are states and regions without a collaborative presence (whether by design or not). While a large number of digital collaboratives exist across the United States, they are not necessarily ubiquitous. It is hoped that this paper will provide insights to others considering the formation of a digitization collaborative or, for more established collaboratives, perhaps offer new ideas to augment their existing structure and operation.

What precisely is meant by a digital collaborative, and why are they intriguing? As noted by Ken Middleton,

“Statewide and regional digitization programs in the USA offer cultural heritage institutions (archives, libraries, and museums) a viable option for digitizing their collections (e.g., photographs, diaries, oral histories, museum objects). These collaborative programs may provide training in digital imaging and metadata standards, access to scanning equipment, and software tools that streamline the creation of metadata records. Most programs also feature a central site for searching across the digital collections of participating institutions.”²

Middleton continues, “Students, scholars and lifelong learners gain access to a rich source for exploring the history and culture of their state or region...the cost savings and potential educational value of these programs have not gone unnoticed. Counting programs still in planning, groups from at least 40 states are involved in statewide or regional digitization programs.”³ Bishoff notes,

“Together, institutions that see aspects of a problem differently can constructively explore their differences. The resulting joint solution is always stronger than what one library or museum could achieve alone. While we often categorize institutions by type, our public does not. Users don’t care where they get the photo or map from, as long as they get it. Often smaller institutions with important collections that might not be able to attempt a digitization project on their own can participate, learning in the process.”⁴

She notes the benefits of gathering related materials from different cultural heritage institutions and bringing them together into a unified whole, as exemplified by the

2. Ken Middleton, “Collaborative Digitization Programs: A Multifaceted Approach to Sustainability,” *Library Hi Tech* 23, no. 2 (2005): 145.

3. *Ibid.*, 145-46.

4. Liz Bishoff, “The Collaboration Imperative,” *Library Journal* 129, no. 1 (January 15, 2004): 34.

Western Trails project, created with funding from a 2001 Institute of Museum and Library Services (IMLS) grant received by the Colorado Digitization Project (a collaborative of various cultural heritage institutions in the Western United States, now the Collaborative Digitization Program). An extensive list of collaborative digitization programs in the United States (along with links to supporting literature) can be found on the LYRASIL website.⁵ Examples of published literature describing various statewide or regional digital collaboratives or projects include works on the Ohio Memory Online Scrapbook,⁶ the North Carolina Exploring Cultural Heritage Online (NC ECHO Project),⁷ the Colorado Digitization Program (now the Collaborative Digitization Program),⁸ and Tennessee's Collaborative Digitization Program.⁹

Background: Digital Activity Survey

Nevada is a physically large state and, outside of two major metro areas, is extremely sparsely populated. Still, across Nevada, in both urban and rural locations, approximately 110 cultural heritage institutions ("CHIs") exist—libraries, archives, museums, and historical societies. Prior to the formation of the NSDAC, many of these had engaged in digitization activities, whether as initial forays as staff, funding, and equipment permitted, or through a more sustained, focused, and supported digitization program integrated within strategic plans. Naturally, the early focus of the NSDAC was to better understand the digital landscape of the state, which in turn, could help inform the development of a five-year digitization strategic plan, a chief early outcome of the NSDAC. With this in mind, a comprehensive Web-based planning survey was administered in fall 2008. The survey consisted of seventy-three questions, the majority of which were "select all that apply" multiple-choice questions. From the 110 identified CHIs, a total of sixty-one completed surveys were returned, netting an impressive 55-percent response rate. The survey posed questions in nearly a dozen functional areas; a few key findings are described below. A report of the survey results was initially provided to the NSDAC in an internal summary document titled, "Nevada Statewide Digital Survey Summary Report," authored by

5. LYRASIL, "Collaborative Digitization Programs in the United States," <http://www.lyrasis.org/Products%20and%20Services/Digital%20Services/Collaborative%20Digitization%20Programs%20in%20the%20United%20States.aspx> (accessed January 2, 2011).
6. Laurie Gemmill and Angela O'Neal, "Ohio Memory Online Scrapbook: Creating a Statewide Digital Library," *Library Hi Tech* 23, no. 2 (2005): 172-86. *Ibid.*, 110-11.
7. Katherine Wisser, "Meeting Metadata Challenges in the Consortial Environment," *Library Hi Tech* 23, no. 2 (2005): 164-71.
8. Brenda Bailey-Hainer and Richard Urban, "The Colorado Digitization Program: A Collaboration Success Story," *Library Hi Tech* 22, no. 3 (2004): 254-62.
9. Tiffani Conner, et al., "Volunteer Voices: Tennessee's Collaborative Digitization Program," *Collaborative Librarianship* 1, no. 4 (2009): 122-32.

the consultants working with the group at that time, and survey data from this document informs the survey results discussed below.¹⁰ Other states have conducted similar landscape or needs-assessment surveys. One recently completed example is the “Survey of NC Cultural Repositories” conducted by the North Carolina Department of Cultural Resources and used to help inform the NC ECHO Project, which, among other things, provides an online portal with access to collections across various North Carolina-based cultural heritage institutions.¹¹ For this survey, completed responses were received from 761 of over 950 identified cultural heritage institutions (an over 80-percent response rate), including library special collections, archives, state parks, state historic sites, and museums. Work on this particular undertaking began in 2001 and involved years of traveling to conduct onsite visits to each cultural heritage institution. The final report was completed in 2010, a nine-year compilation process. While the Nevada survey and North Carolina survey do not precisely overlap (the Nevada survey focuses more exclusively on digitization), both instruments serve as useful primers for other states or regions considering a landscape or needs-assessment investigation to inform digital initiatives.

