Washington State University | Tribal Digital Stewardship Cohort Program | Dr. Kimberly Christen

Abstract
Tribal Digital Stewardship Cohort Training: Cultural and Collaborative Curation Models and Methods

Building on the success of a previous Laura Bush 21st Century Librarian Program grant and a cooperative agreement with the IMLS, we are applying for a 2017 LB21 Continuing Education project grant within the Curating Collections area to extend and enhance the educational offerings of the Tribal Stewardship Cohort Program and the Sustainable Heritage Network (SHN) initiatives currently offered by Washington State University's Center for Digital Scholarship and Curation (CDSC). CDSC staff have a proven record of providing hands-on and virtual training to meet the curatorial, stewardship, and preservation needs of underserved tribal archives, libraries, and museums (TALMs) as they work to manage and sustain their digital cultural heritage. This proposal extends our current work, resources, and expertise to offer the *Tribal Digital Stewardship Cohort Training* program to fill a crucial need articulated by both tribal communities and collecting institutions to provide training, mentorship, and collaboration paths to support cultural preservation and linguistic revitalization efforts nationwide.

One of the greatest needs of the TALM community is continuing education and training for their current staff. It is common that Native librarians, archivists, and curators do not receive formal training, and at the same time they assume multiple duties in their institutions. While post-secondary education to tribal members through Master's degree programs has increased, the literature shows that distance to programs, family obligations, cultural needs, and financial difficulties are obstacles to increasing Native student enrollments in traditional secondary educational settings. There is a crucial need to train existing tribal staff through tuition free, hybrid in-person/virtual educational opportunities. The 2012 Association of Tribal Archives, Libraries and Museums, *Sustaining Indigenous Cultures* report found that, "according to the survey data, the best ways to train current staff are through local, state, and regional programs that are *topic- specific and use hands-on or how-to teaching methods*." Next to hands-on training, the most effective training for TALMs are, "brief distance learning programs like *webinars or short web-based modular courses*." Emphasizing the collaborative curation method developed at WSU through our work with tribes nationally, this new Cohort program expands the digital lifecycle curriculum to include methods and tools to *curate collections in partnership with non-Native repositories through ethical frameworks for sustained engagement*. The collaborative curation model emphasizes long-term engagement, sharing digital content, and enriching metadata with tribal knowledge for broad accessibility. In addition to the digital stewardship curriculum offered by WSU staff, the two cohort groups will be paired both with regional mentors from TALMs and with federal institutional repository partners at the Smithsonian Institution and the Library of Congress to develop a digital project following the collaborative curation method for a hands-on application of the program. Finally, each TALM cohort pair will be trained in and have access to a hosted version of Mukurtu CMS to develop, design and share their digital projects.

The *Tribal Digital Stewardship Cohort Training* program supports the specific educational and curatorial needs of TALMs by providing three avenues for *training and professional development*: 1) a certificate in **Tribal Digital Stewardship and Collaborative Curation** through the hybrid onsite/virtual cohort program at WSU, 2) attendance at regional SHN workshops at TCLI and ATALM, and 3) online access to the entire Cohort program's curricular materials, SHN workshop curricula, and open educational resources contributed by partners. The work plan includes five outcomes directly related to the learning goals: 1) curricular updates to include the collaborative curation model 2) Open Educational Resources (OERSs) creation for all curricular modules, 3) dissemination of OERs on the SHN site, 4) delivery of training to cohort members at WSU, at federal repositories, and through the mentorship program and 5) programmatic assessment. The cohort program phases include: outreach, application submission, application review, cohort selection, on-site visits to cohort institutions, training at WSU, monthly virtual training sessions, and assessment. In addition, we will continue our partnership with ATALM and TCLI by providing workshops at their annual conferences and providing web-based access to conference sessions and one-on-one expert tutorials. Together these offerings provide a full spectrum of educational modules to meet the specific needs of TALMs as they embark on and expand their digitization programs.

Tribal Digital Stewardship Cohort Training: Cultural and Collaborative Curation Models and Methods for Tribal Librarians and Archivists

Project Summary
Building on the success of a previous Laura Bush 21st Century Librarian Program grant and a cooperative agreement with the IMLS, we are applying for a LB21 Continuing Education project grant in the Curating Collections area to extend and enhance the educational offerings of the previous Tribal Stewardship Cohort Program (2014-17) and the Sustainable Heritage Network (SHN) initiatives currently offered by Washington State University's Center for Digital Scholarship and Curation (CDSC). CDSC staff have a proven record of providing hands-on and virtual training to meet the curatorial, stewardship, and preservation needs of tribal archives, libraries, and museums (TALMs) as they work to manage and sustain their digital cultural heritage. Further, WSU's development of the Mukurtu CMS software specifically to address the curatorial needs of Indigenous communities provides a technical platform for the educational models for access to and preservation of cultural collections. This project extends current work, resources, and expertise to offer the *Tribal Digital Stewardship Cohort Training* program filling a crucial need articulated by tribal communities, collecting institutions and the wider field of library and archives professionals to provide training, mentorship, and collaboration paths to support culturally relevant and ethical curation work nationwide.

Emphasizing and building on the ***collaborative curation method*** developed at WSU through our work with Native American nations the last eight years, this enhanced Cohort program expands the digital lifecycle curriculum to include methods and tools to ***curate collections in partnership with non-Native repositories through ethical frameworks for sustained engagement***. The collaborative curation model emphasizes long-term engagement, sharing digital content ethically and responsibly, and enriching metadata with tribal knowledge for broad accessibility. The method emphasizes both culturally responsive technology solutions and building sustainable workflows for collaboration at all steps in the process of curation: from caring for physical materials to creating digital access points for multiple narratives. Building on past success of creating, delivering and sustaining both face-to-face and virtual educational models for tribal archives and library professionals, this phase of work will produce several new outcomes: 1) an expanded tribal digital stewardship cohort training program at WSU emphasizing collaborative curation practices for two cohorts consisting of twenty-four students, 2) a comprehensive set of open educational resources (OERs) organized into training modules and accessible freely online through the Sustainable Heritage Network (SHN), 3) regional and national hands-on training to participants at conference workshops, and 4) a tribal digital stewardship mentorship program connecting cohort members with Native professionals in their fields to extend training opportunities, expand professional networks, and ensure sustainability.

