

## **Narrative**

The University of South Carolina (USC) Libraries Digital Collections Department will collaborate with USC's South Caroliniana Library (SCL) and the South Carolina Department of Archives and History (SCDAH) to digitize approximately 100,000 images of historic South Carolina newspapers over the next two years (2011-2013). The South Carolina Digital Newspaper Program (SCDNP) will: rely on the successful workflow developed over the first two years of NDNP funding, the guidance of the advisory board, and the content knowledge of SCL to select newspapers that represent the state's geographic, economic, and cultural diversity; digitize these titles with the assistance of Apex CoVantage (Apex), the project's digitization vendor; and successfully deliver the digital surrogates to the Library of Congress (LC).

## **History and Scope of the Project**

### Title Selection

In August 2009, the Co-PIs convened an advisory board to select newspaper titles. The Co-PIs provided the board members with selection criteria emphasizing the quality of microfilm, the availability of content, and the goal of representing geographic, ethnic, and cultural diversity. Board members also received a list of titles microfilmed by the SCL for the United States Newspaper Project. They submitted their recommendations which were tallied. The titles were chosen by the number of votes. The board selected 24 titles (comprising 298 reels) published between 1860 and 1922 to be digitized during 2009-2011 (Phase 1). For a complete list of titles, see section one of Appendix A.

### Staff

In September 2009, the Digital Librarian and Co-PI hired a Project Manager and two Metadata Assistants to complete the work of SCDNP. These individuals had a strong background in librarianship, particularly in the digitization of rare and historic materials. The Digital Librarian and Co-PI completed several workshops to prepare her for large scale digitization projects, including the MetaMorphosis institute at the University of Kentucky. The Project Manager had spent two years in the Digital Collections Department prior to transitioning to work full time on SCDNP. To complement his skills, he also attended the MetaMorphosis institute in October 2009. One of the Metadata Assistants had completed an internship in the department before joining SCDNP.

### Second Generation Microfilm

In October 2009, the Project Manager contacted the micrographics manager at SCDAH, which houses the master negatives, to request that they produce the silver negative copies required for the project. Since SCDAH preferred to duplicate all of the reels at one time to simplify the retrieval process, the micrographics manager requested a list of all newspaper titles upfront before any duplicating occurred. In February 2010, SCDAH duplicated and delivered 287 reels of second generation microfilm to the SCDNP staff.

The Project Manager also worked with the LC Duplication Services Office and the New York Historical Society to obtain several reels of African-American newspapers selected by the advisory board. In September 2010, the Duplication Services Office confirmed that they would deliver five reels of second general negative microfilm to the SCDNP staff in October 2010. That same month, the New York Historical Society duplicated and delivered a reel. The staff will include the titles contained on these reels in Phase 1 of the program.

### Vendor Selection

SCDNP staff completed the Request for Proposal (RFP) process in November 2009. After reviewing six proposals, an evaluation committee of library and project administrators selected Apex to create the derivative files for the first four years of the program, which includes Phase 1 and 2011-2013 (Phase 2). For a letter of commitment from Apex, see Appendix C.

### Film Inspection, Workflow, and Deliverables

Starting in September 2009, the Metadata Assistants completed a comprehensive analysis of each microfilm reel. They recorded bibliographical, structural, and technical metadata for every image on each reel. In the process, they discovered a title change not represented in the *Chronicling America* database and identified discrepancies (missing pages, duplicate pages, etc.) in the MARC records and on the reels. They also determined the total number of images for each reel and each batch. Initially, the staff reviewed both the negative and positive reels, but because they found so many unexplained discrepancies between the reels, they decided to work exclusively from the second generation negative reels, taking care not to scratch the negative.

In February 2010, the Project Manager submitted a detailed list of newspaper titles to LC for its approval. LC authorized the list in March 2010. The cataloging librarian collaborated with Vanessa Mitchell, serial cataloger at LC, to create and update MARC records for the *Laurens Advertiser* and *The Intelligencer (Anderson, S.C.)*. As an added bonus, the inspection process helped the staff to identify and correct errors and omissions in USC's online catalog.

