Please review the Application Guidelines for details about the information requested in this proposal. Fields marked with an asterisk are required.

**Eligibility**

To be eligible for a Digitizing Hidden Collections grant in 2016, applicant projects must meet the following requirements:

- Minimum allowable request for 2016: **$50,000**
- Maximum allowable request for 2016: single-institution projects: **$250,000** / collaborative projects: **$500,000**
- Minimum allowable project term: **12 months**
- Maximum allowable project term: single-institution projects: **24 months** / collaborative projects: **36 months**
- Projects must begin between **January 1 and June 1, 2017**
- Single-institution projects must be completed by **May 31, 2019**
- Collaborative projects must be completed by **May 31, 2020**

**Is this a collaborative project?**

Yes/No  No

**What is the size of the request?**

**NOTE:**

- The minimum acceptable request in this program, for all projects, is **$50,000**.
- Single-institution projects can request **no more than $250,000**.
- Collaborative projects can request **no more than $500,000**.

**Amount Requested**  $170,880

**Provide the proposed project length in whole months, and list the project start and end dates.**

**NOTE:**

- All projects must begin between **January 1 and June 1, 2017**.
- The minimum project length, for all projects, is **12 months**.
- Single-institution projects can last **up to 24 months** and must end by **May 31, 2019**.
- Collaborative projects can last **up to 36 months** and must end by **May 31, 2020**.

**Project length (months)**  24
**Project Start Date**  06/01/2017
**Project End Date**  05/31/2019
A note regarding principal investigators:

An individual may not be named as a principal investigator (PI) on more than one proposal, and may not serve as PI on two funded projects simultaneously. Please tick the box below to confirm your acknowledgement of and compliance with this guideline.

Tick to confirm: Confirmed

Project Summary

All applicants are required to upload a cover sheet with their final proposals. The cover sheet provides you with a place to point reviewers to the sections in your final proposal where you’ve addressed questions or concerns they have may expressed in first round feedback. Click here to download the cover sheet template.

Cover Sheet
dhcproposalcoversheet.pdf

Applicant Institution
C. V. Starr East Asian Library, University of California, Berkeley

Applicant Institution: legal name
Regents of the University of California

Collection/Project Title
Japanese Historical Maps in the C. V. Starr East Asian Library, University of California, Berkeley

Project Summary
The project proposes to digitize approximately 1,500 woodblock, copperplate, and manuscript maps produced in Japan between the 1600s and 1923 and now held by the East Asian Library, and to add them to a website already developed by David Rumsey and Cartography Associates. The website, http://www.davidrumsey.com/japan/, which currently provides access to images of just over 800 maps from the same collection, allows researchers to access the maps without stressing the materials. It also allows researchers to enlarge details, save images to a file, add notes, and juxtapose or superimpose maps and satellite images for comparison. These functions, coupled with the size and variety of the entire map collection, will allow researchers to use the maps to trace political, cultural, administrative, and topographical change, as well as the development of Japanese cartography, from premodern times into the twentieth century.

Collaborating institutions (if applicable)

If this is a collaborative project, include the names of the collaborating institutions below. Use the green add button to list additional partners as needed.
Quantities and Types of Original Materials to be Digitized during the Project

Enter below the estimated quantities and select the units of measurement and material types that best describe the extent of original materials that will be digitized during the project. You may add as many different measurement/material types as you like by clicking the green add button found below this section, but each individual item should be accounted for in only one category.

If the quantities provided are rough estimates rather than precise descriptions, explain the method used for estimating those quantities in the space provided for additional information.

Materials

<table>
<thead>
<tr>
<th>Amount of Materials</th>
<th>1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Measurement</td>
<td>items</td>
</tr>
<tr>
<td>Type of Materials</td>
<td>maps</td>
</tr>
<tr>
<td>Type of Materials: Other</td>
<td></td>
</tr>
</tbody>
</table>

Additional information (optional)  Most of the maps are folded; a small number are not. The total number of items includes about 50 atlases.

Quantities and Formats of Master Digital Files to be Created during the Project

Enter estimated quantities of uniquely described digital files to be created through digitization, as well as the relevant format(s) created.

If additional files are to be derived from those created in the digitization process for the purposes of backup, preservation and/or access, do not count these derivative files or formats in the totals entered; you may describe any derivative formats to be created and the purposes these will serve in the space provided for additional information.

