

*Hula Preservation Society – I Ka Wā Ma Mua, I Ka Wā Ma Hope (The Future Is In the Past)*

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**Abstract – I Ka Wā Ma Mua, I Ka Wā Ma Hope**

**Lead Applicant:** Hula Preservation Society

**Partners:**

- University of Hawai‘i-Mānoa
- Stacey Leong Design
- NetEnterprise, Inc.
- Nā Hawai‘i ‘Imi Loa Hawaiian Librarianship Organization

**What Plan to Accomplish:** Provide Native Hawaiians across the diaspora with a robust online library featuring the collections of five late Hula Masters born between 1918 and 1930 whose materials are almost entirely inaccessible online at this time.

**Timeframe:** September 1, 2019 – August 31, 2021 (24 months)

**Community Need:** The community need centers on the desire for greater access by Native Hawaiians across the United States to authentic cultural resources from a Hawaiian worldview, delivered online for ease of access. This need was identified through in-person connections, online communications, and both in-person and online surveys conducted with our community.

**Intended Audience:** Our audience is Native Hawaiians, a dispersed population that lives both in the Hawaiian Islands and across the continental United States. 2010 U.S. Census data puts our numbers at 289,970 living within Hawai‘i and 237,107 on the continent.

**Goal:** Support Native Hawaiian learning by creating an online digital library built on the voices of our *kūpuna* (elders).

**Intended Outcomes:**

- Target library services in digital online realm to Hawaiians who exist in diverse geographic, cultural, and socio-economic backgrounds
- Expand resources for individuals’ lifelong learning
- Improve quality of and public access to HPS’s digital library services
- Enhance HPS’s capacity for leadership in online library development and management
- Provide training and professional development to enhance the Native Hawaiian library workforce and leadership through internships
- Enhance the effort to recruit future professionals to the field of library and information services through collaboration with Nā Hawai‘i ‘Imi Loa

**Project Category:** Digital Services

## **1. Statement of Need**

**Description of the community:** Our community is Native Hawaiians, a dispersed population living on six Hawaiian Islands and across the continental United States. 2010 U.S. Census data puts our numbers at 289,970 living within Hawai‘i and 237,107 on the continent. A full 45% live away from the homeland.

Prior to Western contact, Native Hawaiians thrived, having cultivated a rich and robust society with innovative and sustainable agricultural and aquatic practices, specialized oral traditions to document our history and culture through chant, song, and story, and diverse and highly developed artistic practices including featherwork, *kapa* (barkcloth material), and hula, to name just a few.

In 1893, the Hawaiian Kingdom was overthrown, and Native Hawaiians who hadn’t succumbed to introduced diseases in the 19<sup>th</sup> century (90% of our people died from disease between 1778 and 1900) became disenfranchised in their own homeland on multiple levels, including loss of connection to the *‘āina* (land), banning of our mother tongue, and suppression of core cultural practices like hula, among many others. The 20<sup>th</sup> century brought continued marginalization and negative impacts for Native Hawaiians, which manifest even until today as our people suffer disproportionately high rates of poverty, incarceration, and health issues. (*In Supportingdoc2.pdf there are two Native Hawaiian Health Fact Sheet 2015 reports published by the Office of Hawaiian Affairs entitled, “Volume I-Chronic Diseases” and “Volume III-Social Determinants of Health” – the first 3-6 pages of each report is included for both cultural background and Native Hawaiian data relevant to our community need.*)

Despite the generational oppression which began with the missionaries’ arrival in 1820, *Kumu Hula* (Hula Masters) had the foresight and intestinal fortitude to continue teaching and sharing the art of hula and its associated cultural practices with their students, often in secret or in outlying areas far from population centers and churches. The *kūpuna* (elders) of that time intuitively understood the future importance hula would play in strengthening Native Hawaiians’ cultural identity, language use, and connection to land.