Metadata deliverables to Apex are on track with the Phase 1 time table. To date, Metadata Assistants have analyzed and created batch, reel, and issue metadata for 149 reels of microfilm, which comprise nine batches and approximately 84,000 images. Staff will inspect and create metadata for the remaining 16,000 images and their corresponding data, which will be approximately 30 more reels, on two additional batches by the end of February 2011. Staff members are on target to complete NDNP requirements by June 30, 2011.

Upon receiving digitized images and corresponding XML data from Apex on external hard drives, SCDNP staff verified the batch and performed quality control outlined in the Phase 1 grant application. After the Project Manager reconciled any discrepancies that existed in the data, SCDNP staff sent the batch to LC for ingestion into *Chronicling America*. Through July 2009, SCDNP encountered some delays in delivering digital content to LC. The staff changed the metadata over time, making minor adjustments to data to conform to LC technical specifications. Apex also had difficulties reconciling their production

software with NDNP technical specifications. LC required awardees to have submitted 25% of the content by July 31, 2010, but SCDNP was only able to submit 10% of content at that time.

Starting in September 2010, SCDNP began delivering monthly batches to LC. Staff members have created an aggressive schedule of deliverables which includes delivering multiple batches to LC in January, February and April 2011. This schedule will allow SCDNP staff to deliver all content for Phase 1 to LC by the end of April 2011. For Phase 1's delivery schedule, see Chart A below.

Chart A: Schedule of Deliverables, Phase 1					
Batch Name	Approximate Number of Images	Data Delivered to Apex	Expected Date of Delivery to Apex	Batches Delivered to LC	Expected Date of Delivery to LC
batch_scu_alexivaalentine	9435	2010-03-19		2010-07-21	
batch_scu_brandonblaze	9716	2010-03-19		2010-09-20	
batch_scu_carlaco	9875	2010-04-07		2010-10-12	
batch_scu_danastjames	9846	2010-04-07		2010-11-15	
batch_scu_evadeestruction	9892	2010-06-21			2011-01-14
batch_scu_felicitylane	8345	2010-06-21		2011-01-05	
batch_scu_gnomiemoore	7557	2010-11-18			2011-02-25
batch_scu_heddalettu	9619	2010-11-15			2011-02-04
batch_scu_imonidevore	9150	2010-12-21			2011-03-18
batch_scu_jinx	8290		2011-01-31		2011-04-08
batch_scu_kikideville	8290		2011-02-25		2011-04-29
<b>Total</b>	<b>100015</b>				<b>2011-06-30</b>

In September 2010, the Project Manager created a program wiki to assist with tracking batches throughout the workflow process. It allows staff members at SCDNP, Apex, and LC to provide feedback, clarify discrepancies, and update each other of the status of particular batches. The wiki complements weekly conference calls between SCDNP and Apex. During the conference calls, staff members discuss a wide array of topics, including: exceptions that may occur with the content on future batches, technical specifications, errors from previous batches delivered to USC, issues that have developed during the digitization process, and future delivery dates.

The Project Manager preserves the digital content in two steps. First, he temporarily stores batch data waiting to be approved by LC on an external hard drive. After LC accepts the batch and ingests it into *Chronicling America*, he submits the data into the MetaArchive Cooperative, a distributed digital preservation strategy that uses LOCKSS (Lots of Copies Keep Stuff Safe) software. USC Libraries has been part of the cooperative since 2009. This approach allows the SCDNP to store its data on secure file servers in multiple locations in a geographically distributed network. SCDNP staff members also have local access to this data in the event that they needed to access it for production purposes.

SCDNP staff will reach the 100,000 image limit for Phase 1 after inspecting, digitizing, and delivering microfilm reels for 19 newspaper titles (comprising 179 reels). Staff members will carry over the remaining five newspaper titles (comprising 119 reels) to Phase 2 of the project. For a list of newspaper titles completed in 2009-2011, see section two of Appendix A. For a list of newspaper titles carried over from Phase 1 to Phase 2 of the project, see section three of Appendix A.

To date, the cataloging librarian researched, wrote, and delivered four scope notes to NEH and LC for newspaper titles included in Phase 1. These deliverables meet the deadlines outlined in the time table provided in Phase 1 of the grant application.

