



## NATIONAL ENDOWMENT FOR THE HUMANITIES

DIVISION OF PRESERVATION AND ACCESS

### **Narrative Section and Work Plan of a Successful Application**

The attached document contains the grant narrative and work plan 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 their unique project and aspirations. Prospective applicants should consult the Preservation and Access Programs application guidelines at <https://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 Programs 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: Montana Digital Newspaper Project

Institution: Montana Historical Society

Project Director: Roberta Gebhardt

Grant Program: National Digital Newspaper Program

# National Digital Newspaper Program Proposal

(2021-2023 NDNP Cycle)

Montana Historical Society

## Description

The Montana Historical Society (MHS) requests funding from the National Endowment for the Humanities to digitize Montana's microfilmed newspapers for the Montana Digital Newspaper Project (MDNP). Through this project, the MDNP will focus on identifying and digitizing newspapers that were published on or directly adjacent to the eight Indian reservations in Montana, thereby capturing the concerns and events affecting Montana's Native American population more systematically. The MDNP will deliver 100,000 digitized newspaper pages and all required digital, metadata, and microfilm deliverables to the Library of Congress for inclusion in *Chronicling America*.

## Narrative

### History and Scope of the Project

#### Historical Overview of Montana Newspapers

In 1864 John Buchanan published the first issue of the *Montana Post* in the booming gold-mining town of Virginia City, marking the beginning of newspaper publishing in Montana Territory. Over the next decade, the towns of Helena, Deer Lodge, Missoula, and Bozeman followed Virginia City's lead by starting their own newspapers, documenting significant local and regional events. Eventually more than a thousand individual newspapers were published in Montana. Looking at these many different Montana newspapers, scholars have identified four periods of journalism in Montana's early newspaperpublishing history: 1864-1889 - partisan political rhetoric in the Territorial period; 1888-1906 - private, self-interested

journalism of business entrepreneurs; 1900-1925 - political wrangling of reform and county busting; and 1910-1929 - economic and patriotic propaganda surrounding corporate consolidation and World War I.<sup>1</sup>

The period following 1929 continued the era of corporate consolidation of Montana newspapers, with seven of the eighteen daily newspapers in the state controlled by the Anaconda Copper Mining Company. Although the “company line” was challenged by a few independent editors like Miles Romney at the *Western News* in Hamilton and William Dunne of the *Butte Bulletin*, the Anaconda Company did not give up control of its daily newspapers until their sale in 1959. In each of these identified periods, including after company consolidation, the content of Montana’s newspapers reflected their publishers, editors, and communities. The press has undoubtedly influenced political and cultural life in Montana.

The span of years from 1864 to 1963 represents a period of significance for Montana history, including such landmark events as achieving territorial status (1864) and statehood (1889), the establishment of silver and copper mining and metallurgy as an economic mainstay, the passing of a Native American culture based on bison and the creation of reservations, the domination of state politics by the Anaconda Copper Mining Company, the end of open-range cattle ranching, the coming of transcontinental railroads, America’s last great homestead boom and bust, and the discovery and development of large oil fields. Newspapers preserved on microfilm at the MHS document these and other events from a variety of perspectives, including dailies owned and operated by corporate interests, locally

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<sup>1</sup> Myers, Rex C. and Harry W. Fritz, eds. *Montana and the West: Essays in Honor of K. Ross Toole*. Boulder, Colo.: Pruett Publishing Co., 1984.

owned newspapers, labor newspapers, Communist papers, and agricultural weeklies.

### New Content

Previous grants from NEH in support of the MDNP have focused on providing broad chronological and geographic coverage of events in Montana history. Newspaper titles were chosen based on coverage of the noteworthy events mentioned above, including the many boom and bust cycles that have marked Montana history - homesteading, mining, logging, and oil production. The papers digitized previously have not focused on Native Americans and the events which directly affected them. Through this project, the MDNP will focus on newspapers that capture the concerns of and events affecting Montana's Native American population by identifying and digitizing newspapers that were published on or directly adjacent to the eight Indian reservations in Montana.

The settling of the West by non-Indians and the destruction of the great bison herds, central to the Plains Indian way of life, radically changed the life of Native Americans. Red Cloud's War (1866- 1868), the Great Sioux War (1876-1877), and the Nez Perce War (1877) marked the end of the era of traditional life for Montana's Native peoples. With the bison population annihilated and Indians confined to reservations, the Starvation Winter of 1883-1884 decimated tribal populations. The last part of the 19<sup>th</sup> century ushered in a time of detrimental federal policies, including forced attendance at Indian Boarding Schools, mandated reductions in reservation lands, allotment, and the opening of reservation lands to European settlement.