In the 1960s and 1970s, there was a burgeoning of Hawaiian pride and a new era known as the “Hawaiian Renaissance,” which was led by Native Hawaiian activists, scholars, and cultural practitioners. As a result of this cultural resurgence and renewed appreciation in “things Hawaiian,” there was a widening acceptance of foundational practices, including traditional (ancient) hula (versus tourist hula), and thus, a strengthening of cultural identity. In the 21<sup>st</sup> century, we continue to experience the passing of esteemed *kūpuna* who kept traditions alive in the 1900s, and we remain under siege when it comes to loss of invaluable first-person knowledge, lack of access to our *wahi pana* (storied places), and continued socio-economic and health challenges born out of impacts of Westernization. This continued loss of significant cultural and historical knowledge drives the need for access to cultural and educational resources from our elders that help ground Native Hawaiians of all ages as we navigate the future. Recognition of these realities and the desire to contribute to the strengthening of our underserved and needy community led to the founding of Hula Preservation Society and informs the ongoing flow of work.

With the unique geographical makeup of Hawai‘i’s island chain, and with Native Hawaiians dispersed across the continental U.S., there is a crucial need for increased access to HPS’s resources, which can be accomplished through expansion of our digital library services and refinement of our online tools.

**Role of Hula Preservation Society:** HPS was established in 2000 by Hawai‘i’s foremost *Kumu Hula* (Hula Masters) and Native Hawaiian elders who endeavored to preserve both tangible and intangible elements of Hawaiian culture for the advancement of Hawaiian people through cultural awareness. It is the only non-profit centered on the important work of cultural preservation through conducting oral histories with our community’s elders, through the lens of hula.

In 2001, HPS applied for and received a grant from the Hawai‘i Community Foundation to develop and implement a prototype for the first-ever online hula library. The content was culled from the preservation work we had done with our treasured elders in HPS’s first year, and the prototype was meant to serve as a showcase for what was possible using the “new” digital and internet technologies. 2002 marked the launch of the library prototype and HPS website at [www.hulapreservation.org](http://www.hulapreservation.org). This was the first time such content had been presented online in this manner, weaving together the elders’ *mana‘o* (insights) and *‘ike* (wisdom), hula knowledge and research, history, and traditional forms documentation, in the multi-media formats of text, audio, video, and still images.

The prototype stood as is while we spent the next decade “offline” and almost entirely focused on shooting oral histories with our elders as they were passing at a rapid rate. During that intense period, deep relationships developed with numerous elders, and they gifted their personal collections to HPS, which led to the necessary establishment of the physical HPS Archive in 2013. An initial Museum Services grant from the IMLS allowed us to work with a professional archivist to officially establish the archive and develop policies, processes, forms, and operating procedures for going forward. The HPS Archive in Kāne‘ohe, O‘ahu, is open to the public four days a week and is utilized daily by HPS as well as a continued array of cultural practitioners and educators for research, materials development, and general scholarship.

HPS’s website and online library debuted in 2002 and remains in prototype form. Even though things have remained unchanged for 17 years, and even though it was built in the days of dial-up internet connections and postage stamp-size video windows, the website/library continue to experience steady usage from across Hawai‘i and the continent. In the two-year period leading up to this proposal, almost 25,000 users took in over 72,000 page visits, with a majority of the time spent in the library. The fact that the website and library continue to generate significant research activity is reflective of a consistent desire to conduct cultural research and education online. It is time to take the time capsule that is the online hula library prototype and use the digital platforms and technologies of today to improve the quality of and access to HPS’s invaluable resources. *(see Supportingdoc2.pdf for Google Analytics website usage data)*

**Purpose of Native Hawaiian Library Services Grant:** To provide Native Hawaiians across the diaspora with a robust online library featuring the collections of five late Hula Masters born between 1918 and 1930 whose materials are almost entirely inaccessible online at this time. *(see Supportingdoc2.pdf for a summary of the Masters’ collection content and the cross-collection materials for this project)*

**Needs Assessment:**

**EXTERNAL:** We gain feedback from our beneficiaries as many times as we can throughout the year. At each public program we conduct, we gather written evaluations. We do Survey Monkeys online, and we ask all visitors to the Archive to complete a post-visit survey. One regular query we make is whether they seek information online relating to Hawaiian history, culture, and hula. Feedback from the last seven public programs (2017-2019) indicate steady and consistent responses at 87%. *(Additional data and other reports are available in Supportingdoc2.pdf.)*