### Outreach

SCDNP staff members have utilized several approaches to distribute information about the program to the general public. USC Libraries prepared a press release at the launch of SCDNP and received press coverage from across the state. Seeking details on the program and its goals, reporters from five newspapers interviewed SCDNP and USC Libraries staff members. Furthermore, Palmetto People, a local cable program highlighting events in South Carolina, invited the the Digital Librarian and Co-PI to appear in an episode to discuss SCDNP. The episode aired in May 2010.

In July 2010, USC Libraries launched the SCDNP Web site, which contains a general overview of the project, details on the newspaper titles selected for digitization, contacts for individuals seeking more information, and grant documentation. The Project Manager maintains it. The SCDNP blog links to the Web site. The blog provides users with updated progress reports from SCDNP staff, announces upcoming public events, and contains posts that draw attention to specific articles from historic South Carolina newspapers in *Chronicling America*.

SCDNP staff members have also promoted the project through several public presentations. The Digital Librarian and Co-PI spoke about SCDNP at two state-wide conferences in the Winter and Fall of 2010. In September 2010, Deborah Thomas visited USC to discuss the SCDNP. While here, Thomas gave a public presentation on NDNP and *Chronicling America*. The Project Manager introduced the SCDNP Web site and blog to the audience and also provided the list of newspaper titles selected for Phase 1 of the project. In October 2010, the Project Manager and Metadata Assistants held a session on SCDNP at the annual conference of the South Carolina Library Association. This session reviewed the history of NDNP, outlined the workflow of SCDNP, listed the newspaper titles to be digitized, and gave a live demonstration of *Chronicling America* as well as the SCDNP website and blog. That same month, the Metadata Assistants spoke about digital librarianship and SCDNP to teenagers at the 2010 Lexington One School District (Lexington, S.C.) Career Showcase. For more details on SCDNP Outreach, see Appendix B.

## Newspaper Digitization Efforts in South Carolina

Only in recent years have institutions in South Carolina begun to explore the possibility of digitizing historic newspapers. USC was one of the first institutions in the state to digitize a newspaper title. In 2006, the Digital Collections department digitized *The New South* (Port Royal and Beaufort, S.C.) and made the digital surrogates freely accessible via the department's CONTENTdm content management system. In addition to USC's efforts, the Georgetown County Public Library (GCPL) has established a collection of newspapers online. GCPL's Georgetown County digital newspapers range from the early 1800s to 1899. Their collection includes the following titles: the *Winyah Observer*, the *Pee Dee Times*, the *True Republican*, the *South Carolinian*, the *Winyah Intelligencer*, the *Georgetown American* and the *Georgetown Union*. The GCPL delivers this content through their CONTENTdm content management software and makes it freely available to those with Internet access. SCDNP staff provided this list of newspaper titles to the advisory board and encouraged the committee to select titles that had not yet been digitized.

### **Methodology and Standards**

SCDNP has several advantages in starting Phase 2 of NDNP. Staff will benefit not only from the expertise gained after completing Phase 1 of NDNP, but also from the expanded resources available to the project. SCDNP's home department, the Digital Collections department at USC Libraries, moved into the recently-opened Ernest F. Hollings Special Collections Library in June 2010. The new facilities offer more physical room and upgraded equipment. Through NEH funds, the Metadata Assistants acquired new laptop computers with desktop monitors. The department also expanded its scanning capabilities by receiving a Zeutschel Omniscan 14000 AO overhead scanner, which will enhance SCDNP's ability to digitize disparate hard-copy issues of newspaper titles selected by the advisory board.

#### Access to Master Negative Microfilm

SCDNP staff will follow the same procedure used in Phase 1 to duplicate second generation microfilm for Phase 2. Micrographics technicians at SCL film the newspapers and check each microfilm reel before sending it to SCDAH. Technicians at SCDAH check the quality of each reel. If the reel does not meet established preservation standards, technicians at SCL will re-shoot the papers and include the new images at the beginning of the reel. Once approved, the master negative microfilm is housed in SCDAH's microfilm vault. SCDNP will continue this longstanding working relationship. Staff will coordinate with SCDAH to duplicate second generation microfilm for Phase 2 of the program. For a letter of commitment from SCDAH, see Appendix C.