In the 20<sup>th</sup> century federal and state laws and court rulings were passed that greatly affected the Native people in Montana and throughout the U.S. The *Winters* decision in the U.S.

Supreme Court in 1908 upheld Indians' rights to water on their reservations based on treaty agreements. In 1924 the Indian Citizenship Act granted all American Indians U.S. citizenship. The 1928 Meriam Report criticized the federal government for its treatment of American Indians and recommended ending the policy of forcibly sending Indian children to boarding schools. The Indian Reorganization Act of 1934, co-sponsored by Montana senator Burton K. Wheeler, established important rights for tribal self-government and encouraged Indians to strengthen their cultures. The 1953 adoption of the termination policy withdrew federal support from many tribes, shutting down schools and medical services on many reservations and leaving Montana's Indian tribes again fighting for the right to maintain their tribal identity.

Coverage of these and other events related to the history of the tribal nations of Montana can be found in Montana newspapers that were published on or adjacent to Montana's reservations. MHS intends to focus additional digitization efforts on adding newspaper titles from 1864-1963 that capture local perspectives of the events that changed the lives of Montana's Native residents. (See Appendix A for a list of possible titles reflecting this content.) Adding this new content to the Montana newspapers in *Chronicling America* will help to provide more comprehensive coverage of the events that have defined Indian history in Montana and the western U.S.

The need for this content is supported by current research projects on Montana and western U.S. history. Academic scholars have most recently researched and published on topics such as the Piegan perspective of the Marias River Massacre, the role of Cheyenne women in 19<sup>th</sup>-century warfare, tribal suffrage, the U.S. Canadian border and Indians, the Indian Rights Association, and Crow horse culture. The addition of digitized newspapers from on or nearby Native American

reservations would make these research topics more accessible.

### Newspaper Collections in Montana

MHS has collected published and unpublished materials, art, and artifacts about Montana for more than 155 years, including the majority of all newspapers published in Montana. In the late 1950s MHS undertook a project to find and microfilm historic newspapers. In 1983 MHS received a grant from the NEH United States Newspaper Project (USNP) to survey, catalog, and microfilm newspapers in Montana. Over the next three years MHS cataloged 1,121 individual newspaper titles into the CONSER database and created a union list of newspapers published in the state. MHS microfilmed issues from 182 different newspaper titles that were not already represented in its collections.

The collection and preservation of newspapers continues. MHS subscribes to 65 weekly newspapers and 11 daily newspapers, which are microfilmed regularly. MHS holds over 18,000 reels of newspaper microfilm, representing newspapers from 243 towns, many of which no longer exist. These titles cover the span of newspaper publishing in Montana, from 1864 to the present. MHS is the primary repository for the preservation of as well as access to Montana's newspapers.

### Digitization Efforts to Date

MHS makes Montana's historic newspapers freely available online through both *Chronicling America* and an independent, online Montana newspaper repository. MHS has completed four previous NDNP grants from NEH. Through those projects more than 377,000 pages from 78 newspaper titles, dating from 1864 to 1963, have been digitized and made available in *Chronicling America*. From July 2019 to June 2020, the Montana pages

available in *Chronicling America* were viewed 447,190 times.

In 2016 MHS launched Montana Newspapers, a web portal dedicated to making Montana's newspapers freely accessible online. The repository is built on the CHRONAM open-source search and discovery engine developed by the Library of Congress. The site, [montananewspapers.org](http://montananewspapers.org), now contains more than 717,000 newspaper pages from 122 Montana town, county, school, and tribal papers. The content on Montana Newspapers covers the period from 1873 to 2018. In the last year more than 801,000 pages were viewed on Montana Newspapers.

In addition to Montana newspaper digitization projects, MHS has acted as the technical partner for the Idaho State Historical Society's NDNP from 2013 to early 2020. Working closely with the staff of the ISHS, MHS oversaw the conversion, metadata creation, quality review, and upload of more than 300,000 pages of Idaho newspaper content.

## **Methodology and Standards**

### **Access to and Status of Microfilmed Newspapers**

MHS holds the most complete collection of newspapers published in Montana, including more than 4,000 reels of master microfilm, representing more than 1,000 titles published in over 100 communities in Montana from 1864-1963. A complete list of newspaper titles in the MHS collection for 1864-1963 can be found in Appendix B. MHS is committed to purchasing second-generation masters of Montana newspapers on microfilm from third-party vendors, should those titles be chosen as appropriate for this project.

