Statement of Need:

The Hawaiian Mission Children's Society (HMCS) library and archives has preserved the heritage of the protestant missionaries and their relationship with the people and cultures of Hawaiʻi since 1852. Today, HMCS does business as the Hawaiian Mission Houses Historic Site and Archives (HMH) and is a National Historic Landmark and an institution accredited by the American Alliance of Museums. Our focus is making available to the public the historical records of the missionaries working and residing in this region during 1820-1863. These records have been used by academic researchers and historians to interpret the political and cultural changes that occurred during the early nineteenth century, and they also hold important genealogy records for Native Hawaiians. A large portion of these collections are written in the Hawaiian language. With the resurgence of Hawaiian language speakers, these collections are the focus of HMH to better serve and support this community.

Ke Kahua Maoli
This project places indigenous knowledge, intellectual and spiritual structures, and epistemologies at the center of its work. It also respectfully approaches the writers who wrote the documents, and recognizes the place and people who continue to hold these documents in their care. We are motivated by the conviction that the work we do is relational, dependent upon the maintenance of proper conduct and behavior. This ethos includes care for the place we work from, for ourselves, members of the project team, and the ʻike that is held within the documents that we work with.

HEA - In the Hawaiian language to **hea** is to call, name; to sing or recite a name chant; to give a name to.

The purpose of the HEA project is to organize and transcribe the previously digitized manuscripts in the Hawaiian Evangelical Association collection Name Files and make these writings accessible to a wider audience via the Mission Houses Archives web portal.

This phase of the project which focuses on organization and transcription is a necessary large step towards future phases which will include:
1. The creation of a finding aid and subject categories in the Hawaiian language.
2. The proper dissemination and representation of this work online.
3. Scholarship to deepen the discussion on Hawaiian and indigenous methodologies.

The Hawaiian Evangelical Association (HEA) collection, in its entirety, comprises manuscripts from Congregational churches throughout Hawai'i. It includes letters and papers pertaining to church business, pastors' reports and letters, and correspondence received by the HEA. A majority of the 64 lineal feet is written in the Hawaiian language.

The focus of this project is on the "Name Files" collection within the HEA papers, of 574 folders of some 1101 individual writers spanning the years 1824-1947 from the rise and fall of the Hawaiian Kingdom to the Republic and nearly to statehood. These Hawaiian language texts document the daily lives of Hawaiian and American ministers, some of whom rose to prominent governmental positions, as well as those connected to the HEA.

Transcriptions make texts searchable and indexable. The HEA collection transcriptions will also serve as a foundation for future HMH projects focusing on translation and text-to-speech, and also facilitate machine reading of texts. Furthermore, given the size of Hawaiian language archival collections, like the HEA, we believe that our project will become a benchmark project shaping future indigenous language collection stewardship.

The preservation of Hawaiʻi's cultural heritage and history is increasingly important to the Hawaiian Mission Houses, which in recent years has stepped up its efforts to serve not only as a memorable destination for visitors, but also a place for local residents and Hawaiian people to delve deeper into Hawaiʻi's rich and complex past. While many visitors are drawn in by the original architecture of the houses, enjoy the material culture of the museum and stop in to the gift shop, too few have been apprised of the amazing materials housed in its textual, published and hand written, and image archive.

In order to reinvigorate Hawaiʻi's history, the Hawaiian Mission Houses Historic Site and Archives library seeks to promote new initiatives to invite Hawaiian language back into people's homes and normalize a language that was almost lost. The library has successfully pursued and published digital humanities projects which highlight the unique Hawaiian language documents in its care. Transcribing the HEA Name Files collection, and eventually more collections in the digitization plan, secures HMH's objective to give back to and foster a growing Hawaiian language speaking population, by providing the means to enable scholars, students, and members of the community greater access to sources written by kānaka maoli people themselves. A unique problem facing community users in Hawaiʻi, as an island community, is that the sources based in HMH's archive are only easily accessible to people living on Oʻahu. Hawaiians and other patrons living in other parts of the archipelago must catch a flight to

Honolulu, find transportation and lodging in order to examine documents for any extended period of time. By moving collections online, and increasing accessibility through transcriptions and the production of detailed finding aids in Hawaiian and English, HMH will preserve the delicate original archival material and will facilitate new scholarship in numerous disciplines originating from Hawaiian writers whose body of work has scarcely been engaged by scholars.

