



NATIONAL ENDOWMENT FOR THE

Humanities

DIVISION OF PRESERVATION AND ACCESS

Narrative Section of a Successful Application

The attached document contains the grant narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the Division of Preservation and Access application guidelines at <http://www.neh.gov/grants/preservation/national-digital-newspaper-program> for instructions. Applicants are also strongly encouraged to consult with the NEH Division of Preservation and Access staff well before a grant deadline.

Note: The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: West Virginia Digital Newspaper Project

Institution: West Virginia University Research Corporation

Project Director: John Cuthbert

Grant Program: National Digital Newspaper Program

PROJECT NARRATIVE

History and Scope of the Project

West Virginia's Eastern Panhandle was the birthplace of newspaper publishing within the present-day borders of the state. Three newspapers were founded there before 1800: the *Potomac Guardian and Berkeley Advertiser* in Shepherdstown in 1790; the *Impartial Observer* in 1797 in Shepherdstown; and the *Berkeley Intelligencer* in 1799 in Martinsburg.

In the early years of the 19th century, newspapers emerged in several other areas of the state. The *Monongalia Gazette* was founded at Morgantown in 1804. The *Wheeling Repository* was established three years later, and Clarksburg's *Bye-Stander* three years after that. The *Wellsburg Gazette* and Weston's *Western Star* began in 1814 and 1820, respectively. The *Kenhawa Spectator* also began publication in Charleston in the latter year while Lewisburg's *Palladium of Virginia and the Pacific Monitor* was founded in 1823. The *South Branch Intelligencer* was established in 1830 in Romney and published until 1896 when it merged with the *Hampshire Review* which is still publishing. Charles Town's *Spirit of Jefferson* commenced in 1844, merged with the *Farmers' Advocate* in 1948, and continues publication today. By 1850, 21 weeklies and three dailies, published in both the English and German languages, were serving a population of approximately 300,000 western Virginians.

On the eve of West Virginia statehood in 1863, 43 towns had established at least one weekly newspaper, and larger towns supported several. The *Wheeling Intelligencer*, established in 1852, was the region's only daily newspaper before the Civil War. The proliferation of newspapers reflected the needs of rival political parties, demand for news of social and political controversy, the need for legal and official notices in recently created counties, and recent technological advances in printing. Although the earliest newspapers were primarily filled with national and foreign news, country editors soon learned that their efforts should be devoted to local and regional news. Throughout the early 19th century, religious and agricultural journals were popular, and many were published in western Virginia. However, the region's population was small and dispersed over a rugged terrain, illiteracy was widespread, and poor transportation hindered newspaper circulation. By 1863, approximately 250 newspapers had been established, with most failing within a short time. A notable exception was the *Point Pleasant Register*. Founded as a weekly in 1862, it became a daily in 1916 and continues publication today.

The press of antebellum western Virginia was generally Unionist and antislavery, but a number of areas also supported pro-Southern newspapers. Wheeling's *Intelligencer* was anti-slavery, pro-Union, and the strongest supporter of the statehood movement. Another newspaper opposed to slavery was the *Ceredo Crescent*, established in 1857 when Ceredo was founded as an anti-slavery community in what was then still a slave state.

The Civil War proved detrimental to many of the state's newspapers. The publishers of several newspapers including the *Fairmont True Virginian*, Harrisville's *Ritchie Democrat*, and Lewisburg's *Greenbrier Weekly Era* closed their papers to join the Confederate army. Pro-Southern presses including Charleston's *Kanawha Valley Star* and Martinsburg's *Virginia Republican* were seized by Union soldiers. Pro-secessionist newspapers in Philippi, Romney, and several other towns were destroyed by the military. The *Parkersburg News* was among several newspapers with a Southern slant that were destroyed by civilian mobs.

At least 15 Civil War camp newspapers were published on confiscated presses for army units on active duty in western Virginia. These regimental publications included *Yankee*, the *Knapsack*, the *Old Flag*, and the *Wandering Soldier*, all Union newspapers, and the *Guerilla*, the only Confederate military newspaper printed in what soon became West Virginia.

Following statehood in 1863, editors changed their mastheads to reflect the name of the new state, although some delayed the change for months. Notable developments after the Civil War made newspaper publishing more lucrative. News companies supplied preprinted sheets to local publishers who added their own copy and advertisements. The introduction of less expensive wood-pulp paper reduced costs. Legislative printing contracts sustained printers in the state capital, which moved from Wheeling to Charleston in 1870, back to Wheeling in 1875, and then permanently to Charleston in 1885.