The first section of the Nevada survey asked for basic demographic and institutional information. Responses were received from a wide variety of CHIs. The average number of full-time employees employed by the respondents’ institutions ranged from one to fourteen staff members overall (including staff members not exclusively focused on digitization-related activities), and the institutions had an overall budget of between one and two million dollars. Just over half of the respondents (thirty-two) indicated they created digital content; the earliest began such work in 1989, with many of the respondents engaged in such activities by 2001.

The second section of the survey focused on information technology (IT) infrastructure (staffing and systems). Forty respondents (61 percent) indicated they did not have a dedicated IT department. While various applications for digital imaging and some level of asset-management software were in use, a majority of respondents indicated they did not use a dedicated digital asset-management system. However, a dozen respondents noted they used PastPerfect, and nine used CONTENTdm.

The next section of the survey focused on the administration and management of digital collections, with questions referencing a “digital collection initiative.” As defined in the survey, this label “refers to a broad range of programs and projects undertaken in cultural heritage institutions. According to *Digital Collections: A Collection from the Society of American Archivists’ Glossary of Archival and Records Terminology*, a digital collection is a group of materials with some unifying

10. Tom Claeson and Liz Bishoff, “Nevada Statewide Digital Planning Survey Summary Report,” <http://nsla.nevadaculture.org//dmdocuments/NVDigPlanningSurveyReportFinal-0315.pdf> (accessed January 2, 2011).

11. “North Carolina ECHO: Exploring Cultural Heritage Online,” <http://www.ncecho.org/index.shtml> (accessed January 2, 2011).

characteristic. For the purpose of the survey, the unifying element is the fact that the collections are digital in format.”¹² Of the fifty-two responses received for the question, “Do you have a digital initiatives program,” thirty-three (64 percent) of respondents indicated they did not have such an initiative, while nineteen (36 percent) indicated they did. In terms of the number of existing digital objects available online, a majority of those responding indicated that none of their digital collections were online, or that only 5-10 percent of their collections were online. Individuals responsible for digital initiatives included directors, digital projects librarians, and registrars. Many respondents indicated they had no dedicated staff (including volunteers) solely focused on digitization activities. The most often cited types of funding for digitization-related endeavors included institutional operating budgets and grants. In response to questions related to digital preservation, the majority (77 percent) of respondents noted that they did not have a formal digital preservation plan; however, data backup was performed by over 96 percent of respondents.

The middle portion of the survey focused on the selection and acquisition of digital collections. The following criteria (selected from a multiple choice list) were deemed most important when choosing which items to digitize: items that are of high value and to which digitizing will increase access (eighteen respondents), items where there is a strong local interest in the collection (sixteen respondents), items where the materials are fragile or deteriorating (fourteen respondents), and items where the materials are heavily used (twelve respondents). The most frequently digitized items (from a multiple choice list of a dozen different material types) included: flat works on paper/photographic prints (twenty-one respondents); maps, architectural drawings, and posters (fourteen respondents); and film materials (film negatives or glass-plate negatives) (thirteen respondents). Respondents noted a wide variety of metadata standards in use at their CHIs, including Dublin Core, MARC, and VRA Core; image file formats used included TIFF, JPEG, and PDF. Twenty-four respondents indicated they authored descriptive metadata, fourteen respondents created administrative metadata, and eleven respondents created technical metadata. Five remaining respondents indicated they did not create any metadata.

The longest question on the survey sought to determine the scope of resources that might be digitized for access by Nevada residents, and collected information about the collections held by Nevada libraries and cultural heritage institutions. Institutions were asked to estimate the number of items in their collections that they would consider for digitization based on eight format types and twenty-eight subject areas. The subjects most frequently represented in the collections included the broad topics of Nevada history, local history, and Western history, followed by mining, ranching, and transportation. The least-common subjects in the collections focused on extraterrestrials, climate, technology, brothels, and literature.

12. “Nevada Statewide Digital Survey,” 8 (internal document).

A latter section of the survey discussed partnerships. While a majority of respondents indicated they do not have collaborations with other CHIs related to digitization efforts, a dozen respondents indicated they had collaborated to some degree, of which only three had formal agreements in place (though four others indicated they have such formal agreements for particular instances). The most important collaborative digitization project goals, selected from a list of seven options, were “increase visibility and expand the audience for institutions’ collections and organizations,” “participate in a grant that supports collaborative initiatives,” and “identify and share standards and best practices for the digitization of different types of media, improving access to collections.”¹³

Landscape Analysis: Stakeholder Meeting and Community Forum Meetings

A second step to better understand the digital landscape involved seeking broad feedback from the CHI community—the librarians, archivists, and museum and historical society directors themselves—as well as from a broader sampling of the general community. In December 2008, a two-day stakeholder meeting was convened, attended by over thirty representatives from Nevada cultural heritage institutions, to focus on the question, “What needs to occur for the people, government, and cultural heritage institutions of Nevada to identify, preserve, and make our state’s unique resources digitally available?” The focus of the first day was brainstorming and subsequently prioritizing action items that could help energize efforts to identify, preserve, and provide access to Nevada’s unique resources. Participants brainstormed a total of thirteen topics meriting discussion, many of which overlap with other topics:

- Volunteer resources for digital projects
- Providing access to the various digital collections throughout Nevada
- Leadership/governance
- Providing assistance for other institutions (e.g., what sort of assistance could established digitization entity could provide assistance to less established players, and what would be most valuable to the smaller entities)
- Selection criteria: local vs. larger groups
- Standards for indexing and technical services
- Keeping visitors coming in to visit the physical institutions
- Collaboration with local government entities

13. “Nevada Statewide Digital Survey,” 8 (internal document).