Hawaiian Mission Houses' archival collection holdings are an essential resource in order to write about or research 19th century history. The HEA holdings have also proven to be valuable to those doing genealogical research. Through surveys, HMH has a worldwide audience.

Project Design:

Goal 1: Organize physical documents in HEA files identifying and defining language and repeated names to be used in meta data.

Goal 2: Create a transcription training manual.

Goal 3: Create and upload a robust and historically correct finding aid data.

At present, the HEA collection of personal correspondences filed by name (the HEA ``Name Files") has a limited organizational structure within the file folders and an abbreviated finding aid. The first goal of this grant is preserving the physical documents in the HEA Archives by organizing, defining the contents and identifying preservation needs of the personal correspondences within the collection. This holistic approach to organizing and digitizing the collection will aid researchers in finding their material online without needing to utilize or sift through the physical documents themselves, saving the archival material the wear and tear of physical use.

Kanani Reppun and Carol Silva, our consulting librarians with Hawaiian-Language and 19th century history expertise, will be leading the project of physical material preservation, organizing the documents and producing a well-defined finding aid for the letters in the "Name Files". Through previous IMLS support, the collection was scanned and is in a format ready to be put on the HMCS Library web portal, OMEKA. To accompany these digital files online, the development of an accurate finding aid for the more than 1100 individual writers is necessary to create optimal accessibility. Reppun and Silva will also assist and train the HMH library staff in preparing files for transcription and reviewing transcriptions for accuracy in language and transcription structural consistency, while in the process reviewing the integrity of the digital products. They will also participate in the review of online presentation of the finding aid and digital products, and ensure library best practices are followed in the creation of subject headings, metadata and customized components of our digital collection database.

Associate Professor of History and expert researcher, Dr. Noelani Arista has written a rough draft of a transcription training manual to train graduate, undergraduate and high school

students to work as transcribers on the project. After the first transcription round has been completed, the manual will be adjusted to needs identified by the lead team members, edited, and then revised. When completed, the manual will be the first of its kind to standardize an approach to Hawaiian language and cultural documentation in digital mediums. Transcribers will work together to aggregate a glossary of terms important to understanding the collection in context, while also producing a list of abbreviations often used by writers.

Project Timeline First Year:
September-October: Project initiation
- Project Coordinator hired
- Assistant Coordinator hired
- Transcribing team identified
- All training and work to begin by October

September-March: HMH Library Staff
- Adjust physical and PDF contents of HEA "Names" Folders
- Digital collection navigation assessment #1 development
- Digital collection assessment #1 implementation

November-December: Library consultant
- Submit final assessment for existing digital products for 574 folders, give final recommendations to HMH staff to adjust physical and PDF contents

May-August: HMH Staff
- Preliminary Finding Aid draft complete
- Preliminary digital presentation complete online

September-August: Continuous work throughout the first year by various people and teams
- The coordinators, consultants, and staff will continuously check product and help with:
  - Develop preliminary finding aid
  - Develop preliminary digital presentation including metadata
- Library Consultant: Material prep for transcription
- Transcription Processing by Transcribers (HMH Staff as Admin)
- Transcription Review by Scholar Team Proofreaders
- Transcription Methodology development

July-August
- Preliminary digital presentation complete online
- First Draft Transcription Methodology document

Project TimeLine Year Two
September-October
- Develop community engagement transcription workshops
- Develop digital presentation assessment #2 (including transcriptions)

September-December
- Targeted outreach to educators and schedule transcription workshops
- Library consultant Digital Product Assessment #2 (including transcriptions)

September-February
- Adjust digital products and PDFs as necessary based on assessments

September-August
- Continue to Finding Aid development

October-March
- Implement and track data for digital presentation assessment #2

December, February, April, June, and August
- Transcription workshops to be hosted

August
- Final Transcription Methodology document
- Final assessment of completed project

*Many of the tasks overlap as the project demands a tandem-like work mode.

Impact:
With the HEA Project, the HMCS Library has renewed its commitment to digital humanities initiatives that will directly benefit Hawaiian churches, members of the Hawaiian community and a growing population of Hawaiian first and second language speakers.

