

Pawnee Nation of Oklahoma Library and Archive

“Expanding Access to Pawnee Historical Materials”

I. PROJECT JUSTIFICATION

Historically one of the largest and most prominent Plains tribes, the Pawnee Nation numbered 60,000 or more during the period of early contact with Europeans.¹ During the 19th century, the Pawnee Dispersal (1873-1878) removed the Pawnees from their homelands to a reservation in Indian Territory (now Oklahoma) along the Cimarron and Arkansas Rivers. For 147 years, the Pawnee people have transformed the Reserve into a seat of tribal government and home to a college, a senior citizen’s center, a tribal court, a tribal police department, a library and museum, a gymnasium, a health center, and commercial enterprises. The Reserve is a growing and vibrant community steeped in cultural traditions for its 3,200 tribal citizens.

Pawnee Business Council President, Walter Echo-Hawk, a noted attorney, author, scholar, and Chairman of the Board of the Association of Tribal Archives, Libraries, and Museums, is a strong advocate for tribal cultural institutions, with an emphasis on archives. President Echo-Hawk holds the conviction that “Every Native tribe, regardless of size, must make a commitment to preserving and promoting its own cultural information by fully supporting tribally-controlled archives, libraries, and museums. It is imperative that unique and critical body of cultural knowledge held by other institutions be gathered in a central location where access and use can be determined by the tribal community.”²

Currently, the Pawnee Nation does not have an official archive, making it difficult to accumulate, interpret, and provide access to an abundance of historically significant materials held by the Pawnee Nation, individual Pawnee members, and other repositories.

To commemorate its approaching 150th year in Oklahoma, a period marked by hardship, loss, and perseverance, the Pawnee Nation is developing a five-year cultural plan (2020-2025) with the goal of bringing cultural materials home and making them accessible to the Pawnee people. Four major objectives in the plan include the following:

- 1) To build a new cultural center with an expanded research library and archive.
- 2) To document the lives of Pawnee people, past and present, through a family history program.
- 3) To identify and acquire materials related to Pawnee culture.
- 4) To create an online repository of Pawnee material culture.

The plan is informed by community input, in consultation with Pawnee scholars, and with the guidance of professional historians, curators, digital projects experts, librarians, and archivists. It draws on experiences of other Native communities that have created similar projects.

This proposal seeks funding to support all four above cited objectives of the Cultural Plan. Specifically, with IMLS support the Pawnee Nation will start developing an archive and research center, commence identifying locations of Pawnee historical documents, acquire access to the materials, and make them available through an online portal.

¹ Oklahoma Historical Society, Encyclopedia of Oklahoma, Entry=PA022

² Walter Echo-Hawk, ATALM Chairman of the Board message to attendees of the 2012 International Conference of Indigenous Archives, Libraries, and Museums in Tulsa, Oklahoma. Page 1, www.atalm.org

The primary beneficiaries of the project are Pawnee Nation citizens, with an emphasis on students and others seeking to learn more about their cultural heritage. It also will benefit scholars and researchers to ensure accurate information about Pawnees, as well as lifelong learners interested in Native culture and history. Ready access to historic materials will also assist Museum of the Pawnee Nation staff in the creation of new exhibits, both within the museum and online. The project supports language revitalization by actively seeking materials in the Pawnee language. Community programming, held in concert with a project that is collecting Pawnee family histories, will engage the community in contributing unique materials from personal collections.

The project falls within **IMLS Goal 3** to “Enhance the preservation and revitalization of Native American cultures and languages.” By working with repositories throughout the United States and Europe, as well as Washington State University, the project meets Objective 3.1 “to support the development of efficient strategic partnerships within, across, and outside Native communities. By addressing archival materials held by the Pawnee Nation and members of the Pawnee Nation, the project supports Objective 3.2 to “support the preservation of content of unique and specific value to Native communities. By making materials available through a free online portal, the project supports Objective 3.3 to “support the sharing of content within and/or beyond Native communities.”