Statement of Need
The *Tribal Digital Stewardship Cohort Program* fills a crucial need articulated by tribal archivists, librarians, and museum specialists, as well as the institutions they seek to collaborate with to support their vital digitization and preservation work. One of the most pressing concerns for tribal librarians, archivists and museum specialists is managing, preserving and caring for the large amounts of and diverse cultural heritage materials in their holdings. The 2012 report, *Sustaining Indigenous Culture: The Structure, Activities and Needs of Tribal Archives, Libraries, and Museums* from the Association of Tribal Archives, Libraries, and Museums (ATALM) aggregated information from tribal archives, libraries and museums (TALMs) across the country providing a clear mandate for intervention and identifying key needs: "Increasingly, digitization is industry-standard work. Yet more than half of responding TALMs do not digitize any materials, and many more need funding, equipment, staff time, and expertise to engage appropriately in digitization. As efforts progress, TALMs also may need assistance with digital policy making and planning in order to ensure appropriate control of cultural patrimony" (2012, pg.12). It is evident from the ATALM report that not just digitization, but having a digital *strategy* to manage and care for collections is an unmet priority area of most TALMs. Even more telling is the role that TALMs play within their communities: "Most TALMs are part of a larger community commitment to cultural stewardship. The key areas TALMs identified as part of their larger role within their communities

include: 1) cultural preservation, perpetuation, and revitalization 2) serving as a repository for cultural materials and resource and 3) providing support for tribal sovereignty" (2012, pg. 3). In other words, TALMs are multifunctional institutions serving dispersed communities of users. The cultural heritage materials that urgently need to be digitized, curated, and preserved may have multiple audiences including K-12 learning environments, Tribal Natural Resource offices, and language revitalization programs. The digital curation of these collections through the tribe's own cultural and technical systems allows for this multiplicity in local contexts.

Continuing education and training for current staff TALM staff is a significant area of need in order to establish digitization policies, workflows and practices that benefit a broad set of cultural, linguistic and social activities. It is common for tribal archivists and librarians to not have formal training in their fields and or be asked to fulfill several roles at their institutions. While post-secondary education to Tribal members through Master's degree programs has increased, the literature shows that distance to programs, family obligations, cultural needs, and financial difficulties are obstacles to local tribal members in obtaining graduate degrees. Furthermore, the Tribal member best qualified to hold a position in a TALM because of that individual's knowledge of cultural traditions, does not necessarily hold a college or graduate degree. There is a crucial need to train existing staff with short course, hands on and tuition free educational opportunities. The ATALM *Sustaining Indigenous Culture* report found that, "According to the survey data, the best ways to train current staff are through local, state, and regional programs that are topic- specific and use hands-on or how-to teaching methods." Next to hands-on training, the most effective educational models for TALMs are, "Brief distance learning programs like webinars or short web-based modular courses."

Work to Date/State of the Field
There are several recent examples of focused training initiatives for tribal professionals. The national Breath of Life Archival Institute's training model demonstrated that connecting tribal professionals with their counterparts at national repositories and linking them directly to collections provides the foundation for the re-use of collections in educational, linguistic, and cultural preservation work. Similarly, the Oregon Tribal Archives Institute, the Tribal College Librarians Institute at the University of Montana, and the Convening Culture Keepers in Wisconsin unite state universities with tribal nations in order to facilitate small, directed courses based on localized needs for library and archive training. The Oregon Tribal Archives Institute, for example, "was designed to address the need for an affordable, in-depth archives and records management training for Oregon's nine federally recognized tribes in order to support, as well as to facilitate, the preservation of Oregon's tribal nations' cultural sovereignty through their archival collections and records." Similarly, in Wisconsin, a collaboration between the UW-Madison School of Library and Information Studies-Continuing Education Services (SLIS-CES) and the Great Lakes Inter-Tribal Council Inc., resulted in Convening Culture Keepers, a series of "six professional development and networking mini-conferences for tribal librarians, archivists, and museum curators serving American Indian communities in Wisconsin…the day-long biannual gatherings seek to provide culturally-relevant trainings and create enduring professional networks between tribal and non-tribal cultural institutions." In these cases, the cultural, institutional and professional needs of tribal archivists, librarians, and museum specialists are served by focused training primarily at the regional level, and network building engaging both tribal and non-tribal partners.

Over the last ten years, ATALM has served as a locus of networks that connect communities, collections, and curation methods. Our work with ATALM through our IMLS-funded Sustainable Heritage Network takes the specific needs of digital stewardship as its emphasis and has formed networks of communities that work together to share resources and skills. The SHN, in partnership with ATALM, provides regional training workshops, online educational resources, and a national registry for tribal archives and libraries that promote collaboration, and sustainable digitization models for the entire lifecycle of digital heritage. In 2013, Washington State University launched the SHN to provide hands-on and online educational resources in the lifecycle of digitization to Native communities and their allies. Building on the strengths of our partners and existing networks, to date, we have created 833 open educational resources freely available on the SHN site covering all points in the lifecycle of collections management: from physical object care to policy building, to step-by-step guides to digitize multiple content formats. These resources emphasize cultural respect and tribal values. The SHN site has a substantial reach with 35,189 unique visits and 166,322 page views over the last two

years. The SHN facilitates a network of collaborators through communities and workbenches that include non-Native organizations, such as the Internet Archive and AVPreserve, highlighting the creation of diverse professionals in the shared work of digital heritage management (see appendix pages 2-16 for impact report).