The process of duplicating second generation microfilm will go faster in Phase 2. A substantial amount of the microfilm that SCDAH duplicated from SCDNP remains to be rolled over from Phase 1 to Phase 2. SCDNP staff will also begin inspecting microfilm and creating metadata earlier than in Phase 1. For details on the rollover of microfilm from Phase 1 to Phase 2, see section two of Appendix A. In addition to these reels, SCDNP staff will work with SCDAH to duplicate approximately 50 reels to include in Phase 2 of the program.

## Title Selection

In August 2010, staff members met with the advisory board again to discuss the status of the project and plan for Phase 2. The advisory board made three decisions regarding newspaper selection. They agreed to reselect the five newspaper titles (comprising 119 reels) remaining from Phase 1 for inclusion in Phase 2. See section three of Appendix A for a list of newspapers from Phase 1 that will carry over to Phase 2). They authorized staff to digitize four newspaper titles (comprising 17 reels) published prior to 1860. See section four of Appendix A for a list of these titles. The advisory board selected two additional newspaper titles (comprising 31 reels) to include in Phase 2. See section five of Appendix A for a list of these new titles. When selecting titles, the board members used the selection criteria and methodology created by NEH and LC and referenced in the Phase 1 grant proposal.

In addition to selecting newspapers, committee members and SCDNP staff also discussed the future composition of the advisory board. All but two of the members will remain on the advisory board for another year. One member, Libby Young, requested that staff replace her with Steve Richardson. Richardson is Coordinator of Reference Services at Furman University Libraries and has experience providing reference services with historic South Carolina newspapers. Staff also elected to remove John Hammond Moore from the committee as his health did not permit him to participate actively in the project. For letters of commitment from advisory board members, see Appendix E. For a list of advisory board members with brief biographies, see the Consultants and Advisory Board Members section.

## Digitization and Deliverables

The digitization workflow process for Phase 2 of the program will follow the steps outlined in Phase 1's grant application. The workflow will consist of six components: preliminary film inspection, metadata creation, final film inspection, hard-copy digitization, quality review of digital content, including verification of batches, and digital preservation.

SCDNP staff members will conduct a preliminary inspection of the second generation negative film. They will create batch, reel, and issue metadata for every image on the reel, while ensuring that the microfilm readers do not damage or scratch the reels. In doing so, they will gain a detailed understanding of each title, which will allow them to identify patterns or runs, determine the total number of images on a particular reel, and identify irregularities such as missing or duplicate images. They will also confirm the availability of print newspapers that can fill in gaps in the microfilm. They will coordinate with the librarians at SCL and in the Digital Collections department to digitize the original newspapers for inclusion in the SCDNP.

Once the metadata specialists create metadata for approximately 10,000 images, they will work with the Project Manager to perform the final film inspection. They will rework through each reel in the respective batch, paying close attention to particular problems identified in the preliminary inspection and metadata creation stages, and will reconcile any issues. Upon completion, the Project Manager will assemble the reels in the batch, ship the material to Apex for digitization, and provide the metadata for the batch on the SCDNP wiki.

Apex will digitize the reels, create the derivative files, and ship them back to SCDNP on an external hard drive. The Project Manager will review the quality of the data in multiple steps. First, he will check problems identified in the inspection process against the xml data created by Apex. If discrepancies exist, he will reconcile and make appropriate changes (including altering xml data and revalidating the issue using the command line interface). Using the DVV, the Project Manager will review a sample (between 5% and 10% of all issues in the batch) to ensure that the xml metadata corresponds with the relevant images. Lastly, he will verify the batch using the DVV before sending it to LC for inclusion in *Chronicling America*. SCDNP staff will use the wiki to clarify questions with Apex and to leave feedback for future batches. After LC accepts the batch for ingest into *Chronicling America*, the Project Manager will work with Tony Branch, Systems Librarian, to deposit the approved batch data into the MetaArchive cooperative for preservation.