2. PROJECT WORK PLAN

2.1 ACTIVITIES

\$150,000 is requested for a one-year period (9/1/21-8/31/22) to establish the Pawnee Nation Archive and Research Center for the purpose of preserving the rich history and culture of the Pawnee people. Funds will be used for a project director, student interns, acquisition of digital resources, travel, and the development of an online portal. In conjunction with the Museum of the Pawnee Nation, the project will be conducted under the auspices of the Pawnee Nation Cultural Resource Division which will provide administrative support, office space, and equipment.

The project commenced in 2020 when the Pawnee Nation worked with the Oklahoma State University School of Architecture to develop concept plans for a new cultural center. Fourth year architectural students worked with community members and the Museum of the Pawnee Nation Board to analyze community needs and visualize design goals. Subsequently, the Pawnee Nation was accepted into the IMLS-funded “Culture Builds Communities” program administered by the Association of Tribal Archives, Libraries, and Museums. As a result of the program, the Pawnee Nation expanded its vision of what is possible. It has allocated 25 acres of Reserve land to build a Cultural Center with a learning lodge as a museum which encompasses an expanded library, research center, and archive.

The Pawnee Nation is progressively moving toward the opening of the new center by establishing components of it now and engaging the community in creating content. Specifically, the Pawnee Nation is seeking to establish a physical and online archive of historic materials relating to Pawnee culture. With Enhancement Grant funding, the Nation will:

- 1) Retain the services of a full-time contract Project Manager to be responsible for ensuring execution of all project objectives, including developing sustainability plans. (**\$60,000**)
- 2) Retain the services of the Washington State University Center for Digital Scholarship and Curation team to help establish the online portal using the IMLS-funded Mukurtu Content Management

Software program, advise on gaining intellectual control of new materials, establish access protocols, and develop a digital preservation plan. (**\$25,000**)

- 3) Retain the services of researcher and archivist Jonathan Webb Deiss to identify and acquire Pawnee materials held in federal repositories in Washington, DC, including those held at the National Archives Administration, the National Anthropological Institute, Library of Congress, and other federal repositories. (**\$20,000**)
- 4) Retain the services of three paid student interns with priority from the Pawnee Nation College to assist the project manager with acquiring and accessioning new materials. (**\$7,500**)
- 5) Support the work of a Community Curation Team made up of Pawnee scholars to identify non-federal sources of materials, develop an acquisition plan, and start accumulating materials. (**\$24,000** for travel and digitization costs).
- 6) House newly acquired physical materials in accordance with standards of care for archival materials (**\$3,500** for supplies, equipment, and furnishings).
- 7) Engage Pawnee Nation Citizens through a public relations campaign (**\$3,500** for materials).
- 8) Apply 58.27% indirect costs to help administer the grant (**\$1,859** or 58.27 % of salary only)

Web Portal: The Pawnee Nation will work with Washington State University (WSU) to develop the online portal based on the Mukurtu Content Management System and built on the Drupal platform. Mukurtu is a content management system and digital access tool for cultural heritage, built for and in ongoing dialogue with indigenous communities. Developed and maintained at the Center for Digital Scholarship and Curation at Washington State University, the free and open-source platform is designed to meet the specific curatorial and access needs of indigenous peoples. Mukurtu offers the ability to provide differential access to community members and the general public and to create space for traditional narratives and knowledge labels that foreground Indigenous knowledge in the metadata of digitized cultural heritage materials.

The Pawnee Peoples' Portal (working title) will feature collections on topics such as agriculture, songs and ceremonies, military and veterans, education (boarding school history), religion, historic events, art and artists, language and vocabulary, and other topics as determined by the project team.

WSU has assisted other tribes with similar projects, as represented in the websites linked below:

- [HHF Digital Archives \(hunaheritage.org\)](http://hunaheritage.org)
- [Passamaquoddy People](#)
- [Plateau Peoples' Web Portal | Plateau Peoples' Web Portal \(wsu.edu\)](http://wsu.edu)
- [Catawba Archives \(catawbaculture.org\)](http://catawbaculture.org)

Materials Acquisition: The project will gather digital images of historical and cultural materials relating to the Pawnee people and culture including historical documents, government records, photographs, newspaper articles, maps, and audio and video recordings. Selection priorities include materials of historic and cultural significance, unique and rare materials, high audience interest and demand based on suggestions from the community and Scholar Curators, and clear copyright and permission status. Materials readily available elsewhere or of poor quality will not be prioritized. Project funds will not be used to acquire physical materials.