Digital Files to be Created

<table>
<thead>
<tr>
<th>Quantity</th>
<th>5800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>TIFF format at 300 ppi resolution minimum, 400-600 where possible</td>
</tr>
</tbody>
</table>

Additional information (optional)
The maps to be digitized were purchased by the East Asian Library from the Mitsui clan in 1949. Founders of one of the largest conglomerates in Japan, the clan amassed a private library that incorporated portions of the libraries of other respected collectors and intellectuals, including the Motoori lineage of scholars descended from Motoori Norinaga (1730-1801). Mitsui and Motoori ex libris seals appear on virtually all of the maps in the collection. It is the largest collection of Japanese historical maps held by a research library in North America.

The earliest maps date from the late seventeenth century, the latest to the early twentieth century. Formats include atlases, hanging and hand scrolls, folding screens, and, predominantly, sheet maps. Media include woodblock, copperplate, and manuscript.

Map types range from maps that document historical events (such as the 1853 arrival of Commodore Matthew Perry’s “black ships”) and urban disasters (such as fire, a perennial problem in premodern Japan), to route maps that note tips for the traveler, heavily annotated pilgrims’ guides, and plans of imperial palaces providing information that, because highly confidential, was unpublishable before 1868.

Because of the Mitsui clan's vast business interests, the collection also includes hundreds of maps of the “three capitals,” Edo (Tokyo), Kyoto, and Osaka. Comparison of these maps published over successive years can serve to document urban development and even political change, since the residences of high-ranking officials, as well as their annual revenues, were frequently noted on the maps. Comparison of maps of larger areas—of Japan, for instance, or of...
the globe—serve to document advances in cartographic standards, aesthetic preferences, and Japan's understanding of the world beyond its islands.

**Geographic Scope**

Describe the range of geographic regions represented in the nominated collection(s).

**Geographic scope**

Regions represented in the maps include the world; Asia; China, Taiwan, Korea, and Sakhalin; Japan; the provinces and prefectures of Japan; Edo and Tokyo, Kyoto, and Osaka; other cities and sites of cultural or historical interest in Japan.

**Date range of materials to be digitized**

Enter the earliest and latest dates the original materials in the nominated collection(s) were created, in whole years. Dates should be formatted as YYYY BC/AD – YYYY BC/AD (e.g. 356 BC - 1542 AD).

**Date range of materials**

1687 AD - 1923 AD

**Collection level descriptions (if applicable)**

If applicable, identify and provide the URL(s) for any collection-level descriptions currently available online.

**Collection URL(s)**

<table>
<thead>
<tr>
<th>Collection name(s)</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese Historical Maps/East Asian Library--University of California, Berkeley</td>
<td><a href="http://www.davidrumsey.com/japan/">http://www.davidrumsey.com/japan/</a></td>
</tr>
</tbody>
</table>

**Description of Content: Confidential**

**List of collections to be digitized**

Your list must follow CLIR's format, found here.

List of Collections (.pdf, .xls, .xlsx) ListofCollections.xlsx
Current arrangement and description(s) of materials to be digitized

Provide a brief narrative that summarizes the physical arrangement and the level(s) of processing, cataloging, or other descriptive work that has previously been done for the nominated collection(s). Include the date(s) this descriptive work took place and the standard(s) and/or current format(s) of the records that were created.

Current Arrangement

At the time the East Asian Library acquired the Mitsui map collection, it chose to keep the maps together and in the original shelf order: maps of the world are followed by maps of Asia, Asian countries, Japan, Edo and Tokyo, Kyoto, Osaka, other cities of Japan, sites of cultural or historical interest, route maps.

With the aid of a National Endowment for the Humanities grant in 1985-86, all pre-1868 maps were fully cataloged following AACR2 and can now be found in Berkeley's online catalog, OskiCat, http://oskicat.berkeley.edu/, as well as in OCLC WorldCat. Since then, approximately 150 more recently published maps have been cataloged and added to OskiCat and OCLC Connexion. Descriptive information about individual maps and atlases to be added to the Japanese Historical Maps website will be extracted from the catalog records in OskiCat and WorldCat.

