

The following is the "performance narrative" submitted as part of the grant report to the Institute of Museum and Library Services in August 2011. It follows the general headings and sequence prescribed by that agency.

Title:

Preserving and Digitizing Recordings in the Modern Political Archives at the University of Mississippi

Brief Overview:

The project's goals included digitizing all recordings in the Modern Political Archives; adopting preservation measures for both the analog and digital recordings; and providing greater accessibility to those recordings in collections open to researchers. By the end of the grant, all 3,896 recordings in the archives were digitized; all original and digital recordings were appropriately stored; and all recordings in open collections (454) were available to the public online. Researchers are the true beneficiaries of this project as conservation measures will prolong the lifespan of the recordings while the new digital conversions offer user-friendly access to a treasure trove of Mississippi and American political history.

Description of Project Activities:

Identification of Recordings

Staff reviewed all collections in the Modern Political Archives to locate analog and digital recordings. In the end, a total of 3,896 were uncovered in fourteen collections. Every original recording received a unique identifier that was then used throughout the project for container labels, metadata spreadsheets, and the files of digital counterparts. The identifier incorporated some form of the collection name, the format of the original recording, and a sequential number. Modern Political Archives Senior Library Assistant Stephanie McKnight assumed responsibility for tracking both the original and digital files throughout the project as material moved in and out of the Modern Political Archives, Media & Documentary Projects, vendors, and the J.D. Williams Library.

Digital Conversion

The University of Mississippi's Media & Documentary Projects (MDP) unit played an integral role in the grant, restoring and digitizing most of the analog recordings. Although other members of the department participated in the project, key personnel were Dr. Andy Harper (director of MDP), Micah Ginn, and Rebecca Batey (hired as MDP's full-time project manager for the grant).

The grant proposal had originally proposed a workflow that prioritized collections open to the public, followed by those collections with restricted access. However, efficiency and delays in delivery of essential equipment dictated an approach that focused more on formats rather than collections.

MDP restored original recordings when necessary and created a set of master and access digital copies for each recording. Master files of audio recordings are preserved as uncompressed .wav files (96khz at 32-bit). Access copies for audio recordings are mp3 files. Except for VHS tapes, masters of audiovisual recordings are preserved as uncompressed .mov files. Access copies for audiovisual recordings are .mov ProRes4444 video files. Since the project encompassed a large number of VHS tapes that were largely recordings of commercial television broadcasts, the master files for VHS tapes were downgraded from uncompressed .mov to 640 x 480 QuickTime movie DV NTSC 48khz in order to save space on the primary storage server.

Due to lack of necessary equipment on campus, three separate vendors completed digital conversion on specific recording formats: 35mm film, quad tapes, and 16-inch 78rpm records. Towards the end of the grant, MDP also concluded that a batch of 47 Beta tapes, VHS tapes, umatic tapes, and 16mm films in extremely poor condition required the expertise and equipment of an outside vendor.

Members of the Department of Archives & Special Collections handled the digital conversion of a small number of analog recordings (78rpm and LP records) as well as any born-digital material. Master copies of born-digital recordings are the original format with derivatives created depending upon concerns for long-term sustainability. Access copies of born-digital recordings are the same as those for analog material.

Metadata

A separate spreadsheet for each collection involved in the grant was maintained on the library's SharePoint system, granting access to any member of Modern Political Archives, Media & Documentary Projects, Archives & Special Collections, or Library IT involved in the project. Each spreadsheet captured three standard sets of information. The first portion comprised administrative details: a list of all the unique identifiers for that collection, tracking when original materials were checked out and back into the Modern Political Archives, whether the master and access copies were uploaded to the library server, and the final physical location of the original recording.

A second section captured preservation metadata on the original recordings (format, commercial producer of the format, and a description and transcript of any labels on the recording or their original container) as well as the conversion process (conversion steps, any deviations to the standard conversion process, equipment and software used, digital file size of the master, file format of the master, file format of the access copy, whether a derivative copy existed with a description and explanation of the process, conversion date, and name of the responsible staff member). MDP staff completed conversion metadata for any analog recordings while archives staff compiled conversion metadata for record discs and born-digital material.