Recognizing the gap in the training needs for tribal institutions and professionals, in 2015 WSU launched the first Tribal Stewardship Cohort Program to provide TALM professionals with *an alternative training opportunity* to enhance, extend and build their skills in digital heritage management and collections care. Filling a gap between short workshops and University degree programs, the TSCP provided **twenty-four tribal participants from twelve tribal nations across the United States with a twelve-month training program in the lifecycle of digital heritage management.** The cohort model proved invaluable to the success of our students and their communities. Bringing two members from each tribal institution ensures that the skills they learn are sustained upon their return to their home communities and institutions. Participants said that the cohort model enhanced "tribal pride" and that they "learned so much from the [other] cohort members." Since the program brings together cohort members from multiple tribes and organizations within those tribes (libraries, archives, museums) and participants learn from each other and develop close professional ties across Native institutions. The curriculum we designed combines best practices in digital stewardship, preservation, and curation with a focus on cultural needs and tribal values at every stage of the lifecycle. The cohort program emphasizes creating manageable, achievable programs and projects to meet local needs. In a final evaluation of the program, one member of the first cohort noted the "overwhelmingly positive impact your work has on native communities. You've given us an amazing toolbox. Now it's time for us to work. Your minds are rich with knowledge. More importantly, your hearts are doing this work for the right reasons." A member of the second cohort summed up the impact this way, "The networking is a blessing, we are empowered to do our work together." Emphasizing cohort-based learning and extending networks of tribal professionals impacts the depth of learning digitization skills, project planning, and policy building by opening avenues for the exchange of ideas and valuing differing perspectives (see appendix pages 17-51 for full curriculum map).

In November 2016, the Tribal Stewardship Cohort Program received the National Digital Stewardship Alliance's [Outstanding Project Award](#) recognizing the national impact of our "work in providing long-term educational opportunities in digital heritage management and preservation as well as its dedication to culturally responsive and ethically-minded practices." After our first two cohorts completed the training we summarized their assessments and our evaluations into the following main findings from our pilot project (2015-17):

1. While pairs of participants from each institution provided support for one another, the relationships formed and information shared *between* the varied tribes outmatched our expectations. Based on this feedback, more time should be given to enable long-term partnerships that would stimulate and encourage spreading the skills and knowledge gained to regional TALMS and non-Native institutions. Cohort members requested formal and informal structures and networks for maintaining and growing the networks they formed during the cohort training.

2. From year one to year two we implemented a more formal application process. While we did not make the application process totally open, we made formal offers to TALMs inviting them to apply based on recommendations from our advisory board. We found that this process resulted in a more engaged and informed set of TALMs at all levels. That is, each cohort pair felt more supported by their administrations and we had direct contact with the TALM administrations with the result that there was significant support for the skills, policies, and training that the cohort members received.

3. Our evaluation results highlighted the importance of a balanced curriculum, the need for targeted instruction for each cohort member and TALM pairs, and time devoted to creating policies and completing projects with other cohort members.

4. The most often remarked on skill gained was being able to understand the entire digital stewardship lifecycle and the necessity to be able to drill down into one component, but be knowledgeable about all aspects and then to create policies to address each of these areas. As one cohort participant remarked, "my tribe is not unique in its lack of set policies."

Combining hands-on and web-based educational opportunities, networking and mentorship with a core emphasis on tribal content and cultural digitization needs, the *Tribal Digital Stewardship Cohort Program* will build on the existing cohort program to train local TALM staff to work in their communities with their own

collections and returned digital collections from other repositories more effectively through the collaborative curation method. The *Tribal Digital Stewardship Cohort Program's* focus on building partnerships *between TALMs and federal institutions* that hold Native materials with an emphasis on collaborative digital curation and a long-term focus on mentorship, will build professional capacity across TALMs, enrich collections and records across institutions, and ensure sustainability in terms of both technical and human infrastructure. While the emphasis of this training model is on TALM participants, the benefits will influence the wider profession through our emphasis on a generalizable collaborative curation model and the development long-term partnerships of trust and respect. Underpinning this training will be a solid foundation of workflows, policies, and technologies. Extending the existing curriculum to more clearly define reproducible models will provide a foundation for long-term sustainability through TALMs, non-Native repositories, and other professional training programs. For example, for the last two years we worked with the [Preserving Digital Objects With Restricted Resources](#) project to expand their two-day preservation workshop to include topics of specific relevance to tribal communities thereby extending already existing models to tribal participants and broadening the perspectives of other workshop participants. The resources we create will not only be educational modules for TALM professionals, but also, curricular units that can be added to existing course offerings by other institutions.

Project Design
Goals and Outcomes
The project has four main goals:
- *Provide hands-on and online educational opportunities* for TALMs emphasizing digital stewardship through the collaborative curation model;
- *Create reusable, adaptable, and open educational resources* and curricular modules for the lifecycle of digital stewardship and specific modules for each stage of collaborative curation. These resources will include hands-on activities for in-person instruction and online modules;
- *Provide sustainable workflow models* for collaborative and ethical curation and content sharing between Native and non-Native repositories, communities and partners
- *Expand TALM networks* to encourage and promote professional development, mentorship, collaboration and mutual assistance.

To meet these goals, this updated *Tribal Digital Stewardship Cohort Training* program will provide **three avenues** for training, professional development, and network building: 1) a certificate in **Tribal Digital Stewardship and Collaborative Curation** through the hybrid onsite/virtual cohort program, 2) participation in SHN workshops at Tribal College Libraries Institute (TCLI) and ATALM, and 3) online access to the entire Cohort program's curricular materials, SHN workshop resources, and open educational resources created by WSU and partner organizations.

Work plan and Timeline of Activities
The work plan includes **five activities directly related to the project goals**: 1) curricular updates to expand the collaborative curation model 2) OER creation and dissemination of modules online, 3) recruitment and selection of participants, 4) delivery of educational modules to cohort members through collaboration with federal repository partners, and 5) network building and mentorship.