Methodologies for identifying and acquiring materials include:

- 1) Conducting a survey of records held by various Pawnee Nation departments to determine if records of permanent value should be accessioned into the Archive. Existing records retention schedules will be reviewed and policies established for future transfers.
- 2) Researching and determining digital repatriation potential of Pawnee materials held by state historical societies, libraries, and universities in states where the Pawnees had/have a presence (Kansas, Oklahoma, Nebraska), the Newberry Library (Chicago), Haskell Indian Nations University, the Gilcrease Museum (Tulsa), American Philosophical Society Library (Philadelphia), and the Library of Congress. The Scholar Curators will work with the project manager to determine an acquisition plan and seek digital repatriation of the materials.
- 3) Locating and acquiring digital copies of Pawnee materials held in federal repositories, with the National Archives and Records Administration and the Anthropological Archives serving as priorities. Jonathan Webb Deiss Research Associates will be retained to identify materials. Upon approval by the Pawnee Nation, Mr. Deiss will start acquiring digital copies of prioritized materials.
- 4) Engaging community members through Community Archiving days held during the annual Pawnee Homecoming (July) to seek out family archives of historic importance for digitization. Community members also will be asked to help identify people and places in photographs accumulated through the federal repositories.

A Microsoft Teams account will be established for the project, with files created for each of the topics, i.e., military, art, boarding schools, etc. Community members may upload materials as located. Copyright permissions will be determined before materials are accessioned into the archive or made available online.

2.2 STAFFING

The project will be led by a full-time contracted Project Manager who will be supervised by the Pawnee Nation Cultural Resources Director. Because this is a discrete, one-year start-up project requiring high level technical abilities, the Project Manager will be contracted instead of Pawnee Nation attempting to recruit an individual for one year. The Project Manager will be supported by three student interns each working **10** hours per week. A volunteer Community Curation Team will provide additional resources. Specifics are below.

Project Manager: The project will commence with the selection of a full-time Project Manager with knowledge of developing and managing digital archival collections, including researching and acquiring materials specific to Pawnee culture. The Project Manager will be responsible for ensuring the successful completion of all project activities and meeting or exceeding defined outputs.

Specific duties Include:

- Developing and implementing policies and procedures, including a sustainability plan.
- Hiring, training, and supervising student interns from the Pawnee Nation College.
- Developing and managing an online portal and uploading new materials
- Cataloging and managing records and artifacts now in the control of the Archive and Research Library utilizing the Mukurtu Content Management System
- Converting hard copy documents and photographs to digital formats.
- Seeking out and acquiring Pawnee materials and records of historical significance held by the Pawnee Nation, by private citizens, and in repositories around the world.
- Providing assistance to the Pawnee Community Curation Team as it identifies sources of new materials and working with the Curators to develop an acquisition plan, including prioritizing acquisitions, creating a timeline, and developing a budget.
- Providing for the proper storage of non-digital archival materials.

- Organizing events and identifying additional methods to engage Pawnee Nation citizens in sustaining and advancing culture.
- Will supervise grant deliverables and deadlines, including reporting.

Student Interns: Three students, with priority from the Pawnee Nation College, will be recruited to aid the Project Manager and Community Curation Team as they identify new materials. They will be trained in the use of the Mukurtu CMS and in archival accessioning and digitization procedures.

Cultural Resources Division Director: Herb Adson will monitor the daily progress of the project and supervise the Project Manager. Mr. Adson, an acknowledged Pawnee cultural specialist and Pawnee cultural leader, will organize and lead the Community Curation Team.