Additionally, a rising, "born digital," generation of young kānaka scholars raised reading, speaking, and writing in Hawaiian will be able to learn about 19th and early 20th century Hawaiian culture, language and history without having to access secondary resources, which are commonly those that have been translated from ʻōlelo Hawaiʻi. The HEA "Name Files" collection supplies a deep dive into over a hundred years of Hawaiʻi's history, the materials found within it are of different genres, some introduced, some traditional, marking the collection as densely complex; embedded among these letters and journals are references to the nūpepa (Hawaiian language newspapers,) and book trade, newly composed songs, chants, prayers, and sermons. The collection moves us from the prosaic recitation of daily lives to account ledgers, to the politics of church governance, ka ʻōlelo a ke akua (the word of God), new emergent oral and literary productions at once Hawaiian *and* Christian. Through digital preservation we plant the seeds of language and cultural revitalization as a new generation will

be sharing new histories, creating new media projects through various mediums: app creation, podcasting, film, AR/VR and video gaming.

Our audience includes researchers and scholars interested in nineteenth century U.S. and Hawaiian history, Indigenous and Hawaiian Studies, Hawaiian and Indigenous governance, Religious history, Indigenous Christianity, Indigenous print culture (all the nūpepa (newspaper) trade that ran through the churches as well as the many requests for bibles, hymn books and other literature made by ministers for their congregations), ethnomusicologists (Lyons substantial collection of papers), Hawaiian language and language reclamation scholars, Hawaiʻi residents, members of the Hawaiian community, the growing population of people who read and speak the Hawaiian language,genealogists, people doing land and genealogy research, missionary descendants and church members.

Dr. Noelani Arista, who will be leading the transcribing team writes:

> The Hawaiian-language archive has been devalued owing to a scholarly preference for working in English- language- only archives. Important anthropological works about Hawaiʻi and Hawaiians impose innovative methods that assume primary-source scarcity, an irony given the sheer size of the Hawaiian- language archive. Over-reliance on English- language archives, along with a smattering of previously translated source materials, is widespread in writing on Hawaiʻi and Hawaiians, giving rise to what Puakea Nogelmeier has termed "A Discourse of Sufficiency."[1] This discourse has produced a historiography deaf to Hawaiian subjectivities, historical experiences, and modes of historical production.[2]
>
> Few published scholarly essays and monographs use any portion of the untranslated archive, which constitutes probably 95 percent of the material housed in libraries and archives. Imagine the daunting problem of encountering a "new," vast, unread archive of materials, while engaging with over a century of historiography founded on few to none of these sources. The crisis currently facing scholars embarking on writing the history of Hawaiʻi, Hawaiian history, and Hawaiʻi in the world is nothing short of reassessing and rewriting accepted theses and narrativizations enshrined in books published

---

[1] Nogelmeier, Puakea. *Mai Pa'a i Ka Leo: Historical Voice in Hawaiian Primary Materials: Looking Forward and Listening Back*. Bishop Museum Press, 2010.
[2] Noelani Arista, "Ka Waihona Palapala Manaleo: Research in a Time of Plenty. Colonialism and the Hawaiian Language Archive," in *Indigenous Textual Cultures: Reading and Writing in the Age of Global Empire,* eds. Tony Ballantyne, Lachy Paterson, Angela Wanhalla (Durham: Duke University Press, 2020), 31- 59.

over the past century. Once indigenous-language sources are mainstreamed through works written by scholars trained to fluency, a new future for the Hawaiian past can be charted.[3]

Hawaiian historians, language scholars, and community members agree that access to resources written in ʻōlelo Hawaiʻi is imperative, innovative, and will open a space for narratives that pulled from primary sources from

Communication Plan:
Every semester, undergraduate and graduate students are introduced to the holdings at HMH library. The professors from Indegnous Politics, Hawaiian Studies, American History, as well as others, will be informed of the HEA project during their visits. Their students will also be given the opportunity to attend the transcribing workshops.

Every week, HMH staff sends out a weekly newsletter blast that reaches over 6,125 households; 3,887 on Oʻahu, the remaining make up patrons from the neighboring islands and the continent of the US, as well as 8% from around the world. HMH continually works to expand the reach of patrons and membership. The progression of the HEA project will be periodically highlighted in these newsletters.