**INTERNAL:** When HPS completed the first-ever online hula library prototype 17 years ago, the intention was not for it to remain a showcase piece but that it actually be used, expanded, and continually worked on. However, the rate of time-sensitive oral history work with our elder masters intensified, and we did not have enough financial support to “do it all”, so the library has remained virtually unchanged. Our desire to focus on the accessibility of materials ramped up again in 2013 as we opened the physical Archive and we could see that most of our beneficiaries could not make the trip to the small town of Kāne‘ohe to do their research. Between 2014-2018, we formed meaningful partnerships with the Papakilo

Database online cultural repository, the Public Library system statewide, and the University/Community College system libraries and their eVols service. While we appreciate and readily utilize these channels to freely share materials, they are geared toward sharing individual items with metadata attached via quite dry, non-visual, non-culture interfaces. We desire to return to our original library concept from 2002 which was and still is the manner in which we honor and share of our treasured community elders and their legacies – holistically by individual.

A system called “Mukurtu” that also began development in 2002 in Australia with the Warumungu Aboriginal community built into its system the fact that there are cultural protocols surrounding digital heritage materials, and that there are non-Western and non-standard, archival-based systems of knowledge to be recognized and communicated. As indigenous Hawaiians, we endeavor to provide resources in a culturally responsive and appropriate manner. In 2018, we were informed of a Mukurtu workshop in Honolulu by our partners at NHIL. Mukurtu sounded intriguing and something we might want to consider in evolving our library from prototype to reality. At the workshop, we met Professor Gary Holton from the University (project partner here), and subsequently learned of the Mukurtu cohort program we could apply to. We submitted an application, and in April 2019, we were informed that HPS’s Collection Manager, Ms. Keau George, was invited to be part of the 12-member cohort in 2019-2020. Mukurtu did not exist when HPS completed our online library prototype in 2002, and mobile devices, iPads, and high-speed bandwidth were not the norms. Much has changed, the universes are aligning, and we hope the time has come for the prototype to become a full-fledged online digital library!

## **2. Project Design**

**Goal:** Support Native Hawaiian learning by creating an online digital library on HPS’s website built on the voices of our late treasured *kūpuna* (elders).

**Hawaiian Perspective:** *In ‘ōlelo Hawai‘i (Hawaiian language), “ma mua” is forward, and “ma hope” is back. Yet, in the ‘Ōlelo Noe‘au (wise saying) for which this project is named, “mua” is what has come before and “hope” is what lay ahead. ...In the past lay the future... While HPS’s prototype is 17 years old and technologies have changed, its approaches and the decisions made then about how to appropriately and meaningfully share cultural materials from our elders remain solid and set the foundation upon which the library can be built today.*

### **Three Objectives:**

- 1) Create and test the online library & website-based infrastructure by the 18<sup>th</sup> month
- 2) Prepare individual hula master and cross-collection materials by the 20<sup>th</sup> month
- 3) Populate the online library and open public access by the 23<sup>rd</sup> month

*\* Note: Greater activity detail for each objective can be found in Schedule of Completion charts.*

### **Partners and Roles:** (see *Supportingdoc1.pdf* for all Partnership and Commitment Letters)

- University of Hawai‘i-Mānoa (UH) – OBJ 1 (Creation) & OBJ 3 (Roll-out): The national Mukurtu CMS “Hubs & Spokes” project is regionally-based at UH, and Mr. Gary Horton and Ms. Alana Kanahale will provide technical assistance, advisement, and guidance to HPS through April 2020
- Stacey Leong Design (SLD) – OBJ 1 (Creation): The SLD team will create the larger website that the Mukurtu-based Hula Master collections and cross-collection materials will live in. SLD is known for their culturally-compelling and island-focused graphic design and web work, and will help bring the library & HPS’s web presence to life through powerful imagery and functionality

- NetEnterprise, Inc. (NET) – OBJ 1 (Creation), OBJ 2 (Collections work) & OBJ 3 (Roll-out): The NET team will provide technical infrastructure, internet communications, and web support for the project workflow, and hosting and technical support for the library and website
- Na Hawai‘i ‘Imi Loa (NHIL) – All three Objectives: Interns that HPS connects with through NHIL will be involved in all Objectives, gaining hands-on, real-world experience and contributing to the advancement and expansion of HPS’s digital services for Native Hawaiians.
- Consultant: Gene Kois of Specific Video – OBJ 2 (Collections work): Will create 10 pieces of cross-collection content that represent the diversity and depth of the legacies of the five Masters
- Consultant: Alana Kanahele – OBJ 1 (Creation) & OBJ 3 (Roll-out): Will provide technical assistance, advisement and guidance as an independent contractor until the end of HPS’s project period, after the UH-based “Hubs & Spokes” project wraps up in April 2020