- Inventorying and identifying records for institutions that do not have resources to image/preserve their historical records of value to the community and state
- Benefits of digitization (e.g., how can institutions with established digitization programs benefit from helping less-experienced organizations)
- Models of collaboration and funding
- Digital preservation
- Copyright

A group consisting of a discussion leader and self-selecting participants was formed for each topic. Each group discussed their topic, drafted a discussion summary, and authored a set of preliminary recommendations. As it would be difficult to give due diligence to thirteen focus areas, the participants prioritized which topics they felt would further the central goal of providing greater creation of and access to digital collections. Five priorities were chosen:

- Facilitating and expanding online access to distributed digital collections
- Development of a leadership/governance structure that will support growth and sustainability
- Development of standards/best practices that will support access to Nevada's digital collections
- Identifying an appropriate collaborative model where the full range of types and sizes of Nevada cultural heritage organizations can participate
- Building a benefits structure where large and small organizations will create the statewide initiative, including how larger institutions could assist smaller institutions

The second day of the stakeholder meeting was focused on discussing the above priorities, with self-selecting participants forming groups to discuss the topics further and generate a series of next steps. For example, for the last item—discussing how larger institutions could assist smaller institutions—the following next steps were envisioned: establish a mentor/mentee program, identify areas of expertise, understand what equipment is available by others that can be shared, and sponsor open houses/field trips.

In February 2009, shortly after the stakeholder meeting, a series of three community forums, in three different cities across Nevada—Reno, Henderson, and Elko—were facilitated by the NSDAC. A total of thirty-three individuals attended these meetings. Two PowerPoint presentations were developed, used at each community forum. As it was not presumed that attendees would be broadly aware of existing digital collections, the first presentation focused on illustrating the existing

variety of published digital collections in Nevada, highlighting their broad range of active institutions, collection topics, and formats (audio, video, image, and transcripts). The second presentation focused on what, by this time, was an emerging draft of the Nevada Statewide Digital Plan. This presentation provided a brief summary of activities to date (described above), shared a proposed mission statement, and outlined the five distilled goals from the earlier stakeholder meeting, including recommended next steps and a targeted timeline for each goal. Ample time was left for discussion and feedback after the presentations.

The Nevada Statewide Digital Plan

Collectively, the steps outlined above—conducting an extensive digital survey, visioning at the stakeholder meeting, and conversing through community forums—provided the data necessary to draft a final version of a Nevada Statewide Digital Plan, which was completed in June 2009.¹⁴ As found in the document’s introduction, the purpose of the five-year plan (2009-2014) was to empower Nevada’s cultural heritage institutions and associated information providers to:

- preserve and provide access to the greatest amount of materials possible documenting Nevada’s history and development;
- further the services of libraries, archives, museums, information centers, and educational systems to meet expanding educational needs of students and residents;
- develop their digital collections on a statewide basis; and
- develop a digital governance structure.

The original five action items were collapsed into four final goals, each with associated activities (anywhere from six to sixteen activities, depending on the goal):

Goal I: Provide online access to digital collections held by Nevada cultural heritage organizations and allied information providers distributed throughout Nevada.

Goal II. Develop and implement standards/best practices that will improve access to Nevada’s digital collections.

Goal III: Develop a leadership/governance structure that will support the growth and sustainability of a standards-compliant digital initiative created by Nevada’s cultural heritage organizations and allied information providers.

14. Nevada Statewide Digital Advisory Committee, et al., “Nevada Statewide Digital Plan 2009-2014,” http://nsla.nevadaculture.org/dmdocuments/NV_Statewide_Dig_plan_060509FINAL.pdf (accessed January 2, 2011).

Goal IV: Establish a collaborative digitization model where the full range of types and sizes of Nevada cultural heritage organizations and allied information providers can participate.

Each activity had a proposed completion date (season, year), ranging from summer 2009 to summer 2014. Assessment through measurable outcomes and additional outputs was built into the final plan, as follows:

- Nevada's cultural heritage organizations and allied information providers share a common vision and set of goals in the development of the Nevada Digital Heritage Initiative.
- Nevada's cultural heritage organizations and allied information providers develop a statewide network based on the best set of solutions for Nevada's statewide digitization.
- Nevada's cultural heritage organizations and allied information providers have established a shared Web presence.
- Data would be collected on the following:
 - Number of institutions agreeing to participate in a statewide digital network initiative
 - Number of funded projects that result from grant applications and that utilize goals and activities in the plan's identified focus areas for implementation of the projects
 - Number of institutions that adopt the metadata best practices
 - Number of institutions that adopt the collection development policy
 - Number of local partnerships that are formed
 - Number of visits to a shared Web presence

With the completion of the five-year digital plan, the first year of activities for the NSDAC were concluded, with a clear course set for the plan to be implemented.

Establishment of Working Groups

The second year of activities commenced with the establishment of several working groups that focused on completing specific action items outlined in the plan. Initially, discussion within the NSDAC led to the drafting of charges for three working groups, but ultimately, two working groups were created: a Standards/Best Practices Working Group and a Collaboration Working Group. Each working group was led by one or more members of the NSDAC and included additional members of the committee as well as additional stakeholders. As they made progress, working groups were expected to communicate updates to the overarching NSDAC.