Current condition and housing of materials to be digitized and plans for their conservation and preservation

Describe the current condition and housing of the materials to be digitized, including the means through which this condition has been assessed. Identify the individual or individuals responsible for this assessment and approximately when the assessment took place. Describe the strategies to be employed for stabilization, conservation, and/or preservation of the materials, including the means through which this work will be supported and sustained long-term. Explain the environmental provisions made for the long-term management of the source materials and the strategy for responding to requests for access to them.

Current Condition

In 1985-86, the East Asian Library received a National Endowment for the Humanities grant that provided funds for conservation treatment of the maps acquired through the Mitsui acquisition in 1949. Individual maps were treated by the library systems Conservation Laboratory as needed; every item in the collection was housed in archival-quality document pamphlet binders (folding maps), phase boxes (larger maps and collections of maps), or clamshell boxes (maps mounted as hanging or hand scrolls). This collection is now kept in the East Asian Library's rare book room. Access to the room is highly restricted; the temperature- and humidity-controlled environment is monitored by the staff of the library system's Conservation Lab.
The samples demonstrate the breadth of the collection with respect to style, medium, and subject matter, while illustrating the type of information the maps provided contemporary users as well as the modern researcher: maps that locate regions only relatively; maps that display a high degree of cartographic sophistication and aesthetic sensibility; maps that favor a simpler, pictorial style, or multiple points of orientation, for particular purposes; maps that record information not intended for general dissemination; maps that document the increasing pace of urban and technological development in the cities and regions they depict.

Description of Samples

The samples demonstrate the breadth of the collection with respect to style, medium, and subject matter, while illustrating the type of information the maps provided contemporary users as well as the modern researcher: maps that locate regions only relatively; maps that display a high degree of cartographic sophistication and aesthetic sensibility; maps that favor a simpler, pictorial style, or multiple points of orientation, for particular purposes; maps that record information not intended for general dissemination; maps that document the increasing pace of urban and technological development in the cities and regions they depict.

Selected Permissions (if applicable)

Yes/No

Yes

Selected Permissions (if applicable)

Tick to confirm: Confirmed

Rights, Ethics, and Re-Use

All parties to this proposal understand that as a condition of acceptance of any Digitizing Hidden Special Collections and Archives award from CLIR, all recipient institutions and collaborating partner organizations will be required to sign and execute the program’s intellectual property agreement.

Tick to confirm: Confirmed

All parties to this proposal understand that as a condition of acceptance of any Digitizing Hidden Special Collections and Archives award from CLIR, all metadata created in the course of funded project activities must be dedicated to the public domain under a CC0 Creative Commons license. Exceptions may be made for culturally sensitive metadata.

Tick to confirm: Confirmed
All parties to this proposal understand that as a condition of acceptance of any *Digitizing Hidden Special Collections and Archives* award from CLIR, recipient institutions, including partnering institutions in cases of collaborative projects, must not claim additional rights or impose additional access fees or restrictions to the digital files created through the project, beyond those already required by law or existing agreements. Digital copies of materials that are in the public domain in their analog form must also be in the public domain. CLIR strongly encourages grant recipients to share digital copies as public domain resources and/or with Creative Commons licenses, as appropriate. Exceptions may be made for those materials in the public domain without the express wishes of local, traditional, and indigenous source communities.

Tick to confirm: Confirmed

**Applicants who tick any of the four boxes below should provide details clarifying their responses in the Rights, Ethics, and Re-Use Statement.**

Tick all that apply: Applicant and/or partner institutions plan to impose specific attribution requirements when digital copies created through this project are re-used by others.

**Rights, Ethics, and Re-Use statement (max. 3 pp, 2MB, .pdf format only)**

Upload a description (maximum 3 pages) that summarizes all known rights, embargoes, and access or legal restrictions applicable to the source materials to be digitized and describes how these rights, embargoes, or restrictions will be communicated to the public. Identify and explain any ethical considerations that affect circulation of, access to or re-use of the digital copies. Explain the basis upon which the proposed activities are justifiably legal and ethical, and the specific terms under which users of the collections will be able to access and re-use the digital copies created through the project. Explain and justify any institutional watermarks incorporated into copies made accessible to users and any fees charged for re-use. Describe any other measures to be taken to restrict or re-define access to or re-use of the digital copies in order to comply with the law or with applicable, pre-existing agreements or contracts or to uphold ethical and moral claims and rights of individuals or communities.