Dr. Noelani Arista has also committed to writing about the completed HEA project to be published in several scholarly journals.
In 2019, HMH toured a cultural history program in New England for the month of October. Recently, this program, "My Name is ʻŌpūkahaʻia" was selected for a 2020 Award of Excellence by the American Association for State and Local History (AASLH). HMH has proven innovative with programming and platforms. Making sure our immediate and the community at large is privy to the work we are doing is important and we make every effort to inform stakeholders and those who might benefit from this work.

Sustainability:
Transcription quite literally adds a layer of security to the preservation of this indigenous language collection, but by design this project will set new standards for best practices in archival project design. Through the new lens of COVID-19 stay at home regulations, making these collections digitally available and robustly accessible is at the forefront in the Hawaiian Mission Houses service to the community.

---

[3] Arista

Through creating and implementing policies for better organization of our physical files, partnering with academics and transcribers to breakdown searchibility barriers, and addressing the technology we use for online access, we will increase digital service accessibility by providing a more robust online finding aid with an intuitive digital presentation of our digital products. Developing these updated policies, informed by our Hawaiian language academic and librarian consultants, and building a project with prioritizing Hawaiian language searchibility and proficiency at its center, puts the HMH library at the forefront of indigenous language collections stewardship.

Kānaka maoli community members, educators and researchers are motivated by research concerns that diverge from mainstream scholars. Indigenous research in the Hawaiian language is often focused on locating and illuminating family histories, genealogies and connections to land. After the HEA "Name Files" collection is transcribed and made available online with more clearly defined finding aid, the individual and family names, the names of churches and place names will be word searchable, enabling increased access and new avenues of research.

Another avenue of preservation and revitalization will be the training of a skilled transcription group of fluent and semi-fluent Hawaiian speakers for the project. Transcribers on the project will be trained to re-present what they see on the page consistent with a set of rules governing practice. Transcribers will have the opportunity to strengthen their ability to read 19th century hand, familiarize themselves with the writers whose folders they are processing and hone their ability to transcribe Hawaiian language documents. Individuals with advanced skill we be asked to join a group who will be creating new subject headings for the collection in the Hawaiian language.

The HEA Project is an exciting project that promises to set a foundation for future pathways in which the Hawaiian language is prioritized. The diverse support and enthusiasm from our communities is exciting. With the support of the IMLS Native Hawaiian Library Services Grant, Hawaiian Mission Houses Historic Site and Archives will place indigenous knowledge, intellectual and spiritual structures, and epistemologies at the center of our work.