The Standards/Best Practices Working Group focused primarily on action items found within the Statewide Digital Plan's second goal: "Develop and implement standards/best practices that will improve access to Nevada's digital collections."¹⁵ In brief, the focus of the Standards/Best Practices Working Group is as follows:

"Working group members participate in the review of best practices & standards associated with high-quality digitization endeavors. From this work, group members will collaborate and participate in developing guidelines for best practices/standards for digital projects in Nevada, with an eye toward improving discoverability and sustainability of Nevada's digital materials, whether at the local level, as well as at the larger, interoperable shared level. They will also contribute to effective communication of the guidelines to the key digital stakeholders in Nevada. Over time it's envisioned this group would be responsible for reviewing and revising the guidelines as needed, and developing a strategy to train cultural heritage organization practitioners and volunteers in Nevada's best practices & standards. Such work could help inform a later effort focused on establishing a more formal digital preservation program."¹⁶

As Wisser notes with the NC ECHO project,

"...working groups rely on the large expert-base from partner institutions. They consist of members from the field who are interested in participating in the formation of best practice guidelines, tools, and making decisions on the application of particular metadata standards. The goal of creating guidelines and tools is to ensure consistency of application and to teach cultural heritage professionals best practices in creating metadata for their materials."¹⁷

The work of the Nevada Standards/Best Practices Working Group began with drafting a one-page checklist of several key areas that needed consideration prior to commencing any new digitization project (e.g., documentation, scope, image specifications, metadata fields). Planned future documentation will extend the concepts introduced in the overview checklist. The group also began brainstorming ways to register digital collections in a central location, to expand awareness of, as well as to help document and advertise, what standards are in use by various CHIs. Such concepts supported the development of a centralized, statewide portal, discussed shortly. Additional priorities also included the investigation of existing, published best practices (e.g., the Western States Digital Imaging Best Practices) and

15. The complete charge appears as Appendix A.

16. The complete charge appears as Appendix B.

17. Wisser, "Meeting Metadata Challenges," 166.

the identification and practice of local naming conventions (such as the use of a Nevada place names list that had been developed in the past). The group made progress on several of these initiatives in 2010, with a clear roadmap for additional progress in 2011.

The second working group, the Collaboration Working Group, focused on the fourth goal in the Statewide Digital Plan: “Establish a collaborative digitization model where the full range of types and sizes of Nevada cultural heritage organizations and allied information providers can participate.”¹⁸ In brief, the focus of this group is as follows:

“Working group members participate in the identification and resolution of issues regarding collaborative digitization efforts in Nevada, and work to foster effective communication among the key digital stakeholders in Nevada. Collaboration Working Group members will develop resources and strategies to resolve issues regarding collaboration, including geographical and technological challenges, variations in the curatorial traditions, types, and sizes of collections, and experience levels of cultural heritage organizations, and other issues to be identified.”

The Collaboration Working Group aimed to identify existing, published projects in the state that represented a collaborative effort—whether through combined collections, expertise, or support (such as the use of specialized equipment). The group also sought to identify challenges that arose during collaborative efforts (questions on copyright, for example). Another major initiative planned by the group is to draft a white paper on the benefits of collaboration and what could be gained by both large and small entities participating within the state. As Bishoff notes,

“Collaboration makes it possible for every institution to capitalize on the professional traditions and expertise of all. Curators who develop museum exhibits and library catalogers with their metadata expertise can work together with preservation and conservation experts. Working together is also cost-effective. The infrastructure is shared, including digital imaging laboratories, a digital archive repository, metadata creation software, a digital rights management system, and often hardware for the website and server. Many projects share the cost of training programs. Collaboration also greatly increases funding opportunities.”¹⁹

In 2010, a new digital collection was launched in commemoration of the one-hundredth anniversary of the historic Johnson-Jeffries boxing match, a “fight of the

18. The complete charge of the working group appears as Appendix C.

19. Bishoff, “The Collaboration Imperative,” 34-35.

century” that occurred in Reno, Nevada, in 1910.²⁰ This was a collaborative project between the University of Nevada, Reno Special Collections and the Nevada Historical Society, both of which have a presence on one of the working groups or the main committee. As such, some attention was given during the creation of the collection as to what worked well and what challenges arose. The Collaboration Working Group will likely document the experience to share with the NSDAC.

Challenges

Over the course of the first two years, NSDAC faced several challenges. As previously mentioned, Nevada is physically a large state, with only two centers of substantial population (>100,000). Many of the state’s CHIs are spread across the vast rural expanses of the state; several of these areas do not yet have high-speed Internet connectivity, making quick communication among committee and working group members a challenge. Distance, time, and funding constraints have resulted in more impersonal communication methods (such as e-mail) as opposed to in-person, face-to-face dialogue. Several members have begun experimenting with videoconferencing technologies (e.g., Skype) for update meetings. Audio teleconferencing has also been broadly used by the main committee. Shortly after the committee was formed, a Google Groups site was set up to help facilitate and archive e-mail messages and discussions within the group as well as to deposit and provide access to working documents. The NSDAC began a migration to Google Sites after Google announced the demise of its Google Group service in late 2010. Administering rights and learning the capabilities of each platform has taken some effort. Fortunately, Library Services and Technology Act (LSTA)-based grant funding has enabled the committee and working-group members to gather together in person two to three times per year; meetings are staggered such that the northern and southern population centers switch off hosting duties. Still, it cannot be presumed that LSTA funding will continue indefinitely to sustain the travel costs associated with in-person meetings.