In the late 19th and early 20th centuries, dramatic growth in West Virginia's natural resources industries brought substantial increases in population to the Mountain State. This influx led to the establishment of a wide variety of new communities many of which were multicultural in nature. Newspapers designed to serve this new populace were often geared to specific ethnic or occupational groups. German and Italian newspapers appeared in Wheeling and Thomas, respectively, while newspapers published by and geared to African-Americans emerged in Martinsburg (*Pioneer Press*), Charleston (*The Advocate*) and Keystone (*McDowell Times*).

The *Volcano Lubricator*, *West Virginia Walking Beam* and West Union's *Derrick Herald* all emerged to serve boomtowns that arose overnight when West Virginia became a leading center of America's oil industry during the late nineteenth century. The state's first college newspapers also appeared during this period, including West Virginia University's *Daily Athenaeum* which made its debut in 1891 and continues to this day.

The availability of cheap paper, the rise of news distribution networks, and the invention of the linotype, telephone, and the typewriter all combined to encourage the amazing proliferation of newspapers in West Virginia during the first decade of the twentieth century. With at least 223 different titles (dailies, weeklies, semi-weeklies, and tri-weeklies) publishing concurrently by 1912, more papers were being issued within the state at this time than at any other point in history. Unlike most of their predecessors, many of the titles founded during this period survived to the present.

The presence of so many newspapers in the early 20th century created fierce competition for both readers and advertisers. World War I made the challenges publishers faced even more difficult by bringing higher paper, labor and postal costs. As had happened during the Civil War, several newspapers closed when their owners departed for military duty. Many smaller papers were forced to suspend publication or merge with competitors.

Although the number of daily newspapers remained fairly constant, the number of weekly newspapers continued to decline after the war. West Virginia's slow population growth in the 1920s and 1930s and the widespread poverty of the Great Depression reduced the number of weeklies to 130 by the outbreak of World War II which again forced numerous closures and mergers.

Even further declines occurred in the following decades as tens of thousands of West Virginians left the state seeking employment. Mechanized mining produced rapidly declining employment in the coal industry while unemployment also increased in many areas of manufacturing. Although circulation remained relatively stable during the 1960s, 1970s and 1980s, population losses and an unfavorable economic climate triggered a gradual decline in newspaper publishing through the remainder of the century.

Ironically, West Virginia's innovative publishers led the nation during this period in technological advances. The installation of the first offset presses in the early 1960s permitted the printing of several different newspaper titles per day, allowing the owners of such presses to contract to print newspapers from neighboring communities as well as their own. By 2002, just 25 presses printed all the newspapers operating in West Virginia as well as many titles from other states. The disastrous West Virginia 1985 flood also dramatically changed the technology of newspaper production. The *Pocahontas Times* was the first West Virginia newspaper to use a desktop publishing system after the flood demolished its printing plant, instantly moving the paper into the computer age. Other flood-ravaged newspapers quickly adopted computerized production, and every one continued to publish. Today, all West Virginia newspapers rely on automated information processing and computerized typesetting systems.

By 2010, there were just 21 daily and 58 non-dailies publishing in West Virginia. This figure does not include daily student newspapers published at West Virginia University and Marshall University and non-dailies published at other educational institutions in the state. The state's largest newspapers are Charleston's *Gazette* and *Daily Mail*; Huntington's *Herald-Dispatch*; Parkersburg's *News & Sentinel*, Beckley's *Register-Herald* and Morgantown's *Dominion Post*, each of which have a daily circulation of more than 20,000. The largest weekly papers include the *Nicholas Chronicle* and the *Weston Democrat*.

The West Virginia University Libraries and the West Virginia Newspaper Project

The West Virginia University Libraries (WVUL) has long maintained a position of leadership in the acquisition and preservation of West Virginia newspapers. The WVUL has continually

endeavored to maintain a comprehensive collection of current West Virginia newspapers and to seek old and rare newspapers wherever they may be found. WVUL's collection is not only the largest but also the most significant in existence for the state. Notable holdings include complete runs of key newspapers including the *Wheeling Intelligencer* (1852-1900), a leading voice in the statehood movement and for the Union's cause in the upper Ohio Valley region; and Charles Town's *Virginia Free Press*, a Whig, Constitutional Union, then Democratic newspaper, founded in 1825 which endured for nearly a century.

