1. PROJECT JUSTIFICATION

Purpose of Proposed Project:

The Hoopa Tribal Museum is the head of a collaboration that includes the Kim Yerton Memorial (KYM) Library, Hoopa Tribal Archives, and the IŁtuq' Center, for a project titled "Preserving Our xoji-Hupa Language", intended for Hupa tribal members and the Hoopa Community.

Performance Goals

Goal 1) Record and Document Xoji-Hupa Language from our fluent first language speaker and sustaining the continuing development of a comprehensive conjugative-dictionary. Whereby, finalized and approved pages will be readily available as an immediate tool for reference and curriculum development.

Goal 2) Develop Digitized Curriculum in an array of formats of audio, video and digital text for better dissemination and usability throughout the community and posterity.

Assessment: Need, Problem, Challenge

There is a severe shortage of curricula and reference material: We do have a small dictionary that was completed in the 1980's. It hasn't developed any speakers on its own. It is 120 pages of double column words, with a few pictures. It is beautifully laid out, however it is not user friendly. You must be able to read linguistically in order to decipher the pronunciation and enunciation and does not show you syllable division.

The ILtuq Center had a 4 month long after school immersion camp in 2015. Only two teachers were available. Silischitawn Jackson and Ginger Rogers, an Intermediate speaker. Using the XojiNa:tini-xweXine:iwh (true/spiritual/beautiful) dialect of Verdena Parker, there were 16 kids, ages 5-9 attending the class. The curriculum had to be developed on the fly. What was developed was disjointed. The teachers were teaching what they personally knew and not from a systematic system. Each teacher doing their own topics, unrelated to the others. It was near impossible to find available curriculum in the XojiNa:tini-xweXine:iwh dialect.

During 2016, the Kim Yerton Library completed an inventory of which there were **1569 books** in the Native American collection containing 148 single titles on local native tribes. There were only 29 books referencing Hoopa Myths, stories, and teachings; of those, 18 contain some Hupa Language, of which 10 were Hupa Language specific, ranging in dates from 1905 to 1996.

There is a severe shortage of proficient teachers: . There are three other K-12 teachers, two in the High School, and one in the elementary. None are fluent (yet) and are considered to be at an Intermediate level (ACTFL guidelines). There have been no students graduating from the local High School that have better than a Novice Level Hupa Language proficiency.

There is a severe shortage of classes: The Basic Level-1 (ASLA) class was offered four times within four years (2013 to 2016) by Project Director Silischitawn Jackson. In January 2018, a

Basic Level-2 (ASLA) was begun. By July, only four remained in the intensive two-night per week class projected to end on December 30th, but continued on into 2019 and still going. These four were able to reach a Novice-High Level (ACTFL) and are included in this grant as Interns. They are cognizant of the difficulties they had in attending the two night per week Hupa language classes and have articulated their needs in order to succeed, inspiring the foundation of this grant and belief that "with multiple teachers we can do multiple schedules and multiple classes, with multiple levels being taught simultaneously".

Specific Need and Audience:

The Hupa Language is highly endangered. There are no first-language-speakers of Hupa under the age of (70) seventy. There is only <u>one</u> first language fluent speaker able and willing to Teach Publically, Verdena Parker, identified in this grant as our Project Elder. She is elderly and time is running out. More aggressive work needs to be done now or never: the gathering of language acquisition materials, standardized and consistent curriculum development, accurate cultural interpretation, functional teaching and use of the language, archiving and dissemination of materials, and the saving of a formal Hupa dialect.

There are many interested community members wishing to fully and fluently learn the language. Most, if not all, community members have heard the language spoken within their families, at public events and at ceremony. Community classes were started back in 2011 by Silischitawn Jackson, identified in this grant as our Project Director. All classes offered began with a high enrollment. Scheduling always becomes an issue and results in a high dropout rate and very few finishing. Once someone misses a (basic) class they fall behind. Similarly, this can be compared to a K-3rd grader learning the basics of reading. The one teacher must backtrack in class to catch them up, or try and facilitate a make-up class. Usually, those who have missed some classes will dropout. One teacher can only offer one class at a time. The need for digitized curricula available at any time is imperative, especially during these covid19 times.