In terms of the future, thought has begun toward better understanding the true costs of sustaining the infant collaborative. Such costs include the infrastructure and expertise costs associated with digital-preservation methodologies. Furthermore, as noted by Bishoff and Allen, “How do we get money for this?” is probably the most common question asked with respect to sustainability.²¹ As hinted above, time constraints and excessive workloads have weighed heavily on all committee and working-group volunteers. By any measure (e.g., state and city budget deficits, record high unemployment, and severe housing declines) Nevada has been one of the states hit hardest by the economic recession that began in the latter half of 2008. At time of

20. UNR Special Collections and The Nevada Historical Society, “Johnson-Jeffries Fight: A Centennial Exhibit,” http://knowledgecenter.unr.edu/digital_collections/exhibits/johnson_jeffries/ (accessed January 2, 2011).

21. Liz Bishoff and Nancy Allen, *Business Planning for Cultural Heritage Institutions* (Washington, D.C.: Council on Library and Information Resources, January 2004), 48.

writing, Nevada is struggling in the recovery that appears to have at least begun for much of the rest of the country. During the NSDAC's brief existence, some members have been laid off or have relocated. Other members are heads of CHIs that have had to downsize their operations and, in the process, pick up others' work responsibilities. In some cases, they have found themselves as proprietors of solo operations or with low staffing levels, which impacts their ability to travel or participate heavily in committee or working-group efforts. To help save money, some entities have had to switch to a four-day work week. All of this has had some level of impact on the group. Still, even in the best of economic times, challenges would exist. Concerning the NC ECHO project, Wisser notes, "Working groups also present some challenges. They can often be slow-moving and ask for participation from professionals already overly busy with their own responsibilities. Meetings are difficult to plan with varying schedules, and travel can be an issue for participants who are located in the extremities of the state."²²

Crystallizing the concept of governance as it relates to a statewide digital collaborative has been challenging. In addition to the two working groups detailed earlier, a charge was drafted for a Governance Working Group, aimed at furthering the Statewide Digital Plan's third goal: "Develop a leadership/governance structure that will support the growth and sustainability of a standards-compliant digital initiative created by Nevada's cultural heritage organizations and allied information providers." Drafting and subsequently discussing the charge engendered rich, candid discussion within the NSDAC, with the ultimate outcome that the potential establishment of such a working group was best left to some point in the future. Additional conversations with the whole group were needed, focusing on a more finite form the collaborative might take and determining if there would be some concrete entity used to "govern," and which individual entities would join. Ultimately, the NSDAC decided it was premature to establish and charge a Governance Working Group and that the existing NSDAC was, for the present, the de facto governance group. Next steps might include drafting a statement that various CHIs throughout the state would endorse, with the potential reality that a more informal, loose federation of different CHIs working together may be what evolves, at least for the next couple of years.

Another challenge, or opportunity, has been the ongoing sustained promotion of the group's existence. Many efforts were made during the first two years, including a broad call for participation in the 2008 digital survey, broad promotion of the five-year digital plan (by posting the plan on the Nevada State Library and Archives website and distribution via e-mail to all CHI directors), conversation at the stakeholder and community forum events described earlier, and a well-attended presentation at the Nevada Library Association's 2010 Annual Conference. Despite these efforts to inform the CHI community, there are still individuals interested in

22. Wisser, "Meeting Metadata Challenges," 166.

digitization and who are unaware of the committee's existence or its efforts to facilitate digitization.

Other challenges have arisen that are more reflective of the diverse nature of cultural heritage institutions. Libraries, archives, museums, and historical societies have long held various standards, practices, and curatorial traditions. While areas of common ground exist, there are also situations where standards, practices, and traditions remain quite specialized and unique to that type of cultural heritage institution. Libraries may create what they term a digital collection, with a limited amount of "storytelling," while museums and historical societies may create what they term a digital exhibit whose only function is to tell a story. Various technical standards are in use, describing the physical item or serving as a finding aid to a collection of objects, such as Dublin Core and Encoded Archival Description. As noted by Bishoff,

"Institutions may have common goals and visions, but they lack a common language. This lack of shared vocabulary regularly causes the professionals to talk at cross-purposes. For example, one element in a Dublin Core record is contributor. To librarians, the contributor has a role in the creation of the work—as the illustrator, translator, or photographer. To museum professionals, the contributor is a donor."²³

Bishoff also notes the "metadata migraine": "Interoperability is critical to the digital library community. However, metadata standards differ within one institution and between institutions. Different standards are often based on different formats. Subject or controlled vocabulary is equally varied."²⁴ To help understand these differences, as noted above, the Standards/Best Practices Working Group hopes at least to inventory what standards are currently in use across Nevada CHIs.

As became apparent in NSDAC discussion, the correlation between funding and foot traffic is a major issue for most Nevada CHIs. Funding for many Nevada museums is in part determined by foot traffic, and a fear expressed by some was that digitizing collections may negatively impact volume. Whether or not this is true is subject to debate (for example, the NC ECHO survey netted at least one observer noting an "increase in [in-person] use since [the] digitization project has been up."²⁵

Finally, the topic of training and professional development has been challenging, given the widely varying levels of expertise and skill sets found within a state comprised of over a hundred cultural heritage institutions. Conversations on training

23. Bishoff, "The Collaboration Imperative," 35.

24. *Ibid.*

25. North Carolina ECHO: Exploring Cultural Heritage Online, Final Report Summary Booklet, <http://www.ncecho.org/survey/Survey%20of%20final%20report%20booklet.pdf> (accessed January 2, 2011).

needs have also been challenging for the group, as “one size does not fit all.” As noted by Middleton,

“Building a broad-based group of digitization professionals is crucial to sustaining a collaborative digitization program beyond its initial grant-funding period. This is a formidable task because digitization is totally new to so many participating institutions, training can be expensive, and the speed of technological change necessitates continuing education.”²⁶

Taken in sum, most of the challenges described in this section are not unique to Nevada and are all part of the learning and growing experience that results from bringing people from diverse institutions together, finding common ground, and moving forward for the benefit of the populace.