The third section of the spreadsheet concentrated on descriptive metadata: title of the recording; time length; rights information; date of the original recording; creator; contributors; Library of Congress subject headings; a narrative description of the content; type of recording (audio or video); language used; access copy file size; and staff member responsible for descriptive metadata. Political Papers Archivist Leigh McWhite compiled descriptive metadata for all recordings (454) in the open collections.

For recordings in collections currently closed to researchers, the archives adopted a more abbreviated description of content that relied upon preexisting recording labels or a brief review of unidentified material. Mid-project, a surplus in grant funds allowed the archive to hire graduate student workers to begin a more extensive content metadata review of recordings in the Trent Lott Collection. They captured content metadata for 337 Lott recordings before the end of the grant. At the request of the archive, Senator Lott has agreed to amend the donor agreement to permit researcher access to 317 of the 337 described recordings (several recordings were duplicates). These recordings will be available on CONTENTdm as a digital collection by November 2011.

Preservation

The scope of the grant included the adoption of measures to ensure the long-term preservation of both the original analog and digital recordings and their digitized conversions. Modern Political Archives staff placed original recordings in archival containers and stored them in environmental conditions appropriate for the specific medium. For example, 16mm and 35mm film went into archival canisters placed into freezer bags with silicon packets and stored in a freezer set at 0°F. Other mediums inhabit the Archives & Special Collections Cold Room whose separate HVAC system maintains a 40°F temperature. A few formats, such as records and cassette tapes, remain in the main stacks of the archives.

To assist with the preservation of the new digital files, the master and access copies reside on a 48 terabyte RAID array server (files from the grant occupy 22.77 terabytes of that space with 14.25 terabytes of usable space remaining). Backup for the server relies upon a redundant SAN located in a separate physical location with data replicated across the network as well as periodic copies to tape. In addition, the library also retains copies on the portable drives used to transfer the files from MDP to the RAID server. Finally, the library has acquired data integrity software to safeguard against data corruption and loss. Periodically, archives and IT staff will assess the current state of technology and determine if migration to new software or equipment is necessary.

Digital Collections

The recordings from ten of the fourteen collections involved in the grant are now accessible as digital collections on the department's CONTENTdm site. This tally includes nine collections whose papers were already open to researchers as well as a congressional collection whose processing will begin within the next two years. As discussed in the grant proposal, all recordings from collections not subject to time restrictions in the donor agreement are now available to researchers. In addition, a portion of the recordings in the closed Trent Lott Collection will soon be made available as a digital collection on CONTENTdm.

At this time, Internet users may access descriptions for all 595 recording files provided on CONTENTdm (this number is higher than the 454 count of items in open collections because several of the original recordings contained footage on a variety of subject matters; these were subdivided and represented as distinct recordings in the digital collections for ease of use by researchers). Of this total, 234 recordings are available on the web. Copyright concerns limit access of 361 recordings to computer terminals in the J.D. Williams Library.

To create these digital collections, Digital Initiatives Librarian Jason Kovari uploaded selected metadata from the project spreadsheets into CONTENTdm, cleaned metadata and controlled headings, and organized files into the appropriate directory structure on the streaming and storage servers. He also created hinted mp4 files from the access copies to work on the library's QuickTime streaming server. Web Services Librarian Debra Riley-Huff built each digital collection's home page and the initial user interface.

Outreach

The grant proposal stated that most outreach efforts would take place after the grant concluded on 31 May 2011. The following promotional tasks have already occurred:

- Creation of a grant web page on the Modern Political Archive site (http://www.olemiss.edu/depts/general_library/archives/political/imls-grant.html).
- Online postings of ten digital collections containing recordings from collections currently open to researchers.
- Completion of the documentary "Saving History: Preserving the Recordings of the University of Mississippi's Modern Political Archives" (available via a link on the grant web site, Media & Documentary Projects web site, and shown several times on local public television station Channel 99).
- University of Mississippi press release issued on 8 July 2011.
- Announcements submitted for future issues of *Journal of Mississippi History*, *Mississippi Libraries*, and the *Society of Mississippi Archivists Newsletter*. Announcement appears in the Spring 2011 issue of the *Congressional Papers Roundtable Newsletter* (pp. 13-14) available online at <http://www2.archivists.org/sites/all/files/CPRSpring2011.pdf>.
- Announcements posted to the UM library listserv and a listserv maintained by the U.S. Senate archivists for congressional staffers interested in archival matters.
- Letters sent to all donors (or family members) of collections affected by the grant.
- Emails sent to frequent users of specific congressional collections informing them that the recordings were now available.
- Announcements circulated on the J.D. Williams Library listserv.
- Revised or created online finding aids for all open collections involved in the grant (providing information about the grant and links to the digital collection).
- Collection information updates supplied to the online [Congressional Biographical Directory](#) and the [National Archives index of repositories with congressional collections](#).
- Established MARC records for all collections.
- Former Digital Initiatives Librarian Jason Kovari discussed the grant in part during his panel presentation at the Rare Books and Manuscripts Section (RBMS) of the Association of College and Research Libraries (ACRL) conference panel "Digitization on a Shoestring" on 22 June 2011.

Description of Project Audience:

The intended beneficiaries of the grant are researchers: undergraduate and graduate students at the University of Mississippi; scholars from around the world and in a variety of disciplines who will utilize the material while writing theses, dissertations, journal articles, and books; journalists conducting background research for stories; teachers seeking primary sources for use in class lessons; and the casual layman whose interest is piqued by the description of a collection or specific recording.

None of this access is possible if the recordings in the project are not described, promoted, and made available in a user-friendly format. By April 2011, descriptions of all the recordings in the open collections (454) resided on the department's CONTENTdm site for digital collections. Researchers could access 234 separate recordings on the Internet, while 361 recordings were limited by copyright to IP-restricted library computer terminals. By mid-May 2011, all of the open collections in the grant possessed a MARC record in the library catalog and new or revised online collection finding aids describing the recordings and providing links to the digital collections.

Page views as of 1 August 2011 to the following grant-related websites:

- 71 Grant web page on the Modern Political Archives website
- 51 Thomas G. Abernethy Digital Collection
- 273 James O. Eastland Digital Collection
- 127 Robert F. Kennedy Speech Digital Collection
- 60 League of Women Voters of Mississippi Collection
- 169 Nash and Taggart Digital Collection
- 43 Ed Perry Digital Collection
- 65 Presidential Debate Digital Collection
- 67 Southern Women Legislators Digital Collection
- 204 Jamie L. Whitten Digital Collection

The documentary "Saving History: Preserving the Recordings in the University of Mississippi's Modern Political Archives" has 76 video loads and 30 video plays.

Project Analysis:

Achievements

The project's goals included digitizing all recordings in the Modern Political Archives; adopting preservation measures for both the analog and digital recordings; and providing greater accessibility to those recordings in collections open to researchers. By the end of the grant, all 3,896 recordings in the archives were digitized; all original and digital recordings were appropriately stored; and all recordings in open collections (454) were available to the public online. In addition, a donor has agreed to make available 317 recordings from a collection currently closed to researchers.

Lessons Learned

- Almost every task takes much longer to complete than anticipated. This characterization includes identification, restoration, digitization, review of material for descriptive metadata, and tracking of original recordings and digital files.
- Computer vendors do not always provide accurate information about the capabilities of their equipment. For example, the Apple systems engineer assured Library IT that the streaming server would be able to play mp3 audio files. While this is technically correct, the unspoken caveat was that the mp3 files must be in a playlist. A delivery system based on playlists did not meet the needs and goals of this project. Instead, hinted mp4 files were used because they could be referenced and streamed individually from the CONTENTdm record.
- Delays in delivery or installation of equipment are costly in terms of workflow – build buffers into the timeline for the unexpected. Order, install, and begin working with the new equipment as early as possible.
- Backing up digital files should be an integral component in estimating equipment needs and expenses.
- Grant budgets are complicated and different from other university budget systems. Initiate contact early in the process with liaisons in the Office of Research and Sponsored Programs, Accounting, and Procurement.