Population Profile: The Hoopa Valley Tribe (HVT) is a Federally Recognized Self-Governance Tribe. As of April 2019, the HVT Enrollment Department states: there are **3,514** Hoopa Tribal Members of which 55% (1,935) live on the Reservation. This includes: 8% (164) age 65+ and over; 62% (1,195) ages 18-64; and 30% (576) age 0-17. We call ourselves **Na:tini-xwe.** Verdena Parker, our Project Elder, says Na:tini-xwe describes your birth, your death, and the walk in between.

Economy: The economic levels on the reservation are still significantly low. The 2017 American Community Survey identifies: 3,260 total Hoopa residents; of which 82.3% (2,686) are American Indian/Alaska Native; 63.7% (**2,079**) are ages 18-64; and 9.25% (302) are 65+ years and over; Of the **2,079** residents ages 18-64, 44.1% (or 916) are identified as Below the Poverty Level.

Education Levels: According to the 2010 U.S. Census for Hoopa, 18.8% of adult residents above 18 years hold a bachelors degree or higher. This is an increase compared to the 2000 Census of 7%, most certainly due to the opening of the College of the Redwoods Branch Hoopa-Campus.

Location: The Hoopa Valley Indian Reservation was established by Executive Order on June 23, 1876. Hupa is the largest land based reservation in California encompassing 144 square miles, often called the twelve-mile-square, it is both beautiful and rugged country. The reservation is remotely located in Eastern Humboldt County, California (Pacific Northwest Coast), approximately 300 miles north of San Francisco, 90 miles south of the Oregon border, and about 60 miles inland (east) from the coastal cities of Eureka, Arcata. The Hoopa Valley is surrounded by four mountains bisected by the Trinity River- the largest tributary of the Klamath River before reaching the pacific ocean.

Culture: The Hupa people have been in the Hoopa Valley since time immemorial (**Hupa** refers to the people and **Hoopa** refers to the place). Today, the Hupa still practice their sacred ten-day dances of both the White Deerskin Dance and the Jump Dance with a ten day rest in between; held every two years these past 60 years instead of each year. In addition, Brush Dances are held for healing sickness, mainly now for children. Hoopa hosts their sacred dances on odd years and neighbor tribes on even years.

Current role of the library: The Mission of the library is to "Provide quality services, material access and electronic linkages to an underserved and rural community in a welcoming and respectful atmosphere to encourage reading for pleasure, research or scholastic projects." The Kim Yerton Memorial Library is one branch of nine of the Humboldt County California Library System. The Library operates under a MOA "memorandum of agreement" between the Humboldt County Board Of Supervisors and the Hoopa Valley Tribe to expand extended library services, whereby the tribe provides facilities, overhead cost, and a significant amount of personnel costs. Humboldt County stocks the library with a circulation of books, magazines, audio/visual, etc. Under the MOA, different book sections are rotated each month, and are well worth the extra time and effort because some part of the collection is always refreshed. Hours: The Library is open 33 hours per week, Tuesday through Saturday from 10:00 am to 5:00 pm and Wednesday night until 8:00 pm. Staff: The library employs a full-time librarian, at thirty seven and one-half hours, and a Library Assistant at fifteen hours along with three active volunteers. The Friends of the Hoopa Library actively raise funds for projects and programs at the library. Their biggest fundraiser is "Chalk it up" for Books. They volunteer for all special events and provide a clear link to the community. Program: The library provides Summer Reading Program for K-12; attending Author festivals, bringing puppet shows to the library, and Story Time readings for younger ages and elders throughout the year. Patrons have access to all the holdings of all ten county branches via electronic linkage and access to other library holding through inter-library loan system. The library offers a class for students on using the library's on-line data resources. Media: The library provides four on-line computers and WiFi for the public. Collections: Our current holdings are 9,847 of which 2,084 are Native American

Titles (the largest Native American collection among all nine branches of the Humboldt County Library System). **Patrons:** The total registered borrowers for our service area is 3,800 including the surrounding communities of Orleans, Weitchpec and Pecwan and the registration just for Hoopa is 2,512. **Circulation** Between January to December 2018, our library had 16,982 visitors; 14,622 book circulations; and 10,288 computer usage counts.