Looking Forward

Through late 2010 and into 2011, and guided by the Statewide Digital Plan, the NSDAC has focused on several areas. Incorporated within the activities of both established working groups were elements meant to further efforts toward meeting the first goal in the Statewide Digital Plan: “Provide online access to digital collections held by Nevada cultural heritage organizations and allied information providers distributed throughout Nevada.” Earlier, the Nevada State Library and Archives had established a placeholder webpage to serve as a wayfinder to locate the state’s digital collections hosted at various institutions.²⁷ The NSDAC took this one step further and configured the Google custom search tool to centrally search across collections based in CONTENTdm and PastPerfect repositories. In continued response to the first goal of the plan, a new statewide portal is being created, based on the open-source Omeka software.²⁸ The immediate goal for the development of a Nevada portal is to have a collection-level record for each digital collection currently hosted within the state. It is envisioned that each collection-level record will include a representative image (or media clip, transcript, or other icon depending on the collection) as well as various descriptive collection-level metadata elements, including the title of the digital collection, subject, description, creator, publisher, date the collection was made available to the public, and any contributors. In addition, a link to the full hosted collection will be provided. Collection-level records (or for museums, “exhibit”-level records) will be searchable, with success in locating specific items based on the richness of the metadata within the contributed collection

26. Middleton, “Collaborative Digitization Programs,” 147.

27. Nevada State Library and Archives, “Nevada Digital Resources,” http://nsla.nevadaculture.org/index.php?option=com_content&task=view&id=1705&Itemid=421 (accessed January 2, 2011).

28. Center for History and New Media, George Mason University, “Omeka,” <http://omeka.org/> (accessed January 2, 2011).

-level records. In addition, visitors will be able to browse by collection and by institution, and a “featured collection” will be placed (and changed over time) on the portal’s homepage. While it will not happen overnight, it is ultimately hoped that Nevada CHIs will contribute a collection-level record for each collection they currently have online and contribute records for new collections as they are launched. Individuals at the various CHIs will also be permitted access to directly add and update records to the system; for those wishing assistance, a contributor form will allow them to contribute relevant data that others who are more familiar with the Omeka-based platform can use to build and publish the collection-level record. It is hoped that enough collection-level records will be contributed to the system to reach a critical mass in 2011, whereupon the portal will officially be launched and advertised, with the hope that Nevada CHIs will place the portal link on their respective homepages. In this way, it is hoped that the various collections throughout the state will become more discoverable to a broader audience, in addition to having a professional, capable portal that can be used to demonstrate the digitization concept, which helps with legislative marketing.

In late 2010, a third working group was established, a Preservation Working Group. As learned from the fall 2008 digital survey, 77 percent of respondents noted that they did not have a formal digital preservation plan. Several members of the NSDAC attended training (in person and online) related to digital preservation in late summer 2010 and subsequently provided a presentation to the NSDAC. Out of this group discussion came the decision to establish the Preservation Working Group, whose primary aim is to draft and present a guidance document related to digital preservation. In part, it is hoped that such a document will be used by staff as they are actually digitizing materials (e.g., it could include information on the creation of preservation metadata). Subsequent steps might include greater formalization of this guidance document into a plan or policy. Group members noted that in creating a digital preservation guidance document, it is important to address how such a document could perform the following functions: fit into the needs and mission of various organizations, include references to established best practices for digital preservation, and provide “how to do it” preservation guidance for organizations. More specifically, the working group was asked to also include statements addressing who the group is preserving for; what documents need to be preserved; why these documents are being preserved; what the lifecycle management of digital resources is; and how state, regional, or national organizations can work together for digital preservation. To begin their work, group members planned to revisit the 2008 survey results related to digital preservation, identify “burning” preservation needs within the state, learn about migration of information from one format to another, and continue investigations into various archiving and replication strategies (LOCKSS, etc.). At time of writing, the drafting and initial presentation of a digital preservation document is scheduled to occur in 2011. It is hoped that the group’s core document elicits comments and conversation from other institutions, which will help the working group become more attuned to specific institutional needs, desires, and priorities.

Apart from the obvious benefits of digital preservation (the protection of assets and the ensuring of availability and accountability), the NSDAC has noted that many larger entities funding digitization-related grants require evidence that the applicant (s) have a digital preservation plan. As the NSDAC plans to seek significant funding from a national granting agency (such as the IMLS or National Endowment for the Humanities (NEH)) to support a large collaborative, statewide digitization project, the creation of this statewide digitization plan is a necessary step toward fulfilling that goal. Specifically, the NSDAC has already begun talking about submitting a grant application for potential National Digital Newspaper Program (NDNP) funding from the NEH, though other opportunities exist and will likely be explored by the group. To help build their toolkit, several members continue to hone their grant-writing skills with smaller grant requests (e.g., LSTA). In part, such efforts have helped members gain experience with digitization outsourcing and metadata creation (which often occurs with large digitization grants) and helps fund digital-collection projects that have a collaborative element.