Since 1983 all newspaper microfilming conducted by the MHS has been completed to the standards established by the USNP. Microfilming conducted prior to 1983 was completed

in-house, by the State of Montana's Records Management Bureau, or through a commercial vendor. The standards used for microfilming by the MHS from the 1950s through 1982 are not recorded. However, any newspaper title that will be considered for digitization for this project will be reviewed by project staff to ensure that the microfilm meets criteria established by USNP standards.

#### Plan for Selecting Newspapers to Be Digitized

The MHS will convene a Selection Advisory Board (SAB) to select newspaper titles for the MDNP. The SAB will review proposed titles representing the new content for the project using the selection criteria outlined by the Technical Guidelines & Specifications for the NDNP. Project staff will review the history of the MDNP with the SAB, including an overview of newspaper digitization in Montana, general selection criteria for newspaper titles, and the project's goals. MHS staff will provide SAB members with the technical information on each of the newspaper titles for possible consideration, including if MHS owns the master microfilm and if the newspaper has been digitized by a third party. SAB members will be provided with resources for background information on newspaper publishing in Montana, including *Montana: A History of Two Centuries* (Malone, Roeder, Lang; University of Washington, 1991); selected articles on the history of Montana's newspaper publishing industry from MHS's quarterly journal, *Montana, The Magazine of Western History*; and a history of Montana newspapers in Rex Myers's essay, "From Crazyquilt to Gray Blanket: Montana's Colorful Press," in *Montana and the West: Essays in Honor of K. Ross Toole*, edited by Rex Myers and Harry Fritz.

The SAB will approach the title selection process by reviewing three main criteria for each title — research value, geographic representation, and date coverage – within the larger



context of coverage of Native American events in newspapers published on or adjacent to reservations. Geographic and chronological coverage information will be gathered by project staff prior to the SAB meeting. The SAB will also consider statewide or regional influence, including if the paper covers political, economic, and culturally significant events; if the newspaper contains content relative to the identified Native American topics; if the title covers a broad chronological span or if there are any significant gaps in coverage; and if the title is a paper of record or provides state or regional coverage of events. The SAB will also consider if the newspaper has ceased publication and lacks active ownership and if the newspaper has already been digitized by a commercial vendor. After reviewing these criteria, the SAB will create a ranked list of titles to be further reviewed by project staff.

Using the ranked list, project staff will appraise microfilm for the selected titles, reviewing the technical aspects of the microfilm that will affect the success of digitization and optical character recognition creation. Project staff will use the rankings of the SAB along with their technical review of the microfilm to create a final list of newspaper titles to be digitized, totaling 100,000 pages. The SAB will review and approve the final list.

#### Partnerships for the Project

MHS will rely upon the assistance of several institutions in selecting Montana newspaper titles for digitization for this project. The SAB will be comprised of two librarians, an archivist, three scholars, and a journalist, representing five institutions throughout the state. These representatives, from two of the state's academic institutions, a tribal library, the State Office of Public Instruction, and the Montana Historical Society, will provide invaluable assistance. As the institution that holds the largest and most complete collection of Montana newspapers on microfilm, the MHS does not require formal partnerships to

borrow or locate master microfilm for this project. The work for this project will be completed by project staff, MHS staff, and third-party vendors.

### Evaluating and Documenting Copyright Registration

When digitizing content published after 1925, MHS evaluates and documents copyright registration through several steps. Project staff will search for copyright registration using the Catalog of Copyright Entries available on the Internet Archive to determine if a newspaper title is in copyright. Each title search will be conducted using the town, newspaper title, and publisher for each selected title. Project staff will also evaluate third-party content in the newspapers to be digitized. During content analysis of each title, project staff will note any third-party content that might be copyrighted, such as comics and fiction. A search will be conducted to determine if any of the third-party content is currently for sale or if it is out of print. Project staff will also determine if the third-party content is already freely available online. If a newspaper is not listed as being in copyright in the Catalog of Copyright Entries and if any third-party content is not for sale or is already freely available online, the newspaper title will be accepted for digitization for the project.

### Digitization Infrastructure

MHS has developed a strong digitization infrastructure through administration of and participation in the [Montana Memory Project](#), the Montana Digital Newspaper Project, and creation of the [Montana Newspapers](#) repository. The Montana Memory Project (MMP) is a statewide digitization project utilizing CONTENTdm, whose purpose is to provide access to digital collections of materials related to Montana's cultural heritage. MHS and the Montana State Library share the responsibility of providing technical support, cataloging, training and consultation for participants in the MMP. The MMP includes collections from more than 80

organizations, representing universities, colleges, public libraries, museums, and historical societies. Its more than 830,000 digital images include government documents, historic photographs, books, and archival materials.