The WVUL has continually endeavored to maintain bibliographic control of its broad holdings and in the process has generated most of the original cataloging, and published most of the bibliographical research concerning West Virginia newspapers in existence. Altogether, the WVUL has produced or contributed to three major bibliographies and six newspaper indexes. At the same time, the WVUL has quite naturally assumed the responsibility of systematically microfilming West Virginia newspapers, as it was the only repository with in-house microfilming capability during much of the twentieth century. The WVUL's on-going collection development guidelines continue to include the acquisition and preservation of every West Virginia newspaper that can be obtained, and accordingly, every newspaper currently being published in West Virginia is microfilmed on a regular basis unless film is commercially available.

Between 1983 and 1988, the West Virginia University Libraries received three NEH grants for the planning and implementation of the West Virginia Newspaper Project (WVNP), a statewide program for locating, cataloging, and microfilming extant West Virginia newspapers. To introduce the WVNP, the Libraries' West Virginia and Regional History Collection hosted a full-day conference on the history of newspaper publishing and the need for newspaper preservation in West Virginia. Newspaper editors throughout the state participated in the conference and assisted in publicizing the goals of the WVNP by publishing articles about the WVNP which piqued the interest of organizations and individuals alike. The director of the WVNP participated in a series of West Virginia Library Association and West Virginia Press Association conferences to provide the memberships with updates of WVNP progress and make new contacts for Project extension. The staff of the WVNP participated in multi-state meetings and training sessions provided by the NEH and the Library of Congress for the initial cadre of states that received United States Newspaper Project grants from the NEH.

As the work of the WVNP began, the director and staff contacted libraries, newspaper publishers, historical societies, historians, and collectors in each of the 55 counties of the state. As caches of newspapers were located, visits to their owners facilitated the collection of detailed information from which the staff created a union list of the titles of 1200 extant West Virginia newspapers and identified all files not yet microfilmed for preservation. The cataloging records were added to the OCLC database which provides international access to information on member library holdings. The many personal visits by the director and staff provided the opportunity to describe in-depth the importance of the Project, earned the respect and trust of people statewide,

and allowed the WVNP to borrow unique files from newspaper offices, historical societies, libraries, and individuals across the state. The WVUL borrowed and microfilmed for permanent preservation over 400,000 pages of West Virginia newspapers. These microfilmed newspapers are now available to all researchers. The entire community of people who work every day with historical and current newspapers benefited from the success of the WVNP.

In anticipation of the extent of collaboration necessary to conduct the work of the Project, the director and staff were oriented toward building relationships and describing the mutual benefits that would accrue from working in tandem. The West Virginia Newspaper Project could not have achieved its spectacular success without the cooperation and participation of organizations and individuals throughout the state. Many of those close ties remain in place to this day.

West Virginia University Libraries Newspaper Microfilm Collections

The WVUL embraces the most comprehensive collection of West Virginia newspapers in existence, including both originals and microfilm. WVUL's microfilm holdings total more than 50,000 reels, including nearly 1200 titles representing all 55 West Virginia counties. As noted above, WVUL has been actively engaged in cataloging, microfilming and preserving newspapers published in West Virginia for well over a half century.

West Virginia University Libraries Digital Initiatives Experience

The WVUL also has extensive experience in the area of digital projects. The WVUL is currently engaged in a wide variety of collaborative digital projects several of which are large in scale.

Among the most ambitious independent projects is the WVUL's historical photographs project *West Virginia History OnView*. <http://wvhistoryonview.org> This digital resource provides online access and detailed metadata records to approximately 40,000 historical photographs depicting West Virginia subjects. The project is being conducted entirely in-house employing a mix of staff and student personnel resources. A project manager instructs and monitors student employees who create initial metadata records using a Dublin Core based online cataloging template designed with the assistance of the WVU Libraries Cataloging and Systems departments. When completed, the initial metadata records and accompanying scans are reviewed, first by the project manager, and then by the WVU Libraries Cataloging Department where name and subject authority and other issues are addressed as necessary. The final records are forwarded to Library Systems where they are uploaded weekly into the DLXS-based (University of Michigan Digital Library Extension Service) *West Virginia History OnView* website. The site is accessible from various locations on the WVRHC website and also by means of a special icon on the WVU Libraries home page. Response to the "opening up" of the WVRHC photographs collection has been astounding with well over a million distinct visits (and many millions of "hits") received to date.

The WVU Library has much experience in collaborating with other institutions in digitization projects. The WVU Libraries currently serves as host of the "Appalachian Bibliography," <http://www.libraries.wvu.edu/appalachian/bibliography.htm> a collaborative online open-accessible database of published literature regarding all topics in Appalachian Studies. Major subjects include early settlement, the Civil War, coal, folklore, literature, music, politics, religion and women. Compiled at WVU, the bibliography appears annually in the spring issue of the Journal of Appalachian Studies published at Marshall University by the Appalachian Studies Association. This information resource is shared by students and researchers regionally and nationwide.