Through all of these efforts, and despite some continuing challenges—some of which are completely beyond the group’s control—it is hoped that a sustained collaborative will evolve. Middleton notes, “By including archivists, educators, librarians, and museum curators as truly collaborative partners, a digitization program gains expertise, resources, and expanded funding options.”²⁹ Along the same vein, Bishoff observes,

“Librarians, curators, archivists, computer scientists, publishers, and others in the digital library arena are working together to solve the issues surrounding digital collections. Collaboration, they find, is the key to success. For librarians to lead in the creation of vibrant and sustainable digital collections, we must work with our colleagues and with archive and museum professionals....If we build digital collections based on common values, making certain that every participant derives some benefit from the end product, we’ll thrive, just as our patrons will.”³⁰

Five years from now, the Nevada collaborative may be a loose federation of comfortable partners exchanging ideas and collaborating on joint digital collections or exhibits. Or it may evolve into a more formalized collaborative with memberships, governing documents, and a competent and widely practiced digital preservation plan with the associated infrastructure. Over time, additional promotional materials, key professional development opportunities, the sharing of expertise and equipment, and a centralized portal allowing record searches across a wide variety of digital collections, down to the item level, may all come to fruition.

29. Middleton, “Collaborative Digitization Programs,” 150 .

30. Bishoff, “The Collaboration Imperative,” 34.

Appendix A

Nevada Statewide Digital Advisory Committee Charge

Advisory committee members participate in the identification of issues regarding digitization in Nevada, collaborate in the planning and development of a statewide digital initiative, participate in the state request for proposal process to hire a digital planning consultant, evaluate submitted bids, recommend a digital consultant, and contribute to effective communication among the key digital stakeholders in Nevada.

Strategies

- Brainstorm and prioritize statewide digital issues.
- Identify key stakeholders in Nevada dealing with digital collections and work with those groups.
- Assess current digital activities/patterns/potentials in Nevada.
- Investigate other Nevada statewide and regional digital activities.
- Contribute to and participate in implementing a statewide digital plan.
- Provide input into the development of the scope of work for a state request for proposal to hire a digital planning consultant.
- Evaluate bids submitted during the RFP process and recommend a contractor to conduct the statewide planning process.
- Provide feedback during the planning process.
- Help disseminate information to the statewide library, archive, and information repository community, and appropriate groups, such as the State Council on Libraries and Literacy (SCLL).

Advisory Committee Membership

Distribution of membership across libraries, archives, information repositories, and educational institutions include:

Academic institutions

Public libraries

State Historic Records Board

State Council on Libraries and Literacy

Special librarians

Task Force Membership Responsibilities

- Attend meetings when they are convened, either through face-to-face, conference call or video-conferencing, and actively participate in the collaborative meeting process.
- Participate in the development, prioritizing, and implementation of a statewide digital plan.
- Participate in the state RFP process for identifying and recommending a contractor to conduct the planning process.
- Do research in specified areas pertaining to the charge of the advisory committee and provide the information for dissemination to other committee members.
- Represent the advisory committee at focus groups and governing bodies as appropriate.

NSLA Responsibilities

- NSLA staff will be responsible for the overall development, facilitation, and administration of the statewide digital planning process funded by NSLA through federal funds from the Institute for Museum and Library Services (IMLS).
- NSLA staff will provide staff support for the statewide NSDAC, including coordinating meetings, videoconferences, conference calls, or travel arrangements.

Travel Reimbursement

Travel and per diem for task force members to attend designated meetings will be reimbursed by NSLA from federal NSLA funds (Nevada State Library and Archives Travel Status—in-state guidelines to be provided).

Meetings

- NSLA staff will facilitate the process and will provide staff support.
- Meetings will be scheduled to support digital-planning activities and will be run using effective meeting management techniques and collaborative problem-solving.
- At least one meeting will be scheduled, with additional meetings as required either in person or through videoconferences, telephone conference calls, or

e-mail as appropriate. Up to fifty contact hours is anticipated annually, excluding travel time.

Communication Process

The NSLA website and the Nevada Library Association (NLA) listserv will be used to disseminate digital planning information and meeting records as appropriate. The digital planning documents will be submitted to the NSLA Administrator for review and acceptance, then forwarded and through her to the SCLL and IMLS.

Result

The advisory committee will be asked to provide input into the statewide digital planning process. The program will be considered a success if a statewide digital plan as submitted results in the following:

- Nevada's cultural heritage institutions and allied information providers share a common vision and set of goals in the development of a Nevada Digital Heritage Initiative.
- Nevada's cultural heritage institutions and allied information providers develop a statewide network based on the best set of solutions for Nevada's statewide digitization.

Advisory Committee Appointment

Terms on the advisory committee will be for one year.

Appendix B

Standards/Best Practices Working Group Charge

Working group members participate in the review of best practices and standards associated with high-quality digitization endeavors. From this work, group members will collaborate and participate in developing guidelines for best practices/standards for digital projects in Nevada, with an eye toward improving discoverability and sustainability of Nevada's digital materials, whether at the local level, as well as at the larger, interoperable shared level. They will also contribute to effective communication of the guidelines to the key digital stakeholders in Nevada.

Over time it's envisioned this group would be responsible for reviewing and revising the guidelines as needed and developing a strategy to train cultural heritage organization practitioners and volunteers in Nevada's best practices and standards. Such work could help inform a later effort focused on establishing a more formal digital preservation program.

Strategies

- Review current documents created by local, regional, and national institutions regarding best practices/standards for digitization projects.
- Draft best practices/standards for Nevada digital projects for review/approval by the Nevada Statewide Digital Advisory Committee. This will include recommendations on minimum fields for records describing various objects, controlled vocabularies, and standards/best practices pertaining to digitization of images, audio, and video.
- Conduct research on established best practices and standards and establish a clearinghouse for best practices/standards.
- Draft a strategy to train organization staff in best practices/standards and identify possible training programs.
- Draft a list of services available from other digital partners in the state as pertains to metadata/digitization expertise.
- Down the line, recommend options for long-term digital preservation programs for Nevada.