Statement (.pdf format only) Rights, ethics, & re-use.pdf

**Value and National Significance**

Describe the impact of the proposed project upon scholarship, and explain why digitization is the most appropriate means to maximize the value and significance of the materials to scholars and students.

Address the importance of the collections to teaching, research, and the creation of new knowledge.

Value and Significance Statement The maps contain content beyond topographical and administrative geography. Individually, maps of the political capital of Tokugawa Japan, Edo (Tokyo), may identify residences of high-ranking daimyo, noting clan crests and incomes; travelers’ maps may note local manufactures and products; maps of shrines or sites of historic interest, or maps dedicated to charting the extent of natural and man-made disasters, may relate fact or lore not found in
documentary sources. Collectively, the maps allow researchers to trace changes pertaining to a particular area or region. Comparison of maps of Edo published over years can highlight urban growth and development, or document a daimyo's political rise or fall as reflected in the location of his residence or the amount of his income.

The functions available on the Japanese Historical Maps website, http://www.davidrumsey.com/japan/, facilitate such comparison; they also allow researchers to overlay historical maps and satellite images. Recently, researchers associated with Ritsumeikan University, Kyoto, have used maps on the website (and others in the collection) to aid in a virtual reconstruction of Kyoto as it existed at various specific times between the seventeenth and twentieth centuries. While the project's appeal to scholars of cultural studies is clear, its primary purpose is to assist researchers in the fields of urban planning and disaster management.

Digitization of the maps and publication of the images on the web will make the maps accessible to scholars and students at any time and from anywhere. By eliminating the need to unfold and refold the maps in order to view them, digitization will also contribute enormously toward preservation of the maps, many of which are unique, or scarce, or in danger of losing content through repeated use.

Upload three letters of scholarly support for your project (max. 10MB, .pdf format only).

Letter #1
Letter #2
Letter #3

Project Context and Impact

List and describe all envisioned project deliverables. Explain the means through which each will be available to the public, and any applicable conditions or terms limiting their availability.

Describe all expected outcomes, how each will be made accessible to others, and under what conditions. Deliverables include the digital surrogates created during the project and related metadata, and they may also include aggregations of those files and metadata with related collections, catalog records, finding aids, authority files, description and digitization manuals, training materials, new or improved software tools, reference guides, or other outcomes of the proposed project. Address any relevant restrictions or licensing terms not already explained in the intellectual property statement.

Deliverables

The project will produce approximately 5,800 digital images of maps already fully cataloged in UC Berkeley's online public catalog, Oski, http://oskicat.berkeley.edu/search. Resolution will reach 600 ppi for
smaller maps, and 300 ppi for the largest maps. Surrogate images, along with metadata, will be delivered to David Rumsey, Cartography Associates, to be added to the Japanese Historical Maps website, http://www.davidrumsey.com/japan/. The site is accessible to the public without restriction. UC Berkeley Library Systems’ Library Applications and Publishing Group will work with California Digital Library to archive master images and metadata on Merritt, a repository service offered by CDL’s UC Curation Center. Images and metadata will also be stored on a UC Berkeley Library website not yet constructed.

Describe all outreach and marketing activities planned to maximize the impact of the project, for both scholarly and professional communities of interest.

Outreach and Marketing

Inquiries about and requests for publication of maps on the Japanese Historical Maps website come primarily from researchers in the fields of East Asian history and literature, art history, architecture and urban planning, geological sciences and cartography, anthropology and religious studies. The library regularly receives requests from documentary and feature film makers and the news media. The library also receives a surprising number of requests from the public at large, including, in the past, Japanese neighborhood associations, a California-based writer of children’s books, and a resident of Yokohama who wanted to trace the historical channel of Tokyo's Sumida River.

To communicate the addition of 1,500 maps to the Japanese Historical Maps website to our primary constituency, we will post announcements on the following sites and networks:

- H-Asia (a member of Humanities & Social Sciences Online), https://networks.h-net.org/h-asia
- David Rumsey Map Collection blog, http://www.davidrumsey.com/blog/categories/recent-additions

The library will also work with campus academic departments and the Center for Japanese Studies, under the Institute of East Asian Studies, to host an international symposium or workshop dedicated to the map collection.