Pawnee Community Curation Team: A team of volunteer historians and scholars, all members of the Pawnee Nation, will be responsible for identifying, reviewing, and approving all content before it is accessioned into the archive. It is anticipated that individual members will be responsible for specific topics in which they hold scholarly credentials. As needed team members will be added. The initial team invitees include:

- **Herb Adson**, Pawnee Nation Cultural Resource Division Director.
- **Walter Echo-Hawk**, president of the Pawnee Business Council of the Pawnee Nation of Oklahoma and Chairman of the Board of the Association of Tribal Archives, Libraries, and Museums. He is a well-known attorney, tribal judge, author, and historian.
- **Roger Echo-Hawk**, a historian, artist, and scholar specializing in Pawnee oral traditions.
- **Matt Reed**, Pawnee Tribal Historic Preservation Officer, a Chief of the Traditional Nasharo Council of the Pawnee Nation, and Chair of the Board of the Museum of the Pawnee Nation.
- **James Riding In**, editor of *Wicazo Sa Review: A Journal of Native American Studies*, founding chair of the Pawnee Nation College, interim director and associate professor of American Indian Studies at Arizona State University.
- **Will Riding In**, Master's Degree in Museum Studies and a member of the Board of the Museum of the Pawnee Nation.

Museum of the Pawnee Nation Board of Directors: In conjunction with the Project Director, the seven-member board will manage action items and progress completed by the Project Manager. Quarterly meetings will ensure the project is progressing at a timely pace and adhering to archival standards.

Pawnee Nation Business Council: Led by Walter Echo-Hawk, the Business Council will monitor and hold accountable the progression of activities made available to the community through cultural knowledge and events.

2.3 CONSULTANTS AND SERVICE PROVIDERS

Two service providers are Washington State University to guide development of the online portal and use of Mukurtu CM and J Deiss Research Associates to identify/acquire Pawnee records in federal repositories.

Washington State University Center for Digital Scholarship and Curation (WSU) will provide guidance on developing the online portal using the (Mook-oo-too) Content Management System. Mukurtu was developed with major funding from the Institute of Museum and Library Services for the purpose of enabling repositories to manage and share digital cultural heritage. For more information, visit mukurtu.org. WSU will:

1. Work with the Pawnee project team on the development of workflows to meet the project goals.
2. Provide examples of access protocols and categories for the Portal.
3. Provide examples and workflows for using strict protocols to house uploaded content prior to review and vetting by Scholar/Curator team.
4. Provide guidance to the project manager on aspects of the Mukurtu platform needed for successful use of the Project Portal.
5. Configure and host pilot Mukurtu site.
6. Create user accounts for repository staff and Community Curation Team.
7. Host production Mukurtu site for the term of the initial grant.
8. Support the project team as it ingests and works with content.

Pawnee Nation ownership of information and a cap on fees will be spelled out in a sum-certain contract with WSU. Future Pawnee Nation housing of information from the online portal will be determined with the Pawnee Nation Information Technology Division.

The Project Manager will attend Mukurtu training at the ATALM2021 conference and will review all training materials available on the Mukurtu website. Student interns will also be required to follow the online training modules.

Jonathan Deiss Research Associates: Thousands of photographs, maps, documents, and recordings relating to the Pawnees are held in various federal repositories. They are not always easy to identify because finding aids are lacking and because of the sheer volume of records. To streamline the process, the Pawnee Nation will engage the professional services of Jonathan Webb Deiss Research Associates, a Washington, DC based firm specializing in Native content. Its principal researcher, Jon Deiss, knows which federal records are digitized or undergoing digitization and are readily available. Specifically, Mr. Deiss will:

1. Identify Pawnee records held in federal repositories and create an index.
2. Identify which collections have been digitized and are immediately available.
3. Work with the Community Curation Team (CCT) on acquisition priorities.
4. Provide a minimum of 500 high-value (as determined by the CCT) digital images for inclusion on the web portal, prioritizing military records, treaties, and photographs.
5. Coordinate a research field trip for the project manager and members of the Pawnee Nation from December 2-3, 2021. Criteria will be set for identifying visitors. Repositories to be visited are the National Archives, the Library of Congress, and the National Anthropological Archives.