The WVU Libraries is also a member of the Agricultural Network Information Center (AgNIC), a partnership of approximately fifty institutions dedicated to providing digital access to significant information resources pertaining to the field of agriculture. WVU's contribution to the AgNIC program is currently focusing on providing full text access to the WVU Agricultural and Forestry Experiment Station Bulletins which date from 1888 to the present. These bulletins are being scanned and OCR'ed, then loaded into a DLXS platform and cataloged using Dublin Core standards. All bulletins in the database are full-text searchable and viewable as high-quality jpg files and downloadable in PDF format. Bulletins dating from 1970 to 2005 are currently available at <http://agnic.lib.wvu.edu>.

West Virginia University and the WVU Libraries are also partnering with the NARA Electronic Records Archives program in studying the preservation of and promoting the use of electronic records as an educational resource. The WVU Libraries was among the first in the nation to host an institutional repository program for born digital electronic documents, and the second in the world to require electronic submission of theses and dissertations. The WVU electronic repository research portal is currently being accessed online each year by more than a million visitors from more than 100 countries.

West Virginia University is well equipped to embark upon the collaborative digital project proposed here. Indeed, the proposal is a logical extension of WVU's long term and current commitment to preserving and providing access to newspapers. WVU's established contacts for producing the print masters and LVA's ability to manage the output will ensure the best possible content conversion. Our work plan provides thorough oversight, with fiscal responsibility, expertise in OCR conversion, careful review and quality control procedures, a realistic timeline, and assures fully compliant deliverables. Our methodology and standards use state-of-the-art equipment and digitizing methods, and we have an experienced staff and a carefully selected advisory board for this project. Only the highest quality print masters will be used for this project.

Methodology and Standards

Access to master negative microfilm, 1836-1922

WVUL has the largest and most complete set of microfilm of West Virginia newspaper in existence. This project will have access to the Libraries' more than thirty million pages of microfilmed images preserved as negatives in the vault of Image Data Conversion (IDC), a successor of UMI, located in Salines, Michigan, with state of the art microfilm, digitization and storage facilities. The list of newspapers passing the preliminary selection by the project director for the 1836 to 1922 timeframe is available in **Appendix A**.

Newspaper title selection

Newspaper titles for digitization will be selected by the project advisory board. In preparation for their selection, titles will be reviewed for meeting NDNP scope and technical/quality requirements. Using the list of titles in Appendix A, WVUL microphotography technician Francisco Tovar will make an initial assessment of suitability for digitization by using existing information in our files on density, resolution, reduction ratio, focus, condition, and completeness of issues. Mr. Tovar will sample reels for quality that will best result in a satisfactory digital image and optimum OCR text and present a list of titles to the West Virginia Digital Newspaper Program Advisory Board for selection along with the Library of Congress selection guidelines for research value, geographic representation and coverage by date-range.

The advisory board of seven historians, scholars, librarians, journalists, archivists, historic preservation professionals, and educators will review the proposed newspaper titles using the intellectual content selection criteria as outlined by the Library of Congress on their National Digital Newspaper Program website and in the NEH program guidelines. The advisory board will approach its decision-making process by looking at the three main criteria—research value, geographic representation, and date range—and evaluating characteristics within those areas.

The intellectual content selection criteria include:

- titles recognized as the "paper of record" at the state or county level;
- titles with statewide or regional influence;
- titles considered to be important informational sources for specific ethnic, racial, political, economic, religious, or other special audiences or interest groups;
- titles with state-wide or multi-county geographical representation;
- titles with long runs of complete chronological coverage (i.e. lacking major gaps on the microfilm between the eligible years of 1836-1922);
- geographic coverage of each of the regions of West Virginia: the Ohio River Valley, the Allegheny Plateau, the Allegheny Highlands, and the Potomac Region (aka, Ridge and Valley Section);

- orphaned (inactive) titles;
- dates and length of publication for each title;
- availability of microfilm for the period covered;
- historical “centers of activity” during the time period (i.e., which locales were prominent between 1836 and 1922 instead of which locales are currently prominent);
- influence the papers had in the local area, state, region, or nation;
- diversity of viewpoint (e.g. pro-Union [*Wheeling Intelligencer*] and pro-Secession [*Kanawha Valley Star*], pro-labor and pro-management; pro and con coal mine unionization; Democrat, Republican, Socialist, Independent);
- coverage of events that occurred in West Virginia but which had wider, national impact (e.g., John Brown [*Martinsburg Virginia Republican*], Civil War, coal and lumber resources, coal miners strife);
- foreign language and ethnic (for example, Italian [*La Sentinella del West Virginia*] and African American [*Pioneer Press*] newspapers when available for the 1836-1922 period). *La Sentinella del West Virginia* (see Appendix A for bibliographic citation) is the sole Italian newspaper which meets the basic criteria for this grant. If it should be selected for digitization, advisory board member Dr. Matt Vester will be responsible for assuring the accuracy of project content and metadata. No German newspaper titles will be included in the present project but German titles maybe included in future projects.