Project Impact

The primary strategic goal of the Modern Political Archives (MPA) is to completely process and make available to the public all collections not currently constrained by donor-mandated time restrictions. One very large hurdle that hindered the repository from reaching this objective was the existence of large numbers of audio and audiovisual recordings, many of which were inaccessible due to condition, format, and lack of essential equipment and expertise. Not only are all the recordings now digitized, all recordings in the open collections are described and accessible to researchers in digital collections. The project has drastically reduced the archives' backlog of unprocessed material, and the repository will likely attain its primary strategic goal within the next five years. In addition, the digitization of recordings in the closed collections ensures that when time restrictions are eventually lifted the material will be available to researchers in a timely fashion.

A second strategic goal of MPA concerns the overall preservation of its holdings. In 2004, the Department of Archives & Special Collections received a National Endowment for the Humanities grant to hire a preservation consultant. His report indicated that many of the department's audio and audiovisual recordings were at risk. Since then, the university has implemented several improvements. MPA now occupies a renovated building with a new roof and HVAC system as well as a Cold Room for images and recordings with a separate HVAC system maintaining the environment at 40°F. With the grant, MPA extended these preservation measures to housing all original recordings in appropriate storage containers and acquiring a 73 cubic foot freezer for 16mm and 35mm film storage.

Grant funds also contributed to the institutional capacity of the archives by purchasing computer hardware and software to ensure the long-term preservation of all digital files, to reformat born-

digital recordings to archival specifications, and to create access copies. These tools will benefit not only MPA but the entire department of Archives & Special Collections which also includes the Blues Archive and the Southern Media Archive. The Blues Archive is the largest research facility on the music of the blues, containing both commercial and non-commercial recordings of performances as well as oral histories. The Southern Media Archive possesses home movies, documentary film footage, and oral interviews about the South.

Finally, the grant enabled Media & Documentary Projects to purchase cameras, computers, and other equipment to make high-quality digital conversions of various analog recording formats. This increase in capability will benefit not only the rest of the Archives & Special Collections but also other units on campus that hold historic recordings.

Plans for Continued Work:

The grant will serve as a model project in three separate areas: the preservation and digitization of recordings obtained by the Modern Political Archives in the future; the development of an electronic records preservation program for the Modern Political Archives; and future deliberations on preservation of recordings scattered across the campus of the University of Mississippi.

As the Modern Political Archives acquires new collections, it will utilize the increased institutional capacity provided by the grant to both preserve and digitize recordings soon after receipt. Protocols with regards to conversion and the capture of metadata will mirror those developed in the grant. Data acquired while working on the grant will also provide reliable statistics for estimating costs, time, labor, and server space in any future projects that involve recordings.

The Modern Political Archives and the rest of Special Collections anticipate the receipt of future collections containing born-digital material and must soon develop an electronic records preservation program. The grant has provided the archive with relevant experience with regards to technology and service vendors as well as managing a large-scale project with an extensive technological scope.

The grant may also stand as an exemplar by serving as the basis for a campus-wide discussion on preservation of institutional recordings maintained by a variety of departments and groups.

Finally, outreach will continue on both the grant and the newly available resources. The Archives & Special Collections has scheduled a program open to the general public at noon on 15 September 2011. Dr. Leigh McWhite, Dr. Andy Harper, and Micah Ginn will show the documentary "Saving History: Preserving the Recordings in the University of Mississippi's Modern Political Archives," play additional footage from digitized recordings, and discuss details of the grant and the historical value of the material. The Overby Center for Southern Journalism and Politics will host a similar event on 8 November 2011 with the emphasis on recordings that pertain more specifically to political journalism. The documentary will also

continue to air on Channel 99, a public access television station in Oxford, Mississippi. Further promotion on the project will occur in a future issue of the J.D. Williams Library newsletter *Keywords* and announcements posted on the following listservs: UM campus, the Congressional Papers Roundtable, and the Society of American Archivists.