2. KNOWN RISKS

On the positive side, the Pawnee Nation has studied similar projects successfully completed by other Native Nations and has designed the project based on the methodologies and lessons learned by others. The project has a well-defined purpose and easily achievable deliverables. The project schedule is practical and reasonable (see Schedule of Completion). Project consultants and service providers are knowledgeable and have proven track records in accomplishing similar projects. Staff priorities are defined and administrative controls in place. While all activities within control of the Pawnee Nation have been addressed, the risk of consultant/contractor delays is possible as is the closure of repositories due to COVID-19 or other Acts of God. In the event of contractor delays, the project team will continue to accumulate materials and prepare them for inclusion in the physical archive and online portal. In the event materials held by outside repositories are not accessible temporarily, the project team will focus on generating the community archives.

3. INTENDED RESULTS

Receiving support from IMLS will allow the Pawnee Nation to complete both short- and long-term objectives. All project activities will be assessed for effectiveness, quality, and timeliness. Various measurement tools will be used including reports, user surveys, and assessments by project staff.

- The Pawnee Nation will gain access to historical materials that will better enable it to document and preserve its history and culture. This is a long-term objective, but for the one-year project period, performance measures include the acquisition and processing of a minimum of 300 items (physical or digital) per month, either physical or digital. This performance objective will be documented by the project manager and reviewed quarterly by the Museum of the Pawnee Nation Board and monthly by the Community Curation Team.
- The Pawnee Nation will be better able to meet the needs of researchers and scholars through the development of the Pawnee Peoples Portal and a well-organized Archive and Research Center. It will publish an index of holdings, even if the materials are not online. The performance objective will be to create an online index of at least 1,500 items by the end of the project period. Performance will be measured through monthly reports from the project manager.
- Eventually, as the materials become public facing, use statistics and user surveys, i.e., “Were you able to find the materials you sought?” will be implemented. This is a long-term result and meaningful statistics may not be collected during this grant project but will be collected as the web portal is promoted.
- The Pawnee Nation will be better able to engage the community in cultural activities through public programming. Performance will be measured through attendance records, user surveys, and the number of new materials contributed by community members.
- The Pawnee Nation’s relationships with other collecting institutions will be strengthened as it works to digitally repatriate materials. Additional cataloging information will be provided to the partnering institutions as it becomes available, thereby strengthening their collections. The performance objective will be to work collaboratively with a minimum of six institutions. The intended outcomes are that the collecting institutions indicate they are better prepared to work with indigenous communities and their collections are strengthened. These outcomes will be collected through interviews with repository staff who may reflect on their experiences with the project.
- The Pawnee Nation will be better positioned to seek funding from non-IMLS sources in support of its four strategic objectives. This is a long-term objective and will be measured by a demonstrable increase in funding, as well as a diversity of sources.
- The Pawnee Nation, through the documentation of project activities, may serve as an example for other tribes seeking to conduct similar projects. Results will be documented and disseminated through publications and conference sessions.

4. TANGIBLE PRODUCTS

The project will result in three tangible products:

- 1) An archive of physical materials;
- 2) An online portal of curated digital materials; and,
- 3) A toolkit documenting project steps that may be used by other Native Nations wishing to implement similar projects.

5. SUSTAINABILITY

The Pawnee Nation Business Council is committed to maintaining and growing the Archive and Research Center after the grant period ends. Further, it will seek additional project funds from the National Historic Records Advisory Board, the National Endowment for the Humanities, and the National Parks Service. It's non-profit foundation, The Evening Star Fund, will accept personal, corporate, and foundation grants. The Museum of the Pawnee Nation Board, in conjunction with the Evening Star Fund, is charged with raising funds to sustain projects. This includes funding needed for eventual transfer and maintenance of the Archive and Research Center in the planned Cultural Center learning lodge/museum.