MHS is also a participant in the MMP and has contributed more than 292,000 digital images. MHS contributions to the MMP have included two large microfilm-to-digital conversion projects. One project converted 32 reels of microfilm of [livestock brand records](#) (61,000 images) to digital files. The second project converted [Montana's military enlistment cards](#) from 1890 to 1945, previously on microfilm, into 135,000 digital images searchable through three collections on the MMP.

MHS has also developed infrastructure for the digitization of newspapers from microfilm. MHS has received four NDNP grants from NEH. Through the first four projects (2009, 2011, 2013, and 2018), more than 377,000 pages from 78 newspaper titles dating from 1864-1963 were digitized and made available in *Chronicling America*. MHS has also acted as the technical partner for the Idaho State Historical Society's NDNP for their 2013, 2015, and 2017 grants. Working closely with the staff of the ISHS, MHS oversaw the conversion, metadata creation, quality review, and upload of more than 300,000 pages of Idaho newspaper content.

In 2015 MHS began work on [Montana Newspapers](#), a repository dedicated to making Montana's newspapers freely accessible online. Built on the CHRONAM open-source search and discovery engine developed by the Library of Congress, Montana Newspapers went live in 2016. The site currently contains more than 717,800 pages of newspapers from 122 Montana town, county, school, and tribal newspapers, covering the period from 1873-2018. New content is added

frequently.

## Work Plan

The work of the MDNP will occur from September 2021 - August 2023 and is divided into six categories: selection of titles and evaluation of microfilm, conversion processes, OCR text conversion, metadata creation, quality review, and data delivery.

### Selection of Titles and Evaluation of Microfilm

As described above, title selection and evaluation will be completed by the SAB and project staff. Project staff will prepare a list of titles on microfilm suitable for digitization within the scope of the project, and the SAB will select titles based on the outlined criteria. Project staff will review the technical factors of the microfilm for selected titles, evaluating factors that could affect the success of scanning and OCR creation. Criteria to be reviewed include quality of the original text and microfilm capture, reduction ratio used in microfilming the original, resolution of the camera master negative microfilm, and variations in density within images and between exposures. The Project Technician will complete a 500-word essay for each title, which will discuss the scope, content, and significance of the title. The MHS Technical Services Librarian will update the CONSER records for all selected titles.

### Conversion Processes and Digitization

Project staff will pull first-generation, camera master microfilm for selected titles and send the reels to a vendor to create the second-generation duplicate, silver negative microfilm. Upon receipt of the second-generation master microfilm, project staff will assign each reel a Library of Congress barcode number. The barcode number, newspaper title, and date range will be added to an Access Database used for tracking the reel through the project. The

second-generation masters will be shipped to the digitization vendor for creation of the digitization deliverables. Upon completion of the project, MHS will send the second-generation duplicate silver negative microfilm to the Library of Congress.

MHS will continue its current contract with HTC Global Services for newspaper microfilm conversion services. HTC will produce the project deliverables, as defined in the current NDNP Technical Guidelines & Specifications. Digital images will be created from the second-generation duplicate silver negative supplied by MHS. The microfilm will be scanned at 8-bit grayscale with a resolution of 400 dpi. The vendor will capture a standards-based target film strip at the start of each session. They will split dual images into individual newspaper images; de-skew images with more than 3% skew; crop page image files to the edge of the newspaper, retaining the original edge up to .25"; and capture microfilm target frames. HTC will include tagged metadata about the creation of the images into the headers for all image files. They will produce grayscale images that have the same dimensions, spatial resolution, skew, and cropping as the images used for OCR.

HTC will create image output files as an uncompressed TIFF 6.0, from which a JPEG2000, PDF and text derivatives with the same file name will be made. The PDFs will be created with hidden text for each page image, a file name that corresponds to the page image it represents, and appropriate XMP metadata. The vendor will provide a page image that will be grayscale, down sampled to 150 dpi and encoded using a medium JPEG quality setting, and ensure that PDFs do not contain any bookmarks, links, named destinations, comments, forms, JavaScript actions, external cross references, alternate images, embedded thumbnails, annotations, or private data. HTC will create a JPEG2000 for each page image, with a file name that corresponds to the page image it represents. The file will

incorporate required XMP metadata. The vendor will ensure the JPEG2000 will be 6 decomposition levels and 25 quality levels and will produce a JPEG2000 file with a compression of 8:1.