1. Curricular Updates
   Our existing digital stewardship lifecycle curriculum is based on four main areas: "get it, check it, save it, share it." To this model, we use TALM specific values to add "cultural checks" so that at every stage of the lifecycle (in policies, in digitization efforts, metadata creation etc.) cultural values, local protocols and social norms can be added and accounted for. These "cultural checks" may include consultation with elders or tribal government committees or particular spiritual groups. We begin each cohort with this broad based schema and over the year each cohort pair creates their specific version of the lifecycle to meet their local needs. In doing so they complete the program with localized policies, workflows, and methods based on national best practices and standards, but operationalized for their local situations. For example, in the 2016-17 cohort, Ashley Sexton of the Catawba Cultural Center Archives based her

Digital Stewardship Lifecycle on the process of creating Catawba Pottery, an important aspect of life and culture in the Catawba Indian Nation. Each stage of the digital stewardship is mapped onto a part of pottery creation: Collecting and molding the clay, scraping and rubbing to clay, firing the clay, and finally sharing the piece. Each of these stages represents the careful planning and work for physical and digital materials in the archives, adapted to the circumstances of the Catawba Indian Nation. Similarly, Amelia Wilson and Sarah Dibdhyl of the Huna Heritage Foundation worked to create their Digital Stewardship Lifecycle based on subsistence practices in their communities. The Hoonah community collects berries using gathering baskets. For their lifecycle, the pair adapted the steps that go into collecting, processing, and preserving of berries and other traditional foods and medicines to each phase of digital stewardship. Their conclusion was that the ultimate goals of sharing digital resources (from berries and foods, to history, knowledge, language and cultural heritage) ties back into preservation of "Haa Kusteeyí," or the Hoonah way of life. Each cohort pair used these tailored lifecycles to create four policies during the year (collections management, digitization, access and use and preservation). The basis of the Cohort curriculum is infusing local cultural protocols and values into the processes of digitization, preservation, and access (see appendix pages 52-58 for lifecycle concepts and cohort lifecycles). Allowing each cohort pair to tailor the workflows, practices and policies involved they are able to create an implementable plan that meets their technical, cultural, and collections needs. With this model—and curriculum in pace—we will update key resources to focus on collections curation that is both collaborative and culturally relevant. Based on evaluation of our previous two cohorts and our SHN workshops, we have identified twenty-three curricular updates to instructional materials including activities, worksheets, forms, and templates for the next phase to prioritize collaborative curation. We will also create new educational resources to implement the specific focus on digital collaborative curation workflows with federal institutions (see appendix pages 64-66 for full list of resources to be created, updated, and expanded).

2. Creation and Dissemination of OERs
    All materials created for cohort and SHN workshop participants will be made freely available under creative commons licenses on the SHN website. Cohort members will also have access to an online communication and work space that includes notes from all training sessions and internal documents from other cohort members. The public curricular modules will be part of a separate portion of the website where users can decide if they want to engage with all aspects of the curriculum in the order it is delivered onsite to participants, or focus on the resources that meet their specific needs. For example, someone could choose to start at module one and work chronologically through the entire curriculum, watching tutorials, using worksheets, testing workflows, listening to lectures, etc.; or they may need to know how to begin a digitization workflow at their institution and so may elect to go directly to that training content. All of the materials created will adhere to the basic tenets of openness laid out for OERs. That is, all resources created will allow users to: 1) Retain the right to make, own, and control copies of the content, 2) Reuse the content in a wide range of ways, 3) Revise, adapt, adjust, modify, or alter the content itself, 4) Remix the original or revised content with other material to create something new, and 5) Redistribute copies of the original content, your revisions, or your remixes with others. By actively supporting the remixing and reuse of our OERS, we anticipate engaging a wider audience as users customize and re-publish materials to suit their particular needs. To date resources on the SHN website have garnered a wide-ranging audience and direct feedback from site users indicates that SHN created short-tutorial videos have the most direct impact on local practitioners. Since we create SHN resources based on TALM needs, our work blurs the disciplinary divisions between museums and archives. Last year, for example, the most viewed resource on the SHN site was the "Glass Bead Cleaning Demonstration" video tutorial followed by a short overview of the fundamental archival concept, "The Truth About Original Order." Our feedback demonstrates that SHN educational resources meet a demonstrated need in large part due to the inclusion of TALM specific needs coupled with foundational museum, library, and archival concepts and practices (see Appendix pages 67-69).

3. Recruitment, Application, and Selection of Cohort

   During the first application period for the Cohort program (2015), fifteen tribes applied for six spots, in the second round (2016) we received twenty-six applicants for six spots. The demand for this type of training is only growing as tribal communities develop their own collections agendas and national bodies like the Association of Tribal Archives, Libraries and Museums (ATALM) and the Tribal Colleges Library Institute (TCLI) create structures for on-going support and network building between tribal archivists, librarians and museum specialists and non-Native institutions. For this program, we will open the application to any TALM in the United States and at the same time continue active recruitment through our established networks. Our procedures for recruitment, the application process, and the selection of each cohort participants will be as follows:

   1. Publicize and outreach to potential applicants
      a. Expand the informational website with background information, links to past cohort curricular modules, and testimonials for previous cohort members
      b. Create an online application portal for broad access.
      c. Partners on this grant including ATALM and TCLI will promote the program through their list serves, websites, and annual programming
      d. Our advisory board made up of Native and non-Native professionals in the field will provide targeted recruitment
      e. Past cohort members have agreed to provide outreach to potential new cohort participants in their regions.
   2. Application submission
      a. Submissions will be made through our online portal, with clear deadlines, instructions and support. We do not want technology or broadband to be an obstacle for inclusion so we will also allow for hard copy submissions.
      b. Applications will include a statement by the administration of the TALM of their support for the participants to receive the training and a willingness to engage with the Tribal Digital Stewardship team at WSU.
   3. Application review and cohort selection
      a. Applications will be reviewed using a standardized rubric directly related to the application questions.
      b. Applications will be reviewed by a committee made up of WSU team members, Advisory Board members, one former cohort member and one guest instructor.
      c. Final selection will be made by a pre-determined deadline and a waitlist will be maintained for a final selection.
      d. Our preference will be to select a regionally diverse set of participants.