Language: There are no first-language-speakers of Hupa under the age of 70. Hupa is an Athabaskan-Language speaking group from Northwest California. Hupa is a verb-based language with few nouns, unlike English. There is no word for "please" or "I'm sorry". There is no word for good-by for the living, instead, we say "I will see you again". The Hupa Language is not gender specific- people are categorized by Age, knowledge, and familiarity to the speaker, but never gender.

2. PROJECT WORK PLAN

Master Speaker: Verdena Parker lives in Winston, Oregon and has lived off-reservation for many years. She is the only first language speaker left willing to Publically-Teach Hupa. Verdena is a Master Speaker of the old style traditional Hupa dialect. Fortunately, Verdena's mother lived with her in Oregon whereupon they spoke Hupa every single day. She said she thought everyone at home (California) was still talking Hupa. She was shocked to find out that she was among the few left. Her dialect is not *pidginized* and is a pure form of old Hupa known as Xoji-Na:tini-xweXine:iwh. This translates as true/Beautiful/Spiritual Hupa Language. This is a very formal and older dialect of the language and it is not mixed with any Redwood Creek dialect. She also doesn't use any shortcuts or abbreviated language. She said sure you can talk faster this way but you lose so much of the meaning of the original word.

Project Director: Mr. Jackson is a High-Advanced Superior Level Hupa Language speaker according to Verdena and the (ACTFL) guideline.. He has been learning the Hupa Language since the 90s learning with his grandfather, James Jackson Sr. After his grandfather's passing in 2003, he began working with Verdena Shoemaker Parker in 2004. Silischitawn and Verdena are a Hupa Language Master-Apprentice team, through the Advocates for Indigenous California Language Survival, also known as AICLS. She says of him, that he is someone she can trust with the language; he has a good ear and tongue for the language; and he stays true to her dialect. Her ability to think and express herself in the language has never lapsed or atrophied.

This Project proposes a plan to create accessible and digitized curriculum and major reference materials for current and future Hupa Language projects. The creation of Hupa Language proficient teachers, the development of curriculum, a comprehensive Hupa dictionary, and teaching Hupa language classes in the true pure old time Hupa dialect that is not part of Redwood Creek or Tsenungxwe dialects.

Activities: In the first and second year the Project Director, Silischitawn Jackson, will travel 10 times a year to Oregon, to meet and work with the Hupa Master Speaker, Verdena Parker.

There will be 20 trips in total for both years. During these trips to work with Verdena. The Project Director, Silischitawn Jackson, will work on three things: The continued maintenance and development of his own Hupa Language speaking ability, continue the work for the Hupa Language dictionary, and to gather the language needed to create the curriculum for the project. Each of these trips, twenty in total will last FIVE days. As the timeline progresses, the curriculum and dictionary work will also be reviewed and corrected, if needed, by Verdena, as quality control. The Hupa language is very precise and complicated, with many versions of saying things, that can be highly nuanced.

The development of the curriculum will utilize Silischitawn's work with Verdena. First useful topics will be identified, then all of the verbs used in that particular topic will be conjugated in all possible ways. The Hupa language is a verb based language, with only two nouns. The conjugations will be from very simple 1st person-present tense to 3rd person-plural in all of the six Hupa Tenses that English does not have. As well as other aspects of Hupa that English does not have. Such as a weak and strong stem version of every verb. A single verb should have at least 156 ways of saying the verb. From the simplest forms to the most advanced possible uses.

The gathering of language data and the making of curriculum will be done during the throughout both years of the grant. Curricula is grouped into domains such as gathering, home, and are related to each other, such as an Acorn gathering curriculum (Example in supporting documents) as well as gathering Sea Weed, or gather Basket Sticks, or gathering Wild Oats, will all be part of a single Pod category.

During this <u>first year</u> the project staff not only learn the curricula, they'll develop aspects of it. Silischitawn is responsible for teaching the project staff and they are responsible for developing the curriculum from the most basic to the more advanced levels. It is the project staff responsibility to digitize the curriculum into many formats: audio recordings, video recordings, and DVD's. This is all done with Silischitawn's supervision and Verdena's quality control checks. This process of creating curricula will be on-going both years.