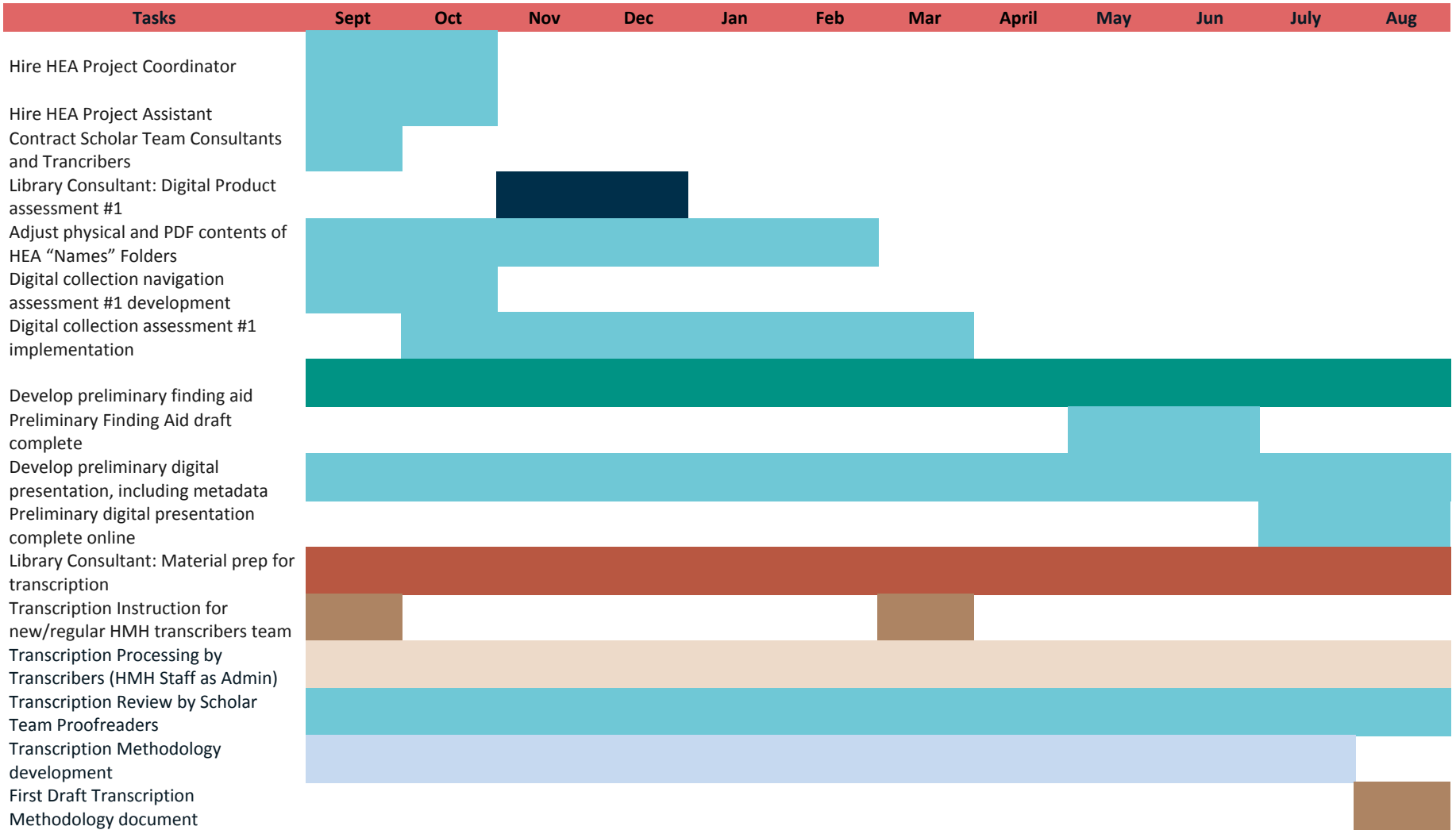E hai i ke ala o ka hana paʻakikī

(pursue the path of challenging work)

NAG-Hawaiian-FY20 Hawaiian Mission Children's Society

HEA Project: Prioritizing the Hawaiian Language through Transcribing

Hawaiian Mission Houses Historic Site and Archives

Project Date: September 2020-August 2022

Year One

Tasks	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun	July	Aug
Hire HEA Project Coordinator												
Hire HEA Project Assistant												
Contract Scholar Team Consultants and Trancribers												
Library Consultant: Digital Product assessment #1												
Adjust physical and PDF contents of HEA "Names" Folders												
Digital collection navigation assessment #1 development												
Digital collection assessment #1 implementation												
Develop preliminary finding aid												
Preliminary Finding Aid draft complete												
Develop preliminary digital presentation, including metadata												
Preliminary digital presentation complete online												
Library Consultant: Material prep for transcription												
Transcription Instruction for new/regular HMH transcribers team												
Transcription Processing by Transcribers (HMH Staff as Admin)												
Transcription Review by Scholar Team Proofreaders												
Transcription Methodology development												
First Draft Transcription Methodology document												

Color Key	C. Silva	K. Reppun	N. Arista	HMH Staff	All	Scholar team	Transcribers

Year Two

Tasks	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun	July	Aug
Develop community engagement transcription workshops	█	█										
Targeted outreach to educators and schedule transcription workshops	█	█	█	█								
Transcription Workshops hosted at HMH				█		█		█		█		█
Library Consultant: Digital Product assessment #2	█	█	█	█								
Adjust physical and PDF contents of HEA "Names" Folders	█	█	█	█	█	█	█					
Digital collection navigation assessment #2 development	█	█										
Digital collection assessment #2 implementation		█	█	█	█	█	█					
Continue Finding Aid development	█	█	█	█	█	█	█	█	█	█	█	█
Final Finding Aid complete							█	█	█	█		
Develop final digital presentation, including metadata	█	█	█	█	█	█	█	█	█	█		
Digital presentation complete online										█	█	█
Upload final PDFs, final finding aid and transcriptions online												
Library Consultant: Material prep for transcription	█	█	█	█	█	█	█	█	█	█	█	█
Transcription Instruction for new/regular HMH transcriber team	█	█				█	█					
Transcription Processing by Transcribers (HMH Staff as Admin)	█	█	█	█	█	█	█	█	█	█	█	█
Transcription Review by Scholar Team Proofreaders	█	█	█	█	█	█	█	█	█	█	█	█
Transcription Methodology development	█	█	█	█	█	█	█	█	█	█	█	
Final Transcription Methodology document												█