Educational Offerings: hands-on and online

Updating the framework for this proposal with an emphasis on the collaborative curation of digital collections and protocol based access and use of digital materials, we plan to provide instruction at WSU, at the partner federal repositories in Washington DC, and at the annual ATALM conference. The cohort year will include: a first week of instruction at WSU, a second week at the ATALM conference venue (pre-and-post conference) a third week in Washington DC at the Smithsonian and Library of Congress, and the final week WSU. This program will focus on each cohort defining and completing a collections curation project in partnership with federal repositories and making their collections accessible through their hosted Mukurtu CMS sites to allow for levels of access based on cultural protocols. In this way, each pair will be provided with hands on training, step-by-step through each phase of the digital stewardship lifecycle and importantly will gain valuable, transferable skills in the curation of existing digital content. In addition, as with the first cohorts, the participant institutions will be provided with a Mukurtu CMS instance (at no cost) for on-going management of and culturally appropriate access to digital collections (see appendix pages 59-63 for sample cohort sites). Because the majority of Native collections are housed in non-Native repositories, the added focus on negotiation, collaboration, and ethical curation promotes an educational model suited for TALM professionals. In addition,

online training sessions will be held with the cohort in the months in between on-site training. Based on feedback from our previous cohort participants, we structured the virtual training sessions around the introduction of new content building from the in-person sessions and added individual phone calls with individual cohort pairs to address their specific needs and questions. This balance between in-person, online and teleconference modes in our first cohorts proved to be a successful model to provide instruction, support and guidance for the cohort members and to allow for the individualization of the curriculum to local needs.

Mentorship and Network Building
Because TALM professionals are often isolated geographically and have fewer resources to attend regional and conferences and professional development opportunities, network building and mentorship is a key part of the long-term success of the any training. The cohort model is a powerful method for TALM professionals to support each other and share knowledge of managing collections with inadequate resources including limited, and sometimes isolated, staff. In their recent global compilation, Lee and Kumaran, show this complexity," "Both Aboriginal and visible minority librarians have had to deal with tokenism, with organizations paying lip service to diversity, with a lack of mentorship, and with working in professional isolation." (p. xiii) Incorporating the needs and goals of TALM participants, the program will select regional mentors for each cohort pair to aid in addressing local and regional needs. The mentors will meet with their "cohort pair" at the beginning of the training to provide guidance for setting goals and priorities and establishing a mentor plan for the remaining year of the program. At the same time, we will continue to provide time for broad networking between tribes and facilitate sharing outside of the meetings through the SHN website's community sections. We will create a private community on the SHN site for participants and mentors to share resources, as well as make use of content from already established SHN communities (see Appendix pages 70-71 for full list).

Timeline of Activities
Over the proposed grant period the project will involve three phases with overlapping sets of activities: 1) curricular 2) engagement, and 3) assessment. These activities involve iterative and generative tasks and outcomes. Administrative tasks and technical infrastructure sustainability are part of each phase.
Project Kick off: October 1 2017-Dec 30 2017
- Updates to SHN website and TDSCP page to include program information
- Finalize online application process
- Meeting with Advisory Board for feedback on curriculum and outreach
- Set up communication channel internally with federal partners
- Announce application openings for Tribal Digital Stewardship Cohort Program

Planning and Logistics: January 1 2018 – June 2018
Curricular
- Updates to identified current resources
- Creation of new resources and updates to existing
- Posting the resources to the SHN website and TDSCP page
Engagement
- Outreach to potential applicants
- Public outreach through partners
- Receive, review, and select cohort
- Outreach to and selection of mentors based on final applicant selection for regional connections
Assessment
- Feedback from Advisory Board and previous cohort on updated/new resources
- Evaluation of application portal for usability
- Updates on SHN site and portal based on feedback
- Final testing of application site and launch

Cohort One: July 2018 – June 2019

Curricular

- Delivery of curricular modules to Cohort one: in-person: July Session 1, October session 2, February session 3, May session 4
- Online training sessions with Cohort members in between in-person meetings
- SHN workshops at ATALM (preconference)
- Upload final ATALM sessions and materials to SHN site

Engagement

- Mentoring activities and Cohort meetings
    - Mentors and cohort members meet at ATALM
    - Cohort meetings with federal repositories—define collections
- Site visits to cohort members by WSU staff to define individual goals for projects
- Recording of workshops, full sessions, and tutorials at ATALM

Assessment

- Advisory Board evaluation of first cohort
- Revision of schedules and training materials based on feedback from cohort participants.
- Deliver a skills inventory survey pre and post cohort training to evaluate skills gained during each in-person session and online assessments for virtual training session months
- Evaluate cohort pairs project goals and outcomes

Cohort Two: July 2019 – June 2020

Curricular

- Delivery of curricular modules to the second year of the Cohort (in-person: July Session 1, October session 2, February session 3, May session 4)
- Online training sessions with Cohort in between face-to-face sessions
- SHN workshops at TCLI and ATALM (recorded)
- Upload final ATALM sessions and materials to SHN site

Engagement

- Mentoring and cohort meeting
    - Mentors and cohort members meet at ATALM
    - Cohort meetings with federal repositories—define collections
- Site visits to cohort by WSU team
- Recording of workshops, full sessions and one-on-one tutorials at ATALM

Assessment

- Deliver a skills inventory survey pre and post cohort training to evaluate skills gained
- Final evaluation of program
- Assessment of curricular modules by cohort members, advisory board, and external reviewers
- Evaluate SHN and TDSCP website use and engagement statistics

Final Reporting, Documentation and Dissemination: July-September 2020

- Aggregate cohort and workshop evaluations
- Publish Final curriculum as OERs on SHN website
- Document collaborative curation workflow and publish to SHN site
- Final updates to SHN and TDSCP websites with resources grouped for modular or skills based access
- Final Advisory Board meeting

Personnel (Grant funded and externally funded)

This proposed project effort will draw on the following roles from WSU and partner institutions.