**For Objective #1:** Create and test the online library & website-based infrastructure by the 18<sup>th</sup> month

- Work with UH partners to design HPS library functionality through a Mukurtu lens
- Work with Stacey Leong Design firm to lay out overarching web programming and design to work hand-in-hand with Mukurtu-based library
- Create test library and make revisions based on findings
- Establish technical linkages between larger website and online library, test, and make revisions
- Include students in all steps of this objective

**For Objective #2:** Prepare individual hula master and cross-collection materials by the 20<sup>th</sup> month

There are six sets of collection materials that span the last 100 years of Hawai‘i. Five sets are individual Hula Master oral history collections built by HPS with the elders themselves in their twilight years. They five were born between 1918 and 1930 and are connected with the islands of Hawai‘i, Maui, O‘ahu, and Kaua‘i. They were each key to keeping traditions alive during the oppression of the late 19th century that continued into the 20th. They helped plant seeds for the eventual Hawaiian Renaissance of the 1970s through their dedication to hula and the passing on of cultural practices, language, and ways of life. The sixth set is an all-encompassing look at the five masters through 10 select community programs they were part of. The summary table in *Supportingdoc2.pdf* gives a detailed look at the content and who is a part of what. With Mukurtu and its built-in cultural approaches and awarenesses, we will for the first time be able to share Hula Master collection materials a a whole, *in context* and not piecemeal as it has been. It is pioneering for HPS to have the prototype evolve into a full online library - using today’s technologies – and to be able to share our elders in a manner most befitting of them and their respective legacies.

**Individual Hula Master Collections**

1) Nona Kapuailohia Desha Beamer (1923-2008)

*Nona Beamer was a widely respected hula master, classroom teacher, composer, entertainer, and author. She was the inspiration for the founding of HPS and our work is reflective of her earnest desire to keep learning and seeking knowledge.*

2) George Lanakilakeikiahialii Naope (1928-2009)

*George Naope was a prodigy, recognized at the age of 3 for his natural skill and abilities in the arenas of hula, chant, and music. Uncle George embraced the work of HPS and did his best to ensure we talked with his esteemed “peers” whom he felt should also be documented.*



3) Kahili Long Cummings (1918-2012)

*“Auntie Kahili” was Maui through and through. She was born into a large family that was heavily involved in hula and music, so it was destiny for her to be in the hula world as well, for her mother was also a renowned Hula Master.*

4) Pulu‘elo Naipo Park (1924-2004)

*“Auntie Pulu” was born in the remote area of Kohala on Hawai‘i Island. As was common during that time, the family moved to O‘ahu for work and to support the family in this “new” Hawai‘i where subsistence living was not the norm anymore. Auntie became a hula fixture in the small Windward town of Kailua where she taught for many decades.*

5) George Kananiokeakua Holokai (1930-2006)

*“Uncle George” was a beloved Hula Master who lived most of his life on the island of O‘ahu and contributed widely by teaching for many years in numerous communities through the County’s Parks & Recreation program. Hula was his destiny and his calling, but he was also an extremely talented musician with an incredible voice.*

### **Cross-Collections from Community Programs**

6) 10 Public Programs (from 2001-2005)

*This last set of materials are public programs hosted and/or documented by HPS that include one or more of the five masters listed above. Each program helps communicate the depth of their respective wisdom and legacies.*

Everything in the six sets of collection material exists in digital form as of this writing. The four most time-intensive tasks under this objective include:

- TRANSCRIPTS – each of the 65 hours (and approx. 2,275 pages) of transcript content need to be gone through and finalized
- FOOTAGE-Non-oral history – these extensive lists of performances, workshops, panel discussions, etc. need to be compiled and made visually compelling for online library delivery
- STILL IMAGES – 20% of the total 3,100 item photo library for the five masters will be selected through this project for inclusion in the associated elders’ collection materials. Total: 620 photos
- MOVING IMAGES – working with the raw footage from 10 community programs and transforming them into 10 completed stand-alone pieces will be an intense editing experience