6. SOURCES CONSULTED

Digital Frameworks

- [Mukurtu: An Indigenous Archive and Publishing Tool; Best Practices for Planning Digitization Projects; A Framework for Building Good Digital Collections; Standards for Digital Imaging; and, Digitizing Historical Records Projects FAQs | National Archives.](#)

Model Programs

- [HHF Digital Archives \(hunaheritage.org\); Passamaquoddy People; Plateau Peoples' Web Portal | Plateau Peoples' Web Portal \(wsu.edu\); Catawba Archives \(catawbaculture.org\)](#)

Targeted Repositories for 2021-2022

- [American Indian Archives | Oklahoma Historical Society \(okhistory.org\)](#) (857 records)
- [American Indian Studies Research Institute, Indiana University \(Pawnee Language Program database and anthropological documents\)](#)
- [University of Oklahoma Libraries - Western History Collections \(ou.edu\)](#) (358 records)
- [Oklahoma State University Edmond Low Library and Archives](#) (1,160 records)
- [National Anthropological Archives | Smithsonian Institution \(si.edu\)](#) (3,253 records)
- [Collections Search | National Museum of the American Indian \(si.edu\)](#) (386 objects, 25 records)
- [The Newberry - Chicago's Independent Research Library Since 1887](#) (196 online records)
- [Pawnee - National Archives Search Results](#) (286 online records and documents)
- [Nebraska State Historical Society Home Page \(nebraskahistory.org\)](#)
- [Pawnee - Kansas Historical Society \(kshs.org\)](#)
- [Pawnee County Historical Society - Oklahoma \(pawneechs.org\)](#)
- [BIA Records: Oklahoma | National Archives](#)
- [Pawnee Indian Museum - Kansas Historical Society \(kshs.org\)](#)
- [Search results for Pawnee, Available Online | Library of Congress \(loc.gov\)](#) (23,777 records)
- [Search results for University of Delaware Library \(worldcat.org\)](#) (9,387 volumes)



DIGITAL PRODUCT FORM

INTRODUCTION

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to digital products that are created using federal funds. This includes (1) digitized and born-digital content, resources, or assets; (2) software; and (3) research data (see below for more specific examples). Excluded are preliminary analyses, drafts of papers, plans for future research, peer-review assessments, and communications with colleagues.

The digital products you create with IMLS funding require effective stewardship to protect and enhance their value, and they should be freely and readily available for use and reuse by libraries, archives, museums, and the public. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

INSTRUCTIONS

If you propose to create digital products in the course of your IMLS-funded project, you must first provide answers to the questions in **SECTION I: INTELLECTUAL PROPERTY RIGHTS AND PERMISSIONS**. Then consider which of the following types of digital products you will create in your project, and complete each section of the form that is applicable.

SECTION II: DIGITAL CONTENT, RESOURCES, OR ASSETS

Complete this section if your project will create digital content, resources, or assets. These include both digitized and born-digital products created by individuals, project teams, or through community gatherings during your project. Examples include, but are not limited to, still images, audio files, moving images, microfilm, object inventories, object catalogs, artworks, books, posters, curricula, field books, maps, notebooks, scientific labels, metadata schema, charts, tables, drawings, workflows, and teacher toolkits. Your project may involve making these materials available through public or access-controlled websites, kiosks, or live or recorded programs.

SECTION III: SOFTWARE

Complete this section if your project will create software, including any source code, algorithms, applications, and digital tools plus the accompanying documentation created by you during your project.

SECTION IV: RESEARCH DATA

Complete this section if your project will create research data, including recorded factual information and supporting documentation, commonly accepted as relevant to validating research findings and to supporting scholarly publications.

SECTION I: INTELLECTUAL PROPERTY RIGHTS AND PERMISSIONS

A.1 We expect applicants seeking federal funds for developing or creating digital products to release these files under open-source licenses to maximize access and promote reuse. What will be the intellectual property status of the digital products (i.e., digital content, resources, or assets; software; research data) you intend to create? What ownership rights will your organization assert over the files you intend to create, and what conditions will you impose on their access and use? Who will hold the copyright(s)? Explain and justify your licensing selections. Identify and explain the license under which you will release the files (e.g., a non-restrictive license such as BSD, GNU, MIT, Creative Commons licenses; RightsStatements.org statements). Explain and justify any prohibitive terms or conditions of use or access, and detail how you will notify potential users about relevant terms and conditions.