1. **Project Director**: Dr. Kimberly Christen, Project Director (PI), and co-Director of the CDSC will dedicate 5% of her time (in-kind) to oversee the Cohort program, managing the team and

communication with partners, mentors, and the advisory board, defining and ensuring project goals are met and managing grant outcomes.

2. **Cohort Team Manager**: Dr. Trevor Bond, co-Director of the CDSC, and co-PI, will dedicate 8% of his time (in-kind) to oversee on campus meetings, update curricular modules with the Curriculum coordinator, provide instruction at WSU sessions, and provide outreach to non-Native repositories.

3. **Curriculum Coordinator**: Lotus Norton-Wisla, WSU Tribal Digital Archives Curriculum Coordinator, will be paid 100% through the grant to oversee the day-to-day operations, maintain direct communication with the participants, lead updates of curriculum in collaboration with the Director and Cohort Team Manager, interact with and coordinate guest instructors.

4. **Resource Coordinator**: Talea Anderson, WSU Scholarly Communication Librarian, will devote 15% of her time (in-kind) to oversee the production of the OERs, ensure their distribution to the widest audience and coordinate with the Curriculum coordinator to assess and evaluate the resources.

5. **Cohort Technical Director:** Alex Merrill, Head of Systems, WSU, co-PI, and Director of Technology at the CDSC will dedicate 5% of his time (in-kind) to serve as the main point of contact for the cohort's technical needs in support of their WSU hosted Mukurtu instances.

6. **Content Specialists:** Federal partner institutions will provide a point of contact: (Guha Shankar, American Folklife Center; Gina Rappaport, National Anthropological Archives and Michael Pahn, National Museum of the American Indian) to interact directly with the cohort participants during the sessions in Washington D.C. and afterwards as the progress with their collaborative curation projects.

Evaluation and Assessment

We will employ a set of evaluation methods aimed at assessing the work to date, refining outputs, and achieving the projects overall goals. Our evaluation will be aimed at understanding the progress and needs of participants, partner institutions, mentors and guest instructors. Evaluation methods include:

- Formal Surveys: Participants will respond to formal surveys assessing the benefits and utility of the overall goals of the program, as well as specific curricular modules and tasks. The beginning and end of each on-site week-long training will include pre-and post-assessments to gauge the progress of individuals and the cohort as a whole. In addition, we will use monthly online feedback forms for the online evaluation of content delivery for the participants. Workshops held at regional conferences (ATALM and TCLI) will include pre-and post-session evaluations and qualitative and quantitative assessments (see appendix pp. 72-74 for examples). Finally, we will use online surveys for our partner institutions and mentors to measure impact, needed updates and goal sharing.

- External Curricular Assessments: In addition to structured feedback through formal surveys about curricular modules from participants, we will solicit feedback from our previous cohort members and previous guest instructors from both TSCP and the SHN workshops. Assessment will happen in the first few months of the project as we update the curriculum and at intervals between the cohort groups.

- Project Advisory Board: An important part of the evaluation process will be the input of the project's advisors. Advisors represent tribal archives, librarians and museum specialists, and experts in digitization and preservation and representatives from national repositories. The advisory board will provide evaluation of the overall project as well as of the mentorship and networking components.

Diversity Plan

Our project aims directly at the needs of tribal archivists, museum specialists and librarians who are marginalized by large-scale national projects and professional organizations that do not recognize their sovereign status, unique historical role and collections, long-term goals, limited resources and infrastructure, and educational and training needs. The TDSCP educational model takes tribal protocols, goals and values as the starting place for the construction of policies, workflows and curation. To ensure we reach a large section of the diverse TALM community, we will provide multiple ways to access training using face-to-face as well as virtual components and resources that suit a range of educational needs from short screencasts to video tutorials to workflow documentation. To facilitate diverse training options and a diverse set of participants, our work plan includes: providing scholarships for cohort members to attend all site trainings, facilitating our workshops in

regional locations across the United States and at high impact conferences for TALMs, maintaining a diverse advisory board to help with outreach, and providing flexible educational training through our online knowledge base making all materials available to download as well as stream live in order to address connectivity and access issues. In addition, we will continue our long-term partnership with ATALM to ensure we reach the widest set of stakeholders from tribal archives, libraries and museum. Finally, we will continue our collaboration with the Society of American Archivists' Native American Roundtable and the American Indian Library Association through our diverse Advisory Board members who have all been involved in tribal focused educational programs or were Tribal Stewardship Cohort Program members (see appendix page 75).