To aid the advisory board in assisting with the selection process, project staff will provide the Board with lists of all eligible newspaper on microfilm; USNP catalog records for each title; dates and cities of publications of each newspaper, copies of historical guides to newspapers, published historical resources.

The Advisory Group members also have expertise to share. All of the sources will be available to help the group make the selections of titles to be used in this project.

When more than one newspaper title meets all or most of the above criteria, the advisory board will then consider the following refined selection criteria for a decision:

- Does the newspaper provide coverage of a significant minority community at the state or regional level?
- Has the newspaper ceased publication and does it lack active ownership, or, in other words, is the newspaper an orphan title?
- Has the newspaper already been digitized by a commercial publisher? (If so, then the newspaper would be excluded from this project.)

Using the research information provided to them, the advisory board will rank their selections using a priority scale. The priority scale features the following ranks:

- Highest priority for digitization—Newspaper meets all intellectual selections criteria and the lack of inclusion of title would constitute a serious gap in the project. Inclusion furthers scholarship
- High priority—Newspaper meets most intellectual criteria. Lack of inclusion of title would be noticed, yet other titles may suffice.
- Medium priority—Newspaper meets some intellectual selection criteria. Lack of inclusion of title may not be noticed because other titles provide similar coverage.
- Low priority—Newspaper meets few intellectual selection criteria. Inclusion of title may fill some gaps, but generally lack of inclusion would not affect scholarship.
- Not recommended—Newspaper does not meet intellectual selection criteria.

With the material provided, the advisory board will review and submit their rankings to the project director, who will then schedule a meeting to discuss the newspaper titles and the reviews in general. With the preliminary reviews as a starting point, this meeting will provide an opportunity for each title to be discussed and for any outstanding questions or issues to be resolved with all present. As a result of discussions with board members, some revisions of rankings may be made. Consequently, after the meeting, the advisory board will make its final selections. The final selections will then be forwarded to the project's technical staff to begin the technical phase. At this point, the WVUL project director will be provided with the final list from which the five hundred-word essays may be generated.

General information provided to each advisory board member will include the following:

- Comprehensive essay on the history of WV newspapers
- Timeline of major economic, political, cultural history events from 1836 to 1922
- Index to the West Virginia Newspaper titles
- List and maps of West Virginia counties with major towns and cities within
- NEH newspaper title instructions for ranking
- Advisory board roster

Background information for each newspaper title will be prepared for the advisory board members and will include:

- OCLC bibliographic record, which will include publication information (place of publication, city, and county), years published, frequency of publication, language descriptors, information about previous or subsequent titles.
- Any history on the newspaper itself including information on publishers and/or circulation statistics. (Many will be found in Harold Forbes, *West Virginia History; A Bibliographic Guide to Research* (1980); Delf Norona and Charles Shetler, *West Virginia Imprints: 1790-1863* (1958); and *The West Virginia Encyclopedia* (2006).

- Fact sheet supplementary to the OCLC record to include the following: completeness of microfilm copy; whether the title is an orphan; whether the title had an ethnic, religious, political, or professional orientation. In lieu of an OCLC record, information about a title will be included on this fact sheet and will provide the same information that would be expected in a bibliographic record.
- Brief historic sketch of city or county serviced by the newspaper. These may be simply references to the *WV Encyclopedia* which includes city and county histories. If an encyclopedia entry is not available the research assistant and coordinator will compile information for the Board.

Members of the Advisory Board

The advisory board shall consist of seven members including historians, educators, librarians, journalists, and historic preservation professionals.

Advisory Board:

Frances O'Brien has served as Dean of Libraries at WVU for the past decade. Initially a cataloger, she has been the driving force behind many of the WVU Libraries' digital initiatives including the renowned WVU Institutional Repository program.

John Douglas is Editor of the Berkeley Springs, WV, *Morgan Messenger*. He has more than thirty years of experience in all aspects of newspaper publication. His reporting has appeared in the *Washington Post* and many other publications.

Dr. Jack Hammersmith is Professor of History at West Virginia University specializing in post-Civil War American history.