For Phase 2, the SCDNP staff members will implement two additional tools to enhance the quality review process. With the assistance of Co-PI Kate Boyd and Systems Librarian Alma Creighton and Web Designer Jason Steelman, staff will adapt Washington State's QA Report software to compare the metadata created by the Metadata Assistants with the METS XML output created by Apex. Boyd, Creighton, and Branch will also assist the Project Manager with installing the LC's open-source Digital Newspaper Viewer software to view a sample of the digital content prior to it being ingested by LC.

### Outreach

SCDNP staff will continue to promote the program by making public presentations and updating users via the Internet. Presenters will include Kate Boyd and Craig Keeney (the program's co-PIs), Santi Thompson (SCDNP Project Manager), and Ashley Knox and Virginia Pierce (SCDNP metadata and outreach specialists). SCDNP staff will rely on Rebecca Gettys, USC Outreach Librarian, to market presentations with various media outlets and on the Web. Staff will also collaborate with Gerri Corson, USC Assessment Librarian, to create instruments to measure the effectiveness of public programming.

During Phase 2, SCDNP will expand its outreach to educators and the general public around South Carolina. To accommodate this increase, current Metadata Assistants will take on additional responsibilities. One metadata assistant, Ashley Knox, will collaborate with K-12 educators to integrate content from *Chronicling America* into the curriculum for South Carolina public schools. Knox will interact with several stakeholders to reach educators. Within USC Libraries, she will work closely with a K-12 educator hired by USC Libraries to make NDNP content compatible with education standards in South Carolina. Knox will also team with the South Carolina Department of Education to create working relationships with educators and coordinate sessions at K-12 education conferences to expand the program's exposure with educators. The goal is to increase the usage of SCDNP content by K-12 educators and to enhance the skills of educators to identify primary source materials in *Chronicling America*.

Virginia Pierce will assume the responsibility of coordinating outreach to the general public. She will use a variety of approaches, including updating the public by way of social media outlets, organizing public programming, and highlighting content in *Chronicling America* via the program's blog. SCDNP staff will

use Deborah Thomas’ public presentation on NDNP as an early model for reaching out to the general public. Building on this event, Pierce will identify appropriate venues including public libraries and cultural events to present the program to the public. She will also work closely with the South Carolina Digital Library (SCDL), a statewide digital gateway which ties together academic special collections, archives, museums, public libraries, and other cultural heritage institutions. Pierce will utilize relationships created by SCDL and SCSL’s infrastructure to disseminate information about NDNP and *Chronicling America* as well as plan public programming. The goal is to increase the usage of SCDNP content by the general public and to enhance the skills of researchers so they can effectively utilize the information in *Chronicling America*.

### Work Plan

The work plan for Phase 2 of SCDNP closely resembles the work plan submitted to NEH in 2008. Key changes include the implementation of outreach programming and the alteration of the delivery schedule of second generation duplicate microfilm to LC. Since SCDNP staff will continue working with Apex, staff members anticipate that the project will avoid some of the initial hurdles it faced during the startup of Phase 1. For full details of Phase 2’s workflow, see Chart B below.

Chart B: Work flow, Phase 2									
Description	Prior to Phase 2	1. S-N 11	2. D-F 11/12	3. M-M 12	4. J-A 12	1. S-N 12	2. D-F 12/13	3. M-M 13	4. J-A 13
Advisory Board makes decisions	Aug 2010					X			
Microfilm analysis performed		X	X						
SCDAH duplicates microfilm		X	X						
Batch, reel, and issue metadata created by SCDNP staff		X	X	X	X	X	X		
Microfilm and metadata sent to Apex		X	X	X	X	X	X		
Files scanned, xml created, and batches validated by Apex			X	X	X	X	X	X	
Quality review and verification performed by SCDNP staff			X	X	X	X	X	X	X
Sample batch sent to LC			X						
List of selected titles sent to LC			X						
Batches sent to LC			X	X	X	X	X	X	
25% of content due to LC					X				



Outreach to K-12 educators		X	X	X	X	X	X	X	X
Outreach to the general public		X	X	X	X	X	X	X	X
Scope notes created and sent to NEH		X	X	X	X	X	X	X	
Catalog records updated		X	X	X	X	X	X		
Attend NDNP Conference	Aug 2011					X			
Federal cash transactions delivered			X	X	X	X	X	X	X
Second generation microfilm sent to LC								X	X
Reports sent to NEH			X		X		X		X