Color Key: C. Silva | K. Reppun | N. Arista | HMH Staff | All | Scholar team | Transcribers

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

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.

Hawaiian Mission Houses Historic Site and Archives' (HMH) copyright will be extended to all digital assets created during the course of this project. A property rights and permissions statement regarding non-personal use will be included in the Dublin Core metadata xml and posted as part of the item's Dublin Core entry record in the Hawaiian Mission Houses Digital Archive (OMEKA). HMH rights and permissions policy applies to all collections in the archives. Our reproduction and usage program is available to users upon request.

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.

HMH will retain ownership of all digital assets. All materials can be freely accessed at the HMH Archives. The searchable online resource will be accessible and unrestricted personal use of the content (words) of our digital assets is permitted. However, the distribution and/or publication of digital assets without permission is not authorized. Our rights and permissions statement is posted on the HMH Digital Archive homepage, in each item's entry record in the HMH Digital Archive, and within the digital object's Dublin Core XML.

HMH Curator of Archives will work directly with users requesting permissions for non-personal use.

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.

Master Digital Image: Archive 45 MB with 600 dpi TIFF files containing a digital representation of 1 page from a handwritten letter, journal, or report

Service Master Image: Optimized working 45 MB with 600 dpi TIFF files that are
copies of each Master file

Derivative Files: User PDF/A 3 MB files that contain a digital representation of one complete letter, report, or parts of a journal.

Metadata: Dublin Core internal metadata will be added to 45 MB TIFF images and 3 MB user PDF/A files
        Dublin Core metadata descriptions are also entered with each file added to the OMEKA Digital Archive

Internet Delivery: Online access to materials are provided via on-site LINUX server and OMEKA (HMH Digital Archive)

Digital assets are backed up to the cloud and portable external hard drive whenever changes are made to the OMEKA (HMH Digital Archive) collection and / or LINUX server

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 flatbed scanner (paper resources are scanned in-house) - Microfilm scanner (services provided by Advanced Micro-Image Systems Hawaii, Inc) - Windows 10 PC - Adobe Photoshop Elements, Scan Tailor image editing software applications (all digital images are processed in-house) - Adobe Acrobat Pro - DSLR Camera with shotgun microphone (video content) - Final Cut Pro video editing software

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).

TIFF – Source: Original handwritten documents

Bit Depth: 24 bit color Spatial Resolution: 600 ppi to 800 ppi Spatial
Dimensions: 6000 to 8000 pixels across the long dimension

Source: 35mm microfilm* Bit Depth: 12 bit Spatial
Resolution: 300 ppi Spatial Dimensions: 600 pixels
across the long dimension

   * Advance Micro-Image Systems Hawaii will be contracted to produce the microfilm scans

PDF/A – Source: PDF/A files are created from Service Master copies for the internet access via OMEKA

Bit Depth: 8 bit grayscale / 24 bit color Spatial Resolution:
72 to 300 ppi Spatial Dimensions: 600 pixels across the
long dimension

XML - Validated utilizing the Dublin Core XSD (http://www.dublincore.org/schemas/xmls/qdc/dc.xsd)

AVI / MPEG – Color, Frame width 1920p x Frame height 1080p, 30 frames per second
Audio levels: Between -10db to -20db

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).

Quality control will be conducted throughout all phases of the digital conversion process. Every master, service master, and derivative image file will be inspected for defects by the project coordinator and followed by a second inspection by the project manager. When a defective image is discovered, it is immediately replaced with either a newly created image or another copy of the master file.