### **For Objective #3: Populate the online library and open public access by the 23<sup>rd</sup> month**

- Work to incorporate individual collection materials as outlined in the table in *Supportingdoc2.pdf*
- Work to incorporate 10 cross-collection videos into library
- Test functioning of overarching website, and test for seamless use of library with return to website
- Test live and document findings; make changes are needed
- Go live!
- Include students in steps of this objective where possible

### **3. Impact**

Intended goals:

- Create first-time holistic public access to five individual Hula Master Collections which have been exclusively built by HPS with each of the masters since 2000
- Build in-house capacity at HPS to share elder-based content in culturally-appropriate ways through HPS's website and its accompanying Mukurtu-based library
- Establish and refine HPS's digital library services to ensure Native Hawaiians can readily and widely access the full-fledged online library

Intended Outcomes:

- Target library services in digital online realm to Hawaiians who exist in diverse geographic, cultural, and socio-economic backgrounds
- Expand resources for individuals' lifelong learning
- Improve quality of and public access to HPS's digital library services
- Enhance HPS's capacity for leadership in online library development and management
- Provide training and professional development to enhance the Native Hawaiian library workforce and leadership through internships
- Enhance the effort to recruit future professionals to the field of library and information services through collaboration with Nā Hawai'i 'Imi Loa

**Project Evaluation:** The project encompasses numerous impacts reflected in the following list:

- DIGITAL SERVICE: HPS website provides ready and seamless access to the online library
- DIGITAL SERVICE: Five treasured hula elders' collections are presented holistically online for the first time
- DIGITAL SERVICE: Ten community programs highlighting the legacies of the five featured late-great masters linked to elder collections
- OUTCOME: Improved technological and library fluency (*through availability of Mukurtu library*)
- OUTCOME: Expanded use of online methods for research (*through availability of elder collections*)
- OUTCOME: Awareness of HPS's online endeavors (*thru implementation of communications plan*)
- FINDING: Reinforced understanding of the importance of documentation of Native Hawaiians' history from Native Hawaiian perspectives
- FINDING: Ability and increased desire to learn more about the life and times of Native Hawaiians who lived during the post-overthrow Territory of Hawai'i
- FINDING: Enhanced awareness of the importance of digitally-preserving tangible elements of Hawaiian culture for future Native Hawaiian advancement
- FINDING: New knowledge and insights from a century of Native Hawaiian history, reaching back to 1918 through the Hawaiian Renaissance of the 1970s and 1980s
- FINDING: Increased understanding of life in 20<sup>th</sup> century in Hawai'i (a time of pivotal societal, cultural, and linguistic changes)
- FINDING: New insights into how hula, a cornerstone of Hawaiian culture, and Hawaiian music have survived, thrived, evolved, and been perpetuated through the efforts of our elders

Data to track results include:

- 1) Establishment of new HPS website and online library to allow HPS to cohesively share Hula Masters' collections
- 2) Finalization of collection materials for online research:
  - 65 hours worth of transcript pages (approx. 2,275 pages across 5 elder masters)
  - Non-interview collection footage summaries for each Hula Master (277 hours relating to performances, panel discussions, events, workshops, and activities)
  - 620 photos (20% of each of five elders' larger image collections)
  - Each elder's finding aid (total 49 pages of content across 5 elders)
  - 10 cross-collection video pieces relating to the 5 masters
    - 5 HPS panel discussions
    - 5 performances showcasing the elders and their legacies
- 3) Training of college interns (2)

Project success will be measured against the specific outcomes listed above. Evaluation of the project will be led by Project Director Loo who will complete quarterly assessments of progress, achievements of outcomes and objectives, and lessons learned. Qualitative input will be gathered from team through written feedback. The project was designed with three S.M.A.R.T. objectives (Specific, Measurable, Achievable, Results-Oriented, Time-Bound) below, that allow for immediate and accurate assessment and are directly tied to the results listed above.