Dr. Bob Conte is employed as Historian for The Greenbrier and serves as Chairman of the West Virginia Archives and History Commission.

Joseph Geiger is Director of the West Virginia Archives and History Section, West Virginia Division of Culture and History.

Dr. Ray Swick is Historian for the West Virginia State Parks system which has facilities throughout West Virginia.

Dr. Matt Vester is Associate Professor of History at West Virginia University. Among his specialties is modern Italian and Italian-American history.

Work Plan

LVA will hire a Technical/Project Coordinator to oversee the technical details of the grant, coordinate workflow with the digitization vendor and ensure that all technical and quality control milestones are met.

Conversion processes

The Library of Virginia will obtain a list of titles, dates, and years from West Virginia University Libraries for the reels of microfilm selected for the West Virginia initiative. LVA will perform all required collation and inventory procedures using existing positive copies in order to create a working database of bibliographic information to assist the vendor in the content conversion process.

The West Virginia University Libraries will select a scanning and content conversion vendor in consultation with the Library of Virginia. For purposes of developing this proposal, the WVUL has already solicited and received what appears to be an excellent bid from Image Data Conversion (IDC) of Salines, MI. (See Appendix E.) WVUL will seek additional competitive bids in accordance with West Virginia University guidelines before making the final decision regarding the award of this contract in whole or in part.

The successful vendor will be contracted to duplicate and scan film and perform all subsequent content conversion processes. The selected vendor will start production by creating second generation (2N) duplicate silver negative copies of microfilm from the camera master microfilm for any titles selected.

Upon delivery of microfilm to the vendor, LVA will be notified of titles along with basic bibliographic information, and the number of reels and enter project related data for each reel of film in a database that will track where each reel is in the digitization process. This is to confirm that the reels delivered to the vendor match the reels inventoried and collated by LVA

Digitization

West Virginia University will be the selector for a contract with a vendor to produce deliverables as defined in this work plan. When necessary, the WVUL will research and locate original ink press newspapers to fill in missing issues. The hard copy newspapers will be digitized by an off-site vendor to be named. Newspapers will be scanned as 400 dpi 8-bit grayscale TIFFs as newspaper size permits, but larger sized newspapers will be scanned as 300 dpi 8-bit grayscale TIFFs when 400 dpi is not possible. These TIFF images will be shipped to the vendor via either USB or firewire hard drives for processing of derivative images, OCR and metadata, and validation. The vendor will digitize newspaper microfilm to the following specifications, and LVA will perform all quality assessment and verify (and validate when necessary) the vendor's work:

- Create digital images from a clean second-generation preservation duplicate silver negative.
- Scan to obtain maximum resolution possible between 300-400 dpi, relative to physical dimensions of the original material; 8-bit grayscale; TIFF 6.0 uncompressed.

- Split two-up film so that there is one page image per file.
- De-skew images with a skew of greater than 3 degrees.
- Crop to include visible edge of page, retaining up to ¼ inch beyond edge.
- Capture microfilm target frames. These image files will be identified in the reel metadata but will not be used for display.
- Capture additional scanning resolution targets, i.e. 35mm Grayscale Preservation Microfilm Target, (2 images per reel--target will be as specified by LC) at the start of each session, to monitor scan quality. These scan target images will be delivered with microfilm target images and page images and identified in reel metadata.
- Deliver grayscale images to LC that have exactly the same dimensions, spatial resolution, skew, and cropping as the images used for OCR.
- Include headers for all image deliverables (TIFF, JPEG2000, and PDF) that incorporate tagged metadata relating to the creation and rendering of the images, per Appendix B.

Metadata creation

To support the goals of the NDNP program, both structural and technical metadata will be created. The role of structural metadata is to relate pages to title, date, and edition, sequence pages within issue or section; and to identify image and OCR files according to the specifications, *The National Digital Newspaper Program (NDNP): Technical Guidelines for Applicants*, in Appendix A: Digital Asset Metadata Elements and Appendix C – XML Metadata Templates. Technical metadata will be created to support the functions of a trusted repository as designated in Appendix A: Digital Asset Metadata Elements – Dictionary; Appendix B – File Format Profiles and Specifications; and Appendix C – XML Metadata Templates. Vendor will create structural and technical metadata with the following specifications, except as noted. LVA will perform quality assessment and verify (LVA will validate as needed) the vendor’s work:

- Create a title identifier using the Library of Congress Control Number (LCCN) for that title, normalized to MARC21 standard.
- Produce a unique identifier for each issue using LCCN, Issue Date and Edition Order.
- Produce a unique identifier for each page using LCCN, Issue Date, Edition Order and Record Sequence Number.
- LVA creates additional title-level metadata related to the title runs digitized and delivered per Appendix A.
- LVA creates issue/edition metadata for all known issue/edition occurrences for issues/editions known to be published but not available as a digital asset, create a record for that issue/edition and use the Issue Present Indicator to indicate the issue/edition the record described is not available.
- LVA creates page metadata for all known page occurrences for pages known to be published but not available as a digital asset, create a record for that page and use the Page Present Indicator to indicate the page the record describes is not available.
- Produce reel metadata objects that describe individual scanned reels and filmed targets.
- Deliver all digital assets in Metadata Encoded Transmission Schema (METS) object structure according to an XML Batch template structure as per Appendix C– XML Metadata Templates.

OCR text conversion

Vendor will create OCR text conversion with the following specifications, and LVA will perform quality assessment and validate the vendor's work:

- Deliver one OCR text file per page image.
- Ensure each OCR text final name corresponds to the page image it represents.
- Create text output in UTF-8 character set.
- Ensure no graphic elements are saved with the OCR text.
- Order OCR text column-by-column, in natural reading order.
- Create OCR text file with bounding-box coordinate data at the word level.
- Produce OCR text files that conform to the ALTO XML schema.
- Ensure all page images are accompanied by an ALTO XML file containing all recognized text.
- Provide, if possible, the confidence level data at the page, line, character, and/or word level.
- Provide, if possible, the point size and font data at the character or word level.

Other Derivative Files

Vendor will create other derivative files with the following specifications, and LVA will perform quality assessment and verify (and validate when necessary) the vendor's work:

PDF files:

- Create a PDF Image with Hidden Text for each page image.
- Ensure each searchable PDF file name corresponds to the page image it represents.
- Create PDF files that incorporate appropriate XMP metadata per Appendix B – File Format Profiles.
- Create a grayscale page image, downsampled to 150dpi and encoded using a medium JPEG quality setting.
- Ensure PDF contains no bookmarks, links, named destinations, comments, forms, JavaScript actions, external cross references, alternate images, embedded thumbnails, annotations, or private data.

JPEG2000 format:

- Create a JPEG2000 image for each page image.
- Ensure each JPEG2000 incorporates appropriate XMP metadata per Appendix B- File Format Profiles.
- Ensure JPEG2000 will be 6 decomposition levels, and 25 quality levels.
- Ensure JPEG2000 compression will be 8:1.

Technical Validation of Digital Objects

Using the Digital Viewer and Validator (DVV) software, the vendor sends LVA the following deliverables for quality review:

- Validated Master digital page image format = TIFF 6.0 uncompressed.
- Validated OCR text file with bounding-box coordinates = 1 text file per page.
- Validated PDF Image with Hidden Text = 1 PDF per page.
- Validated derivative digital page image format = JPEG2000 (.JP2) using specified compression options.
- Validated metadata using METS in accordance with guidelines in Appendices A and C.
Note: all four digital files (.TIF, .JP2, .PDF, and OCR) will use the same file identifiers with distinct file extensions.

Upon receipt of validated files, LVA will:

- Enter tracking date on deliverables to monitor workflow.
- Verify all deliverables to assure quality.
- Accept or reject deliverables from vendor.
- Ensure metadata exists for required Issue Present Indicators and Page Present Indicators.

LVA will verify in order to retain original digital signatures created by the vendor.

Data delivery mechanisms

For delivery to LC, LVA will send deliverables organized in a hierarchical directory structure sufficient for identification of the individual digital assets from the metadata provided.

Specifically:

- Ship deliverable to LC via firewire-enabled durable external hard drives.
- Send a single batch per delivery device.
- Deliver digital assets in conformance with the “BagIt” specification
- Deliver digital assets in the precise directory structure specified by LC, and include successive sub-directories on LCCN, reel number, and issue date with edition sequence.
- Deliver data to LC monthly beginning no later than spring of 2010.

After completing digitization of the newspaper microfilm, LVA will label all 2N duplicate silver negative microfilm with barcodes provided by LC, and will ship them via parcel post for deposit with LC.

Publicity and programing

The progress and results of this project will be publicized throughout the project through regular news releases by WVUL and WVU News Services. An attractive project website will be developed which will bring the project and its results to the attention of educators, libraries, historical agencies and the general public across the state. Presentations about the project will be conducted annually at the West Virginia Library Association and West Virginia Association of Museums annual conferences and also at the annual West Virginia History Day at the Legislature

event among other venues. Every effort will be made to reach as wide and diverse an audience as is possible.