MASTER DIGITAL IMAGE VISUAL INSPECTION CHECK LIST

Things to look for during archival master visual inspection may include:

   - Image is the correct size • Image is the correct resolution - File name is correct - File format is correct - Image is in correct bit depth and color mode (i.e., color image has been scaled as grayscale) - No loss of detail in highlight or shadows - No excessive noise especially in dark areas or shadows - Even tonal values, no flare - Correct focus - Not pixilated - Excessive dust spots or other objects - No digital artifacts (such as very regular, straight lines across picture) - Image not cropped - Image not rotated or reversed - Correct color balance - Histogram:
   - No spikes or clipping - No tonal values lower
   than 9 or higher than 247

SERVICE MASTER* VISUAL INSPECTION CHECK LIST

In addition to the items on the Master Digital Check List, here are additional things we look for during service master visual inspection:

- No digital artifacts (such as very regular, straight lines across picture) - No moire patterns (wavy lines or swirls, usually found in areas where there are repeated patterns, such as half-tone dots) - Image rotated correctly and not reversed - Image centered and not skewed

*The service master is an optimized working copy of the master file which can be used as a source for all subsequent derivatives.

DERIVATIVE FILES CREATED FROM SERVICE MASTERS

- PDF USER FILES VISUAL INSPECTION LIST

        - Image is the correct size and resolution - File name is correct
- File format is correct - Content is legible - Even tonal values, no flare
- Correct focus - Not pixilated - No digital artifacts (such as very regular, straight lines across picture) - Image not cropped - Image not rotated or reversed

All digital assets will be organized in folders and stored on the onsite HMH server, 2 external drives (1 located offsite), and cloud server back-up during and after the grant period. Our on-site server's cloud application is setup to immediately recognize and upload any new digital assets or any collection changes to the cloud server. The 2 external drives are updated monthly. File formats will be updated as needed by the Curator of Archives.

C. Metadata

Descriptive Metadata: Dublin Core is the standard we use to describe the intellectual content, to index, as well as promote discovery and identification of our digital resources. The physical description of the photograph or manuscript document is also described with the Dublin Core schema. The internal descriptive metadata of our digital scans of documents and photographs is embedded within the file and entered prior to image processing via the Extensible Metadata Platform (XMP) fields, which can be found in Adobe Photoshop and Adobe Acrobat Professional. After a digital image is uploaded to our Omeka digital archive, Dublin Core metadata is added again. But, this time externally via Omeka digital archive.

Administrative Metadata: Dublin Core is also the standard we use for maintaining Administrative information about the digital object (e.g. ownership and rights management).

Technical Metadata: We utilize the Exchangeable image file format (Exif) standard for maintaining technical information about digital photographs and scans. Exif data is created by most cameras and scanners at the time an image is produced and embedded within the image file. When necessary, the Exif data can be edited. When using a camera or scanner that does not produce Exif data, it can be manually entered using a open source software application like AnalogExif. (AnalogExif can also edit the XMP metadata fields mentioned under Descriptive Metadata.)

Preservation Metadata: We are currently creating a Shared GSuite spreadsheet with team access that will be used to record information that will be used as part of our effort to ensure the core preservation processes of availability, identity, understandability, authenticity, viability and renderability.

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

All digital assets will be organized in folders and stored on the onsite HMH server, 2 external drives (1 located offsite), and cloud server back-up during and after the grant period. Our on-site server's cloud application is setup to immediately recognize and upload any new digital assets or any collection changes to the cloud server. The 2 external drives are updated monthly.

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 digital products produced from this grant will be publicly available and searchable online via the HMH Digital Archive (OMEKA) and publicized via press release and public outreach programs. HMH continues to negotiate partnerships with the Office of Hawaiian Affairs' publicly accessible online (OHA) Papakilo Database to share our links to our digital assets via OHA's searchable Papakilo's database, as well as our 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).

The digital assets will be made publicly available online via the HMH Digital Archive (OMEKA) at www.hmhda.missionhouses.org. All original documents as well as public access to the HMH Digital Archive (OMEKA) are available in-house during our regular business hours. In the HMH Archives' reading room, we have an internet connected desktop computer for public use as well as 4 laptop computers (available upon request). We also provide public internet access to our patrons via guest Wi-Fi.

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.

Hawaiian Mission Houses Digital Archive - www.hmhda.missionhouses.org

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?