National Impact
--"I didn't know Indian women could be librarians." - Quote from an American Indian student from Zuni Pueblo in Aguilar, P. (2006). *University of New Mexico Libraries' Indigenous Nations Library Program.*

The library and archives field suffers as a whole from a lack of diversity. In particular, only .16% of the profession is made up of Native Americans and Alaskan Natives. This stark number should be a wakeup call to look to the roots of this problem that stem both from a lack of educational opportunities and the lack of role models. It is surely not only the Zuni student who cannot imagine herself as a librarian. To fill this gap, the Tribal Digital Stewardship Cohort program emphasizes two areas that will build capacity and sustainability: providing cohort-based training with an emphasis on cultural needs and growing the network of tribal librarians, archivists and museum professionals through ongoing training, mentorship and professional contacts. The cohort model is successful with underrepresented communities because it provides a point of reference and shared set of experiences for members. As one of our recent cohort members Ashley Sexton from the Catawba Nation put it, "*The amount of knowledge passed on in the TSCP is unimaginable. I learned just as much from my peers that I have from the staff.*" This proposed program will train TALM professionals in skills that are not only relevant to their profession, but to the needs and values of their communities. In the ATALM 2012 report, the authors note: "Many tribal communities with a tribal library or museum also have a tribal archive. These organizations hold—and continue to acquire—a broad array of critical historical records…but tribal archives lack the staff, space, and storage capacity to do their jobs well." The report continues, "*Archives may benefit from staff training in appropriate archival care techniques and in field standards and from new or stronger partnerships with non-tribal, state-level organizations*" (2012, pg. 16). By building an inclusive training program focused on collaborative curation as part of a holistic model of digital stewardship, we provide a foundation for collections preservation, access, and use that can be scaled to meet the needs of various size institutions and provides sustainability by sharing the work of stewardship. Emphasizing collaborative connections to federal repositories, the program unites collections care and community access and use along networks that will grow and continue into the future. In this way, the cultural care of materials is connected to the technical stewardship of those same items and long-term planning for digital stewardship. Using the collaborative curation method and technology as a bridge to emphasize cultural protocols through the use of Mukurtu CMS, the *Tribal Digital Stewardship Cohort Program* will create a ripple effect that promotes collaborative curation between national and federal institutions and underserved populations more generally. These ripples—connections, collaborations and curation education—will be further strengthened by the deliberate mentorship program that will support TALM professionals in their work and also connect their networks to those of their non-Native colleagues. Regional mentors will not only be able to support the cohort pairs, but also aid in regional networks, resource sharing, and collaboration building. At the same time, the curricular modules created by this program can be (and have already been) used and adapted for the needs of other small-scale, local, archives and libraries. In this way, building in cultural difference and localized needs into our curriculum, we make room for more use and expansion to professional practices and standards more widely.

Schedule of Completion
October 2017 – September 2020

The work of this grant will be divided into five phases. The project kick-off phase will encompass months 1-3. The project kick-off phase activities are focused on updating informational websites about program, finalizing the cohort application process and beginning to recruit for the first cohort. A full WSU team and advisory board meeting will also occur during ATALM.

The planning and logistics phase of the project, months 4-9, will have concurrent activities:
- Update existing or creating new curricular materials
- Recruit and select first cohort
- Refresh WSU technological infrastructure and setting-up the first cohort Mukurtu sites
- Begin cohort site visits
- Stage curricular content for the first cohort
- Prepare a skills inventory survey to deliver prior to and after delivery of the cohort training program
- Repository partners will begin to create initial inventories of relevant collections based on the cohort members selected for the first cohort.

The first cohort, months 10-21, will be the first implementation phase. The activities for this phase are:
- Four in-person training sessions with virtual session on relevant topics in between
- Cohort site visits by WSU team members in the first six months of the phase
- Update or revise the curriculum between in-person training sessions two and three
- Recruit and select of second cohort
- Mukurtu Site set-up for cohort two
- Administer pre and post cohort skills inventory, self-evaluation, and overall evaluation of the training for cohort one.
- Present workshops at ATALM
- Record and upload ATALM sessions to the SHN
- Federal partners will create initial inventories for cohort members in the second cohort.

The second cohort, months 22-33, will mirror the activities of cohort one. The activities include:
- Four in-person training sessions with virtual session on relevant topics in between
- Cohort Site visits by WSU team members in the first six months of this phase
- Update or revise the curriculum between in-person training sessions two and three
- Administer pre and post cohort skills inventory self-evaluation and overall evaluation of training for cohort two.
- Record and upload ATALM sessions to the SHN
- Present workshops at ATALM and TCLI
- Perform final assessment of curricular content with evaluative input from cohort members, advisory board and selected external reviewers

The fifth and final phase of the project, months 34-36, will be comprised of wrap-up activities:
- Publish final curriculum to the Sustainable Heritage Network as OERs
- Perform final evaluations of the entire three year project cycle
- Produce final reports and last advisory board meeting

Schedule of completion: Tribal Digital Stewardship Cohort Training: Cultural and Collaborative Curation Models and Methods for Tribal Librarians and Archivists

Phases: **Kickoff** (Oct-17 – Dec-17) · **Planning and Logistics** (Jan-18 – Jun-18) · **Cohort 1** (Jul-18 – Jun-19) · **Cohort 2** (Jul-19 – Jun-20) · **Final Phase** (Jul-20 – Sep-20)

Cell color key: K = black (Administrative and Technical), O = orange (Curricular), G = green (Engagement), B = blue (Assessment). Numbers (1–4) denote in-person training sessions.

Actors: Activity	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
BRD/WSU: Planning and advisory meeting	K												K												K											K
WSU: Update existing curricular modules				O	O	O	O	O	O						O					O							O					O				
WSU: Create new curricular modules				O	O	O	O	O	O																											
WSU: Stage planned cohort curriculum to SHN									O	O					O																					
WSU: Publish curriculum to public SHN as OERs																																		O	O	
WSU: Finalize cohort application process	K	K																																		
WSU: Recruit applications for cohort		K	K	K	K							K	K	K																						
BRD/WSU: Provide feedback on new and updated curriculum content						O	O								O					O							O									
BRD/WSU: Select cohort				K	K										K	K																				
BRD/WSU: Recruitment and selection of mentors						G	G	G	G							G	G	G	G	G	G															
WSU: Refresh Infrastructure and storage solutions							K																													
FED: Create initial inventories for cohort members						G	G													G																
WSU: Mukurtu site creation and maintenance											K		K		K							K		K		K		K			K				K	
COH/COHM: Mentoring opportunities										G			G	G		G	G			G	G	G			G	G		G	G		G	G				
WSU: SHN workshops at ATALM and TCLI											G	G											G	G												
WSU: Recording workshops at ATALM											G	G											G	G												
WSU/COH: Site visits									G	G										G	G	G														
WSU/COH/FED: In person training										1			2			3			4			1			2				3			4				
WSU/COH: Virtual training										O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O				
WSU/COH: Pre and post cohort skills inventory									B	B										B	B												B	B		
WSU/BRD: Assessment of each cohort																				B	B												B	B		
COH/FEB: Evaluative surveys of cohort experience																				B	B												B	B		
WSU: Aggregate cohort surveys of COH/FED																																		B	B	
WSU: Yearly and final reports to IMLS									B	B											B												B	B		
WSU: Final updates to SHN and TDSCP websites																																		O	O	K
WSU: Publish full collaborative workflow and documentation to SHN																																		O	O	O