The curricula in all digitized forms will be archived at Hoopa Tribal Archives Department, the KYM Library and the I±tuq' Center. Having three sets of archived materials for safety reasons, fire, flood (Iltuq' is up on hill), etc. Dissemination of materials is through the Project Assistant.

The Project Assistant job is to disseminate the digitized curriculum materials to other Hupa Language teachers, tribal organizations, students, and the community at large. They also maintain the projects website. This person engages the community and disseminates the curricula through social media, local newspaper, local schools, tribal website, (our own website?), etc.

This curriculum development project will work in conjunction with the ongoing Dictionary project. The words and language for both projects will be gathered at the same time. The

dictionary will have the same words used in the curriculum and more. There can be a lot more dictionary entries made than curriculum developed. We expect to have at least 500 pages of the dictionary done in the first year, and another 500 in the second year. The other dictionary entries not directly associated with the grant timeline curriculum can be used after the grant is over to create even more curriculum. There is an example of a single dictionary entry in the supporting documents of this application. As stated earlier a single verb entry into the dictionary should have at least 156 variations of use for one verb. The dictionary would be a huge source of reference materials for all Hupa Language users. Again from the most basic to the most advanced uses of the verb. In a pure Hupa dialect. That needs to be done now, because of the advanced age of our only Master Speaker, and of the extreme need of gaining and understanding the innate knowledge within the language.

Silischitawn has started the dictionary project. There are almost 1,000 pages he has completed. Verdena reviews and approves all of his work. The dictionary project will be greatly accelerated and enhanced by this grant. It is a project that will always be a lifetime of work. Silischitawn expects the final project to be 2-3 thousand pages, maybe more, divided into volumes. The University of Utah has already contacted Silischitawn and the ILtuq Center, with interest in publishing the work when it is done. One of the tribal council members, who is also an ILtuq' Center board member is having his own book published through the University of Utah, has taken a small sample of the dictionary for the publishers to look at resulting in favorable interest.

3. PROJECT RESULTS

There will be a large standardized set of XojiNa:tini-xweXine:iwh curriculum (Verdena's formal version of the Hupa Language. That can be used within the community for all language students and teachers. From Basic to advanced levels, in many Pod categories. With many digitized formats available with a large reference of the material in the dictionary, we will have the capabilities of creating more curricula. There will be revitalization of the language in the community. Taking the language from an oppressed state to one of prestige.

The dictionary entries will be used to capture Hupa thought and culture as well as words. Showing all conjugations and major aspects of the language. Transferring innate aspects, such as cognitive, spiritual, social, etc. of Hupa culture and expression into posterity. It will have appropriate and true cultural translations. With words and language used in the correct cultural context. It will showcase Xoji-Na:tini-xwe dialect (Verdena's speech).

The project staff's language proficiency will also increase. Giving the language back to the community along with the student-learners creating a larger language base. Creating opportunity and interactions for language use and social interaction, Creating a ripple effect within the community, and de-stigmatizing the use of the language and making it normal again.

The grant partners will use the local newspaper, social media, website to the tribal community. All the materials can be shared with the schools, tribal departments, the tribes General meetings twice a year. The Data Entry is responsible for this aspect of the grant. There are quarterly meetings with partners and other interested community organizations and people.

We have no hesitation in stating that: We will Continue to have classes, continue the work of the dictionary, continue curriculum development and continue the development teachers. All grant digitized materials will be housed for posterity at Tribal Archives, KYM Library and the ILtuq' Center.