Time Line

Initial Organization and Setup (September - December 2011) • Hire Technical/Project Coordinator (LVA) • Set up accounting infrastructure with WVUL • Prepare RFP for digitization vendors - RFP may include requirement to sample test reel • Set up Technical/Project Coordinator work station with LC Validation tools and other necessary programs • Contact Advisory Board Members to confirm participation • Set up Advisory Board listserv for communication • Create ranking sheet for title selection and printouts from positive scans of selections from titles • Project website development.

Selection of Titles (December 2011 - January 2012) • Convene first Advisory Board Meeting: Review title holdings list. Go over criteria and scope for NDNP. Design and distribute ranking charts. • Tabulate results • Communicate title selection results with advisory board via email or listserv • Selection of additional titles if necessary will follow the same procedure at subsequent advisory board meeting.

Essays (October 2011 – May 2012) • Student Project Assistant hired • Receive and edit title essays (500-550 words for each title digitized): First title selections (November 2011 – December 2011), additional selections (if needed) as directed by Advisory Board after second Advisory Board meeting (April – May 2012) • Send to NEH for review and comment (January 2012, July 2012) • Revise narratives as needed.

Evaluation of Microfilm and Metadata Creation (November 2011 – December 2012) • Develop tracking mechanism for film and files • Develop worksheet for recording descriptive, technical, structural, and administrative metadata vendor required documentation • Inspect microfilm for suitability for digitization using the USNP preservation microfilming guidelines and the *NDNP Technical Guidelines*: Physical condition, resolution, density, reduction ratio, focus. Completeness of content on reel • Record required metadata as specified in *NDNP Technical Guidelines* • In most cases, the WVUL has the most complete set of film in the state. If missing issues or pages are found, we will coordinate with other institutions (For example, the West Virginia State Archives at the West Virginia Division of Culture and History) to find and borrow missing content. • Hand deliver master negative microfilm reels to vendor with metadata worksheet for the purpose of creating a duplicate negative which is to be used in the digitization and content conversion process.

Digitization, Processing, and Conversion by Vendor (October 2011 – April 2012) • The reels will be scanned at a minimum of 400 dpi and in 8-bit grayscale. • Images will be cropped and de-skewed. • Additional structural and technical metadata will be supplied by vendor • Deliverables will include: TIFF 6.0 and JPEG 2000 for each page image, OCR text and bounding boxes, PDF image with hidden text, METS objects with descriptive, structural, and technical metadata as

specified in *NDNP Technical Guidelines* • Deliverables will be divided into batches to fit on a 500 GB external hard drive. • Batches will be validated using NDNP supplied software • Vendor will deliver batches to LVA for quality inspection • Test batch will be prepared and sent to Library of Congress (February 2012).

Quality Review (December 2011 – May 2013) • Batches will be validated by the vendor using NDNP validation supplied software tools • LVA will verify (and validate when necessary) all batches and inspect all thumbnail images and look at film for inconsistencies if errors appear • Verify number of expected pages • Use the Digital Validation Viewer to inspect and analyze OCR and metadata from a sample of pages • View full images for inspection of every first and last page of each reel and a random sample of images including all first pages of each issue. • Correct any problems with vendor and modify batch if needed • Send validated and verified files to the Library of Congress as specified in the Delivery of Digital Assets in the *NDNP Technical Guidelines*.

Delivery to the Library of Congress (February 2012 – July 2013) • Deliver sample set of data to Library of Congress (February 2012) • Deliver batches monthly of approximately 5,000-6,000 pages in 16 batches (February 2012 – July 2013) • Deliver set of duplicate silver negative microfilm used in scanning process at close of project (August 2013)

Cataloging (November 2011 – April 2013) • CONSER records for newspaper titles will be updated by WVUL Cataloging according to MARC21 standards with an 856 field linking to the digital newspapers • Records will be delivered to Library of Congress.

Reports and Progress (Dec 2011 – June 2013) • Interim reports will be written and delivered to NEH in accordance with the Endowment's reporting schedule. • Final report will be completed and submitted to NEH in August 2013.

Staff

Dr. John Cuthbert (5% time devoted to this project) is Director of the WVUL's West Virginia and Regional History Collection. During 30 years of curatorial service, he has supervised many large-scale cataloging and digital collections projects including *West Virginia History OnView*. His experience in developing electronic finding aids dates back to 1979 and includes participation in numerous grant projects funded by the NEH and other agencies. Dr. Cuthbert will be responsible for administering all aspects of this project, preparing project reports, managing and working with the advisory board, and overseeing all project budget expenditures and general administrative matters. He will also be responsible, with Harold Forbes, for writing and editing all of the 500 word newspaper title histories.