Activities:
- Assessment = blue
- Curricular = orange
- Engagement = green
- Administrative and Technical = black

Actors:
- WSU = Washington State University
- BRD = Advisory Board
- COH = Cohort Members
- FED = Federal Partners (NMAI, NAA, AFC)
- COHM = Cohort Mentors

DIGITAL PRODUCT FORM

Introduction
The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (i.e., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products can be challenging. 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
You must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

PART I: Intellectual Property Rights and Permissions

A.1 What will be the intellectual property status of the digital products (content, resources, assets, software, or datasets) you intend to create? Who will hold the copyright(s)? How will you explain property rights and permissions to potential users (for example, by assigning a non-restrictive license such as BSD, GNU, MIT, or Creative Commons to the product)? Explain and justify your licensing selections.

The primary digital products of this project will be the collaborative curation curriculum and related supporting documents (including presentation and tutorial content created in partnership with the Association of Tribal Archives, Libraries, & Museums at the annual conference). All of

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.

Washington State University does not assert any ownership rights beyond what is described in A.1.

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.

The primary curriculum materials will have little to no possibility for these types of concerns. The project team will continue to gain written permission to film presentations or tutorials during the annual ATALM conference (or similar venues). We will use the same standard release that we have had in place for several years.

Part II: Projects Creating or Collecting Digital Content, Resources, or Assets

A. Creating or Collecting New 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 format you will use.

The primary digital content, the collaborative curation curriculum and other training materials, will be in a variety of formats. These formats will include textual documents, visual representations of concepts or workflows, and images (both static and moving). We are not yet able to determine the exact amount of new content and we will both we re-working content already created and creating new content. The secondary digital content will also be shared or produced in a variety of

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

The primary digital products of this project, the curriculum and other training materials are born digital works. In general, we will use the most appropriate software for the type of content. For primarily textual documents we will use Microsoft Word on a business class workstation and save ⊞

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to use, along with the relevant information about the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

For Digital products produced at the WSU:
Digital File formats planned: TIFF, TXT, PDF, MP4, WAV
TIFF Specifications: minimum resolution 300 PPI (we will ensure we capture 3000 pixels along the ⊞

B. Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).

The primary digital products for this project, the curriculum and related training materials, will be edited and revised by the WSU team. The curriculum coordinator will develop any new content or coordinating the adaptation of already created materials. The secondary reviewers of the materials ⊞

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may 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).

Digital assets created as a part of the curriculum and training materials will be maintained and disseminated through the Sustainable Heritage Network (http://sustainableheritagenetwork.org) to ensure the widest dissemination possible. Leveraging an established platform will ensure a more ⊞

C. Metadata

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

For the primary digital products produced as a part of the curriculum and related training materials the metadata for digital objects will first be created in Excel and then imported into the target CMS along with the digital content. The project will use Standard Dublin Core Metadata Terms and ⊞

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

For the primary digital products produced as a part of the curriculum the metadata will be preserved within the Sustainable Heritage network as both a separate text file and as standard metadata elements within the CMS. ⊞

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).

The project partners have focused more on promoting the indexing and discovery of the curriculum and related training materials through open web searches than through more traditional library sharing or aggregating services. This is mostly because there is not a larger platform where a repository of this type of content is aggregated. The Sustainable Heritage Network is optimized for ⊞

D. 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).

The primary digital product for this project, the curriculum and related training materials digital content, will be managed by the Mukurtu CMS at the Sustainable Heritage Network's website (http://sustainableheritagenetwork.org). This content will be openly available online to all

[+]

D.2 Provide the name(s) and URL(s) (Uniform Resource Locator) for any examples of previous digital content, resources, or assets your organization has created.

http://sustainableheritagenetwork.org -- Sustainable Heritage Network (Mukurtu)
http://plateauportal.libraries.wsu.edu/   Plateau Peoples' Web Portal (Mukurtu)
http://content.libraries.wsu.edu/   WSU Libraries Content Management System (ContentDM)

[+]

Part III. Projects Developing Software

A. 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 functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

B. Technical Information

B.1 List the programming languages, platforms, 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) and URL(s) for examples of any previous software your organization has created.

C. Access and Use

C.1 We expect applicants seeking federal funds for software to develop and release these products under open-source licenses to maximize access and promote reuse. What ownership rights will your organization assert over the software you intend to create, and what conditions will you impose on its access and use? Identify and explain the license under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software licenses). 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.

C.2 Describe how you will make the software and source code available to the public and/or its intended users.

C.3 Identify where you will deposit the source code for the software you intend to develop:

Name of publicly accessible source code repository:

URL:

Part IV: Projects Creating Datasets

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

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 personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).

A.4 If you will collect additional documentation, such as consent agreements, along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

A.5 What methods will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

A.6 What documentation (e.g., data documentation, codebooks) will you capture or create along with the dataset(s)? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

A.7 What is your plan for archiving, managing, and disseminating data after the completion of the award-funded project?

A.8 Identify where you will deposit the dataset(s):

Name of repository:

URL:

A.9 When and how frequently will you review this data management plan? How will the implementation be monitored?