To spread the news more broadly, to less specialized groups, nationally and internationally, we will rely on UC Berkeley’s Office of Communications and Public Affairs, and the library system’s Scholarly Communication Officer (to be hired).
Describe any collections related to the materials nominated for digitization and describe any plans for creating meaningful linkages to those collections.

Applicants should be as specific as possible in naming these related collections. Related collections may be held by the applicant or partner institutions, or by other institutions not participating directly in the project.

Related Collections

Partnering with David Rumsey and Cartography Associates, and the Art Research Center of Ritsumeikan University, Kyoto, the East Asian Library has already added a related collection to the Japanese Historical Maps website: approximately 150 sheets (some accompanied by their original wrappers) used to play a game called sugoroku, or "double sixes." While often compared to chutes and ladders, sugoroku display a wide variety of pictorial and narrative themes. They consequently hold a wealth of detail for the social and economic historian, geographer, anthropologist, and art historian. Ephemeral by nature and popular by design, sugoroku are relatively scarce outside Japan. It was for this reason that the Art Research Center offered to digitize the collection. The game sheets' resemblance to maps prompted David Rumsey to offer space on the Japanese Historical Maps website. The collection can be found at http://luna.davidrumsey.com:8380/luna/servlet/view/all/what/Game?sort=Pub_Date,Pub_List_No,Series_No.

The library holds another related collection, of roughly 200 Japanese souvenir prints dating from the late 1700s into the modern era. Printed by woodblock and copperplate, most of the prints offer bird's-eye views of sites frequented by travelers—temples and shrines, hot springs, celebrated mountains, scenic spots and sights like the Brocade Sash Bridge of Iwakuni. In fact, many of the prints were clearly intended to double as guides to the sites they represent, and many can be found in published surveys of early Japanese maps. And while the emphasis is on the pictorial, many include text concerning the site depicted; some even include railway timetables and distance tables. Once the collection has been cataloged, the library will make every effort to have it digitized and added to the Japanese Historical Maps website.

Describe any future scholarly initiatives that would be made possible by the completion of project work.

Future Initiatives

Scholars have already used Berkeley’s Japanese Historical Maps website, http://www.davidrumsey.com/japan/, and Japanese map collection to document a tsunami that struck the American northwest in the eighteenth century; to research disaster relief implemented in Kyoto in earlier eras; to study notions of empire, boundaries, and what Japan knew about the world outside the archipelago before the modern era; to trace the history of political elites and commoners’ neighborhoods; and to consider how maps influenced the dissemination of knowledge in Tokugawa Japan.

Once the entire collection has been digitized and mounted on the
website, research projects such as these will have the advantage of being able to tap into a broader range of source material, and with greater facility. The addition of manuscript maps, like those of Edo Castle, will have a potentially greater impact: they are not only scarce by nature but also unique, in the plans they present, as well as in the points of view that inform them.

Project Design

Describe prior research or experiences that have directly informed the design of the project, including any notable innovations or practices that will make the proposed approach particularly efficient, ground-breaking and/or cost-effective.

Working with David Rumsey and Cartography Associates, the East Asian Library has already mounted images of approximately 800 maps on the Japanese Historical Maps website, http://www.davidrumsey.com/japan/. Initially, maps to be mounted were selected by East Asian Library staff and digitized by Cartography Associates. EAL staff prepared lists of cataloging records to assist with the transfer of metadata.

The current proposal builds on the earlier model, with some differences. EAL staff will again select items for digitization and supply lists of catalog records to be converted to metadata. The actual work of digitization, however, will be done by Luna Imaging, in Los Angeles. Surrogate images and metadata will be transferred to Cartography Associates, as before; but Library Systems will also work with California Digital Library to archive master images and metadata in Merritt, a repository service offered by CDL’s UC Curation Center, and on a UC Berkeley Library website not yet created.

Once the collection is fully digitized and published on the web, the library will launch a public services and outreach effort.

Upload a project plan with timeline that includes all major project activities and deliverables, including a project timeline with deliverable deadlines (max. 3 pages, 2MB, .pdf format only).

The timeline for the project should be as explicit as possible, identifying major activities to be undertaken during each quarter of the proposed grant term and naming the parties who will participate in those activities.