The beneficiaries of this project are Native Hawaiians across the diaspora. When Native Hawaiians become more deeply rooted in our culture, we gain the *mana* (power) of self-awareness and cultural identity. This blossoming of internal cultural strength within individuals can improve mental, spiritual, and physical health. In turn, this renewed sense of self transforms into agency in other areas of our lives, which has the potential to radiate outward into our families and communities.

**Risks:** HPS has determined that the potential benefits of this project greatly outweigh the risks to the Native Hawaiian community, as the project implementation risks are virtually non-existent. While the benefits of this project are tenfold, the primary foreseeable risk lies in the incompleteness of this project which is highly unlikely given the strong commitments made to it and HPS by our partners.

#### **4. Communications Plan**

HPS has the ability to reach and interact with broad and dispersed audiences through a variety of means. Project Director Loo will lead the effort, with assistance from Collections Manager George and the channels they have direct access to through their community connections and preservation work:

- University of Hawai'i-Mānoa Hawaiian Studies Listserv – HPS regularly interacts with faculty and students and is able to share information via their far-reaching Listserv
- Association of Hawai'i Archivists (AHA) Listserv – HPS regularly shares via this listserv
- Hawai'i Library Association (HLA) Listserv - HPS regularly shares via this listserv
- Nā Hawai'i 'Imi Loa Professional Organization - HPS's partner is supportive of our activities and readily shares with their board and membership. HPS also participates in and shares through NHIL's Ho'okele Na'auao (annual Hawaiian Librarianship Symposium)



- Community Programs Across Islands – HPS regularly presents educational programs throughout the island chain, and no matter the focus of each presentation, current projects are always intertwined, as is the nature of the work
  - o We also use these as opportunities to engage with our beneficiaries and gather feedback via written surveys – it is an extremely valuable and important aspect of our community work
- Library Presentations – We host programs annually at Hawai‘i State Library Main Branch for our local library-going community
- HPS Archive Research Visits – HPS utilizes a written pre-survey and online post-survey process for researchers to gather direct and immediate feedback from our beneficiaries
- Social Media\* – HPS has a constantly growing Facebook & Instagram following – over 14,500 on Facebook alone, with regular interactions on posts that easily reach 20,000 – this is a reliable means of reaching our community outside of Hawai‘i
- HPS Email List\* – HPS has a constantly growing email contact list – this is a solid means of reaching our community outside of Hawai‘i

*\* more geared for outreach to Native Hawaiians outside of Hawai‘i*

## **5. Sustainability**

This project marks the first time HPS will have the capacity to share materials online in a manner reflective of how we celebrate and honor our elders in the physical HPS Archive, namely by individual elder and their respective legacies.

This creation and rollout of an online library whose prototype was built back in 2002 brings much opportunity to impact our community of Native Hawaiians across the diaspora.

Sustainability is key and we note the following:

- Online Library Expertise: Core project team member Keau George has been accepted into an intensive Mukurtu cohort training program from June 2019-May 2020. Her expertise will support HPS in continuing to maintain and expand the library beyond the project period
- Technical Infrastructure: HPS’s new website and library will benefit from HPS’s long-time organizational partner, NetEnterprise, Inc. who has provided HPS such services free-of-charge for 18 years
- Hula Master Advisement: HPS’s elder advisors and those with whom oral history work continues serve as the strongest source of content advisement and culture-based decision-making
- Collections Management and Sharing: The Mukurtu-based library will start with just five leading hula masters’ collections that have been methodically built with them since 2000. This project will allow us to create processes, learn lessons, and be positioned to continue to grow the library in the years ahead in a culturally-sound and technically-significant way

***Mahalo nui loa (thank you very much) for your consideration.***







## DIGITAL PRODUCT FORM

### Introduction

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (e.g., 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. 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

All applications must include a Digital Product Form.

- Please check here if you have reviewed Parts I, II, III, and IV below and you have determined that your proposal does NOT involve the creation of digital products (i.e., digital content, resources, assets, software, or datasets). You must still submit this Digital Product Form with your proposal even if you check this box, because this Digital Product Form is a Required Document.

If you ARE creating digital products, 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.

**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.

## **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 the format(s) you will use.

**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.

**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).



## **B. 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 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).

## **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).

**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).

#### **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).

**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.

### **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?