### OCR Text Conversion

HTC will create OCR text conversion for each page with one OCR text file per page image. Each OCR file will have a file name that corresponds to the page image it represents. HTC will create text output in UTF-8-character set, ensure no graphic elements are embedded in the OCR text, order OCR text column-by-column, and create an OCR text file with bounding-box coordinate data at the word level. They will produce OCR text files that conform to the ALTO XML schema, Version 2.0, with additional specifications as stated in the NDNP Technical Guidelines as well as creating an ALTO XML file containing recognized text for each page image. HTC will also provide, if possible, the confidence level data at the page, line, character, and/or word level and the point size and font data at the character or word level.

### Metadata Creation

Both structural and technical metadata will be created for each newspaper page. The role of the structural metadata is to relate the pages to title, date, and edition; sequence pages within issue or section; and to identify image and OCR files according to the specifications in the NDNP Technical Guidelines. HTC will produce structural and technical metadata that contains a title identifier using the Library of Congress Control Number (LCCN) for the title; a unique identifier for each issue using the LCCN, Issue Date and Edition Order; and a unique identifier for each page using the LCCN, Issue Date, Edition Order, and Page Sequence Number. For issues/editions known to be published but not available as a digital

asset, the vendor will create a record for that issue/edition and use the Issue Present Indicator to indicate the issue/edition the record described is not available. HTC will produce reel metadata objects that describe individual scanned reels and filmed targets. They will deliver all digital assets in Metadata Encoded Transmission Schema (METS) object structure according to an XML Batch template structure as outlined in the NDNP Technical Guidelines.

MDNP project staff will create issue/edition metadata for all known issues/editions. They will also create page metadata for all known page occurrences of a page 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. If the unavailable page is part of an unavailable issue, a page record will not be created.

#### Quality Review Procedures

Using the Digital Viewer and Validator software (DVV), HTC will conduct an initial quality review and deliver to MHS, for each newspaper page, the following validated items: Master digital page image in uncompressed TIFF format; OCR text file with bounding-box coordinates; PDF Image with Hidden Text; derivative digital page in JPEG2000 format; and metadata using METS in accordance with NDNP Technical Guidelines. All digital files associated with a single newspaper page (.TIF, .JP2, .PDF, and OCR) will have the same file identifiers with distinct file extensions.

Upon receipt of validated files, project staff at MHS will enter tracking data on the deliverables to monitor workflow and will review all issues for duplicate pages and orientation using Thumbs+. Project staff will also review the first page, the page metadata



and OCR for one page and the issue metadata in the DVV; revalidate a sample of deliverables to assure quality; and ensure metadata exists for required Issue Present Indicators and Page Present Indicators.

#### Data Delivery Mechanism

For delivery to the Library of Congress, MHS will send deliverables organized in a hierarchical directory structure sufficient for identification of the individual digital assets from the metadata provided. All deliveries will be made using a shipping method that can be tracked. Deliverables will be created in a METS object structure, according to the XML Batch template structure, and stored in a batch-specific directory structure in successive sub-directories based on LCCN, reel number, and issue data. They will be shipped to LC on a firewire-enabled or USB 2.0 durable external hard drive, sent in a single batch per delivery device, and delivered in batches of no more than 10,000 pages. Batches will be delivered to the Library of Congress monthly, beginning no later than the spring of 2022.

After completing digitization of the newspaper microfilm, project staff will label all second-generation duplicate silver negative microfilm with barcodes provided by the Library of Congress and will ship the microfilm via a tracked shipping method for deposit with the Library of Congress.

#### Timeline

Project milestones and deliverables for the MDNP are outlined in the following table.

<b>Activities</b>	Sum/Fall 2021	Winter 2021/22	Spring 2022	Summer 2022	Fall 2022	Winter 2022/23	Spring 2023	Summer 2023
M = MHS V = Vendor								
Prepare list of proposed titles for review by SAB	M							
Attend annual NDNP awardee meeting	M				M			
Renew contract with vendor for digitization, metadata creation, OCR, and validation	M							
Select titles for digitization (Selection Advisory Board)	M	M						
Conduct detailed collation and page analysis of proposed reels and finalize selections	M							
Perform additional technical analysis of microfilm of selected titles	M							
Purchase second-generation silver negative microfilm		M	M					
Agree on a production schedule with LC	M	M						
Provide LC with selected titles, geographic and chronological coverage, and LCCNs		M						
Write 500-word essay for each selected title		M	M	M	M			
Create deliverables: TIFFs, JP2s, PDFs, metadata, OCR files, per LC guidelines specified in work plan		V	V	V	V	V	V	V
Validate deliverables using DVV		V	V	V	V	V	V	V
Deliver validated deliverables to MHS			V	V	V	V	V	V