Project Plan (.pdf format only)  Project plan.pdf
Technical Plan (max. 4 pages, 5MB, .pdf format only)

Upload a document detailing your proposed technical approach, including a description and justification for the proposed workflow that clearly identifies all tools, systems, standards, and technologies to be employed in the project.

Technical Approach (.pdf format only) Technical approach.pdf

Principal Investigators/Primary Staff

Briefly describe the relevant qualifications of up to three individuals who will contribute substantially to the project. The qualifications of all named Principal Investigators (PIs) must be included here. If the project includes fewer than three PIs, applicants may optionally use this space to describe other important staff members’ qualifications.

Upload resumes/CVs for these individuals below (.pdf, .doc, or .docx format only). In the event that a person holding major responsibility for the project has not yet been identified, applicants may upload a job description for that unidentified person’s role.

Staff Qualifications

Peter Zhou is eminently qualified to act as Principal Investigator for this project, in terms of both experience and understanding of the project’s objectives and technical requirements.
• In the early 2000s, he worked with David Rumsey to launch the Japanese Historical Maps website, http://www.davidrumsey.com/japan/ , which this application proposes to expand.
• Between 2009 and 2012, he partnered with the Institute of Korean Culture, Korea University, and Internet Archive to get the East Asian Library’s Asami Library of early Korean imprints and manuscripts digitized and published on the web, https://archive.org/details/starr.
• Since 2010, he has served as a consultant for the Dunhuang Academy, especially in the context of the Digital Dunhuang Project.
• In the 1990s, he directed the first Internet document delivery service for Chinese academic journal publications between research libraries in the US and the People’s Republic, a project funded by an IMLS grant.
• Since coming to UC Berkeley in 2000, he has spearheaded numerous print publication projects to make the East Asian Library’s collections more accessible and better known: catalogs of the library’s Chinese rare books and Chinese rubbings collections, and dozens of volumes of facsimile reprints of early imprints, manuscripts, and archival materials. These projects have inspired interest in the collections, especially abroad, and have drawn many scholars to Berkeley to examine its rare materials more closely.

The other significant member of the proposed project is David Rumsey, map collector, president of Cartography Associates, and web philanthropist. His vision and expertise led him to create a unique website for map viewing and use, http://www.davidrumsey.com/ ; his generosity allowed the East Asian Library’s Japanese map collection to become a part of it.

Resume #1 (.pdf, .doc,.docx) Peter Zhou c.v.2016.pdf
Staffing

How many staff will be assigned to this project? You may include students and volunteers in this list.

The library expects to have 8 staff working on the project. This does not include Cartography Associates staff, whose work will not be funded by the grant.

Part time:
PI (not budgeted)
General project manager (not budgeted)
Staff expert (not budgeted)
Library assistant
Project manager for digitization and web publishing (not budgeted)
Site designer
Web developer
Metadata analyst/programmer

Training

Describe any training necessary to undertake the project.

Sustainability

Digital Preservation and Discoverability Plan (max. 2 pages, 2 MB, .pdf format only)

Upload a digital preservation and discoverability plan explaining how project deliverables will be made secure and discoverable for the long term.

Preservation/Discoverability Plan (.pdf format only) Sustainability.pdf

Institutional Capacity

Upload a letter of support from the head administrator of the applicant institution.

Letter of inst. support:
Institutional Strengths

Describe the institutional strengths that justify the undertaking of the proposed project by the applicant (and any collaborating institutions). Strengths may include existing infrastructure, partnerships, professional associations, staff experience, access to local expertise (scholars, volunteers, students), financial or other resources, etc.

Institutional Strengths
• The map collection is already fully cataloged in UC Berkeley’s online catalog, Oski, which is freely accessible to the public at large.
• The collection is housed in compliance with conservation standards.
• The UC Berkeley Library has an in-house conservation lab that can treat maps in need of work; the lab is also available to consult on environment, and on the proper handling of maps for special projects, such as exhibiting or digitizing.
• The UC Berkeley Systems/Library Technologies office has its own digital imaging lab staffed by professionals. The project will move from one phase to the next seamlessly.
• As a language-specialty library, the East Asian Library has staff fully competent to manage the collection.
• With one of the largest East Asian studies programs in the US, UC Berkeley has faculty and students who use the maps in their work or have made them the focus of their research.
• Roughly 800 maps have already been digitized and mounted on the Japanese Historical Maps website, a portal on davidrumsey.com. The website has made the East Asian Library’s Japanese map collection more accessible to those already familiar with it, and it has brought it to the attention of those previously unfamiliar with it.
• The Japanese historical maps already online at http://www.davidrumsey.com/japan/ are heavily used. Requests for permission to publish images on the site have come from across the US, as well as from Japan and the EU. While the majority of requests come from academic researchers, the library has also receives requests from museums, news agencies, independent scholars, Japanese neighborhood associations, feature and documentary filmmakers, and a writer of children’s books.