### Staff

SCDNP staff will consist of one Project Manager and two metadata and outreach specialists. The metadata assistant positions from Phase 1 of the program will be eliminated and replaced with two metadata and outreach specialists for Phase 2. Their expanded roles will include coordinating outreach efforts to K-12 educators and the general public. The Project Manager will spend 100% of his time and the metadata and outreach specialists will spend 30 hours per week of their time working on the project. USC Libraries will also offer assistance to the SCDNP through the cost sharing of other faculty and staff members. For specific job responsibilities, see the list below. For resumes for each staff member, see Appendix D.

#### Co-Principal Investigators

**Kate Foster Boyd** (M.L.I.S.), Digital Librarian and Coordinator, SCDL, will cost share 25% of her time overseeing SCDNP. Her responsibilities will include: tracking SCDNP budget, coordinating digital preservation efforts, adapting Washington State’s QA Report software for metadata review, implementing LC’s open-source Digital Newspaper Viewer software for quality review, and participating in outreach efforts.

**Craig M. Keeney** (M.L.I.S., M.A., Public History), Catalog Librarian, will cost share 30% of his time updating MARC records for newspaper, writing scope notes, and participating in outreach efforts.

#### SCDNP Staff

**Santi Thompson** (M.L.I.S., M.A., Public History), SCDNP Project Manager, supported by NEH Funds, will spend 100% of his time coordinating all facets of the program’s operation. He will oversee microfilm inspection and metadata creation, track shipments made to the Apex and LC, communicate on a regular basis with Apex, LC, and NEH, perform quality review and reconciliation of NDNP data, coordinate public

programming with other staff members, and perform other duties as assigned by the Co-Principal Investigators.

**Ashley M. Knox** (M.L.S., B.A., English with Teacher's License), SCDNP Metadata and Outreach Specialist, supported by NEH Funds, will spend 30 hours per week of her time inspecting microfilm, creating batch, reel, and issue metadata, performing quality control of NDNP data, and coordinating outreach to K-12 educators to make SCDNP content compatible with education standards in the state.

**Virginia A. Pierce** (M.L.I.S.), SCDNP Metadata and Outreach Specialist, supported by NEH Funds, will spend 30 hours per week of her time inspecting microfilm, creating batch, reel, and issue metadata, performing quality control of NDNP data, coordinating public programming to increase exposure to the program, and utilizing social media to curate the collection and advertise updates in the program.

#### USC Libraries Staff

**Maggie E. Bergmans**, Administrative Assistant, will cost share 10% of her time to coordinate expenses made on behalf of the program.

**Tony Branch**, Systems Librarian, will cost share 10% of his time to implement LC's open-source Digital Newspaper Viewer software for quality review.

**Gerri Corson** (M.L.I.S.), Assessment Librarian, will cost share 10% of her time to assess the outcomes of public programming and grant objectives.

**Alma Creighton** (M.L.I.S.), Systems Librarian, will cost share 5% of her time to assist with digital storage and preservation, to adapt Washington State's QA Report software for metadata review, and to implement LC's open-source Digital Newspaper Viewer software for quality review.

**Sherry Feggans** (B.A., Business Administration), Business Manager, will cost share 10% of her time to coordinate expenses made on behalf of the program.

**Rebecca Gettys** (M.L.I.S.), Outreach Librarian, will cost share 10% of her time to assist with publicizing the program and coordinating outreach efforts.

**Mary Coit Horton** (M.L.I.S., M.B.A.), Administrative Manager, will cost share 10% of her time to assist with grant administration.

**Patricia Puckett Sasser** (M.L.I.S., M.M., Musicology), Project Manager, will cost share 10% of her time to supervise the digitization of newspapers from their originals for inclusion in Phase 2 of the program.

**Jason Steelman** (B.A., Media Arts), Web Designer, will cost share 10% of his time to adapt Washington State's QA Report software for metadata review.

**Allen H. Stokes, Jr.** (Ph. D., History), Microfilm Supervisor, will cost share 10% of his time to assist with coordinating microfilm selection and duplication.