	HO	OPA VALLE	EY TF	RIBE	- \	/ear	One							
	IMLS Enh	ancement G	rant:	Sch	edule	e of C	omp	letio	า					
		September 1	, 2021 -	- Augus	t 31, 20	22								
	Activities	Position Responsible	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	Meet with all Project Staff; review & plan;	Project Director	Х	Х										10 C7/0003168/0007039C0900000
·2	Prepare Purchase Orders for all supplies and equipment. Create language Data Base.	Archives Director	х	x										
3	Travel to Oregon for Ten recording sessions every five weeks (five-days ea) with Project Elder. Prepare all Travel Documents- as needed	Project Director, Project Elder		x	x	x	х	x	x		x	x	x	x
4	Conjugate and Transcribe recorded language visits. Allow two hours for each hour recorded. This includes all nine-tenses of each verb. Review all hupa language content before dissemination.	Project Director		x	x	x	x	x	x	x	x	x	x	x
5	Maintin Hupa Language Database. Begin with Basic Hupa (colors, numbers, positions, people, animals, etc) and proceed to entries from Project Director's Dictionary. Develop templates for flash cards, labels for Home/Office, etc.	Project Assistant	x	x	x	x	x	x	x	x	x	x	x	x
6	Develop two CD/DVD's per month per three staff x10 months =60. Develop list of sentences for Selected Domain in Hupa Language and English per each activity in all tenses. Send to Project Director for Approval. Thereafter, create audio/visual content for CD/DVD/USB.	Project Assistant Archives Director ASES Director			x	x	x	X	x	x	x	x	x	x
7	Develop Feedback Survey for participants during first two months.Revise as needed. Solicit Feedback Survey to participants.	Archives Director	x	x				Ň						
8	Upload the master files to designated internet platforms every three months.	Project Assistant					х			х			х	
9	Format audio, video, and textual data into accessible interactive resourses for learners.	Project Assistant			x	x	x	x	x	x	x	x	x	x
10	Perform project oversight, complete grant reporting, and other necessary requirements.	Project Director			x	x	x	x	x	x	x	x	x	x
11	Gather and Prepare any and all Hupa Language Materials for checkout to patrons as well as materials on other local tribes; Maintain Meta Data. Funded through IMLS Basic Grant.	KYM Librarian	x	x	x	x	x	x	x	x	x	x	x	x

Project Elder= Verdena Parker, Whinston, Oregon; Project Director= Silischitawn Jackson;

Project Assistant= Mary Campbell; Archives Director= Leslie Sais Jackson; ASES Director= Taivoochi Colegrove; KYM Librarian= Jancie Nixon

HOOPA VALLEY TRIBE - Year Two

IMLS Enhancement Grant: Schedule of Completion

	September 1, 2022 - August 31, 2023													
	Activities	Position Responsible	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	Travel to Oregon for Ten recording sessions every five weeks (five-days ea) with Project Elder. Prepare all Travel Documents- as needed	Project Director, Project Elder		х	х	х	х	х	x		x	x	x	x
2	Conjugate and Transcribe recorded language visits. Allow two hours for each hour recorded. This includes all nine-tenses of each verb. Review all hupa language content before dissemination.	Project Director		x	x	x	x	x	x	x	x	x	x	x
3	Continue to Maintin Hupa Language Database and continue to develop templates for flash cards, labels for Home/Office, etc.	Project Assistant	x	х	х	х	х	х	х	х	x	x	x	x
4	Develop two CD/DVD's per month per three staff x10 months =60. Develop list of sentences for Selected Domain in Hupa Language and English per each activity in all tenses. Send to Project Director for Approval. Thereafter, create audio/visual content for CD/DVD/USB. Total for 2 yrs =120.	Project Assistant Archives Director ASES Director	x	x	x	x	x	x	x	x	x	x		
5	Develop Feedback Survey for participants during first two months.Revise as needed. Solicit Feedback Survey to participants.	Archives Director	x	х										
6	Upload the master files to designated internet platforms every three months.	Project Assistant		х			х			х			x	
7	Format audio, video, and textual data into accessible interactive resourses for learners.	Project Assistant			х	х	х	х	х	х	x	x	x	x
8	Perform project oversight, complete grant reporting, and other necessary requirements.	Project Director			х	х	х	х	х	х	x	x	x	x
9	Disseminate Eval Survey to participants in May. Review, Anylize and make report in July.	Project Director									х		х	
10	Gather and Prepare any and all Hupa Language Materials for checkout to patrons as well as materials on other local tribes; Maintain Meta Data. Funded through IMLS Basic Grant.	KYM Librarian	x	х	x	x	x	x	x	х	x	x	x	x

Project Elder= Verdena Parker, Whinston, Oregon; Project Director= Silischitawn Jackson;

Project Assistant= Mary Campbell; Archives Director= Leslie Sais Jackson; ASES Director= Taivoochi Colegrove; KYM Librarian= Jancie Nixon



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?