Standards/Best Practices Working Membership and Appointment

Terms on the advisory committee will be staggered and multiple years as identified. The working group has a set of 2010 deliverables but will likely exist as a body beyond 2010, as informed by the Statewide Digital Plan and ongoing work with the Statewide

NSDAC. Distribution of membership across libraries, archives, information repositories, and educational institutions include:

Archives

Academic libraries

Public libraries

Special libraries

Museums

Records administrators

Local governments

Standards/Best Practices Working Group Membership Responsibilities

- Attend meetings when they are convened, either face-to-face or through conference calls or video-conferencing, and actively participate in the collaborative meeting process.
- Participate in the research, development, and drafting of guidelines related to best practices/standards for metadata (descriptive, structural, administrative), digital imaging, and digital audio and video.
- Conduct research in specified areas pertaining to the charge of the working group and provide the information for dissemination to other working group members and to the Nevada Statewide Digital Advisory Committee.
- Represent the Standards/Best Practices Working Group at focus groups and governing bodies as appropriate.

Meetings and Communication Process

- Meetings will be scheduled to support digital planning activities and will be run using effective meeting management techniques and collaborative problem-solving.
- At least one face-to-face meeting will be scheduled, with additional meetings as required, either in person or through videoconferences, telephone conference calls, or e-mail as appropriate. Up to forty hours of effort is anticipated annually, excluding travel time.
- Google Groups will be used to house relevant documents discovered during the research phase and as working space for the drafting of Nevada best practices/standards and dissemination of digital planning information and meeting records as appropriate. The best practices/standards planning

documents will be submitted to the Nevada Statewide Digital Advisory Committee and the NSLA Administrator for review and acceptance, and through her to the SCLL.

Result

The Standards/Best Practices Working Group will be considered a success if:

- Research-informed recommendations are made pertaining to best practices and standards associated with metadata, controlled vocabularies, and digitization of materials.
- All or a majority of Nevada's cultural heritage institutions and allied information providers adopt mutually agreeable and interoperable standards and best practices associated with metadata, controlled vocabularies, and digitization of materials.
- Future digital collections adhere to the established and adopted metadata, controlled vocabularies, and digitization standards and best practices.
- A strategy to train organization staff in best practices/standards is drafted and disseminated.

Appendix C

Collaboration Working Group Charge

Working group members participate in the identification and resolution of issues regarding collaborative digitization efforts in Nevada and work to foster effective communication among the key digital stakeholders in Nevada.

Collaboration Working Group members will develop resources and strategies to resolve issues regarding collaboration, including geographical and technological challenges; variations in the curatorial traditions; types and sizes of collections; and experience levels of cultural heritage organizations; and other issues to be identified.

Strategies

- Brainstorm and prioritize collaboration issues.
- Review documentation from the Statewide Digital Plan.
- Compile a report of existing collaborative digital initiatives in Nevada, noting problems encountered and solutions implemented.
- Develop a general inventory of current digitization resources within the state and a list of digitization-related services and resources that theoretically could be made available by established organizations to smaller organizations.
- Develop a set of principles and “best practices” regarding collaborative efforts.
- Identify needs of small organizations.
- Identify potential partnership opportunities between various-sized entities.
- Identify and possibly initiate a potential collaborative digitization project.
- Develop and promote networked resources for project managers.
- Identify training needs for project managers and project participants in consultation with the Standards/Best Practices Working Group.
- Help disseminate information to the statewide library, museum, archive, and information repository community and appropriate groups, such as the State Council on Libraries and Literacy (SCLL).
- Produce a white paper on the benefits of collaboration for both small and large participants.

Collaboration Working Membership and Appointment

Terms on the advisory committee will be staggered and multiple years as identified. The working group has a set of 2010 deliverables but will likely exist as a body beyond 2010, as informed by the Statewide Digital Plan and ongoing work with the Statewide NSDAC. Distribution of membership across libraries, archives, information repositories, and educational institutions include:

Archives
Academic libraries
Public libraries
Special libraries
Museums
Records administrators
Local governments

Collaboration Working Group Membership Responsibilities

- Attend meetings when they are convened, either face-to-face or through conference calls or video-conferencing, and actively participate in the collaborative meeting process.
- Participate in the development, prioritization, and implementation of a model for collaboration.
- Conduct research in specified areas pertaining to the charge of the working group and provide the information for dissemination to other working group members and to the Digital Advisory Committee.
- Represent the Collaboration Working Group at focus groups and governing bodies as appropriate.

Meetings and Communication Process

- Meetings will be scheduled to support digital planning activities and will be run using effective meeting management techniques and collaborative problem-solving.
- At least one face-to-face meeting will be scheduled, with additional meetings as required either in person or through videoconferences, telephone conference calls, or e-mail as appropriate. Up to twenty-five hours of effort is anticipated annually, excluding travel time.

- Google Groups will be used to disseminate digital planning information and meeting records as appropriate. The Collaboration Working Group planning documents will be submitted to the Digital Advisory Committee and the NSLA Administrator for review and acceptance, and through her to the SCLL.

Result

The Collaboration Working Group will be asked to promote the long-term collaboration goals of the Digital Advisory Committee. The group's work will be considered a success if met:

- Nevada's cultural heritage institutions and allied information providers develop mutually agreeable collaborative digitization plans.
- Training, consulting, guidelines, and other resources for collaboration are in place.
- Successful collaborative projects involving disparate partners are implemented.
- Nevada's cultural heritage institutions and allied information providers develop a statewide promotional program for collaborative projects.