A.2 What ownership rights will your organization assert over the new digital products and what conditions will you impose on access and use? Explain and justify any terms of access and conditions of use and detail how you will notify potential users about relevant terms or conditions.

A.3 If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

SECTION II: DIGITAL CONTENT, RESOURCES, OR ASSETS

A.1 Describe the digital content, resources, or assets you will create or collect, the quantities of each type, and the format(s) you will use.

A.2 List the equipment, software, and supplies that you will use to create the digital content, resources, or assets, or the name of the service provider that will perform the work.

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG, OBJ, DOC, PDF) you plan to use. If digitizing content, describe the quality standards (e.g., resolution, sampling rate, pixel dimensions) you will use for the files you will create.

Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan. How will you monitor and evaluate your workflow and products?

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period. Your plan should address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

Metadata

C.1 Describe how you will produce any and all technical, descriptive, administrative, or preservation metadata or linked data. Specify which standards or data models you will use for the metadata structure (e.g., RDF, BIBFRAME, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

C.2 Explain your strategy for preserving and maintaining metadata created or collected during and after the award period of performance.

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content, resources, or assets created during your project (e.g., an API [Application Programming Interface], contributions to a digital platform, or other ways you might enable batch queries and retrieval of metadata).

Access and Use

D.1 Describe how you will make the digital content, resources, or assets available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content, delivery enabled by IIIF specifications).

D.2. Provide the name(s) and URL(s) (Universal Resource Locator), DOI (Digital Object Identifier), or other persistent identifier for any examples of previous digital content, resources, or assets your organization has created.

SECTION III: SOFTWARE

General Information

A.1 Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve.

A.2 List other existing software that wholly or partially performs the same or similar functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

Technical Information

B.1 List the programming languages, platforms, frameworks, software, or other applications you will use to create your software and explain why you chose them.

B.2 Describe how the software you intend to create will extend or interoperate with relevant existing software.

B.3 Describe any underlying additional software or system dependencies necessary to run the software you intend to create.

B.4 Describe the processes you will use for development, documentation, and for maintaining and updating documentation for users of the software.

B.5 Provide the name(s), URL(s), and/or code repository locations for examples of any previous software your organization has created.

Access and Use

C.1 Describe how you will make the software and source code available to the public and/or its intended users.

C.2 Identify where you will deposit the source code for the software you intend to develop:

Name of publicly accessible source code repository:

URL:

SECTION IV: RESEARCH DATA

As part of the federal government's commitment to increase access to federally funded research data, Section IV represents the Data Management Plan (DMP) for research proposals and should reflect data management, dissemination, and preservation best practices in the applicant's area of research appropriate to the data that the project will generate.

A.1 Identify the type(s) of data you plan to collect or generate, and the purpose or intended use(s) to which you expect them to be put. Describe the method(s) you will use, the proposed scope and scale, and the approximate dates or intervals at which you will collect or generate data.

A.2 Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

A.3 Will you collect any sensitive information? This may include personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information. If so, detail the specific steps you will take to protect the information while you prepare it for public release (e.g., anonymizing individual identifiers, data aggregation). If the data will not be released publicly, explain why the data cannot be shared due to the protection of privacy, confidentiality, security, intellectual property, and other rights or requirements.

A.4 What technical (hardware and/or software) requirements or dependencies would be necessary for understanding retrieving, displaying, processing, or otherwise reusing the data?

A.5 What documentation (e.g., consent agreements, data documentation, codebooks, metadata, and analytical and procedural information) will you capture or create along with the data? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the data it describes to enable future reuse?

A.6 What is your plan for managing, disseminating, and preserving data after the completion of the award-funded project?

A.7 Identify where you will deposit the data:

Name of repository:

URL:

A.8 When and how frequently will you review this data management plan? How will the implementation be monitored?