Institutional Priorities

Describe the applicant's (and collaborating institutions') institutional priorities for digitization, digital collection development, maximizing access, and supporting scholarship, learning, and/or the public good.

Institutional Priorities
UC Berkeley’s East Asian Library has long made accessibility at multiple levels a priority: it has partnered with Korea University and Internet Archive to digitize its rare Korean materials; it has partnered with National Central Library (Taiwan) to digitize portions of its Chinese rare editions and manuscripts; it has worked with specialists outside the library to publish descriptive catalogs of its rare Chinese and Korean materials, and a short-title catalog of its Japanese rare books; it has assisted scholars from overseas who have compiled finding aids for its collections of Japanese manuscripts and sutras; it has published dozens of its early Chinese woodblocks and manuscripts in facsimile.
The UC Berkeley Library system has recently launched a new initiative to get as many of its collections as possible digitized and accessible on the web, with priority given to collections of unique and academically significant nature.

As a state institution, the UC Berkeley Library system generally makes its collections accessible to all interested researchers, whether or not formally affiliated with the University.

Prior Initiatives

Provide up to three examples of prior initiatives that demonstrate preparedness of the institution(s) to undertake project work.

Initiative #1

Japanese Historical Maps website (discussed above). The East Asian Library partnered with David Rumsey, who digitized the maps and provided the Library with a portal on his own website. The collection was ready for digitization thanks to an earlier NEH grant that covered cataloging, conservation treatment, and housing for the collection. The initial project put approximately one third of the collection on the web. See http://www.davidrumsey.com/japan/.

Initiative #2

Digitization of the East Asian Library’s Asami Collection of early Korean imprints and manuscripts. The project was carried out in partnership with the Institute of Korean Culture at Korea University, and Internet Archive. The initial goal of digitizing and mounting the Asami Collection (over 1,000 titles in almost 4,000 volumes) was realized, the project digitized and mounted other rare Korean material in the library’s collection. See https://archive.org/details/starr?and[]=creator%3A%22Asami+Collection+%28University+of+California%2C+Berkeley%29+CUY%22.

Initiative #3

Chinese rubbings in the C. V. Starr East Asian Library University of California, Berkeley/Bokelai Jiazhou daxue dongya tushuguan cang beitie (Shanghai: Shanghai Guji Chubanshe, 2008). The Library’s Chinese rubbings collection was originally cataloged thanks to a US Department of Education Title IIC grant. The grant also covered conservation treatment and housing for the collection. Years later, the East Asian Library invited epigrapher Zhao Liguang to revise the catalog in preparation for publication by Shanghai Classics. East Asian Library staff participated in every stage of the project.

Building capacity

Describe how this project contributes to building local institutional capacity, as well as the professional development of all staff involved.

Development and capacity

The Japanese Historical Maps website was developed through the generosity of David Rumsey. With the aid of CLIR, the East Asian Library hopes to expand that sight for the benefit of the scholarly community and the public at large. It will also work with Library Systems to create a mirror site, where the images can be archived in virtual proximity to other UC Berkeley collections.
Funding

Budget Documents

CLIR requires all applicants to complete and upload two budget documents:

- **Budget Narrative** (click here for detailed information about the Budget Narrative). *No page limit, max. 2MB, .pdf format only.*
- **Budget Detail** (must be submitted using CLIR's Excel form; click here for detailed information about the Budget Detail). *Max. 2MB, .xls or .xlsx format only.*

<table>
<thead>
<tr>
<th>Budget Narrative (.pdf format only)</th>
<th>Budget narrative.pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Detail (.xls or .xlsx format only)</td>
<td>applicantbudgetform.xls</td>
</tr>
</tbody>
</table>

Subcontracts *(No page limit, max. 5MB, .pdf format only)*

Provide below any subcontracts for work associated with this project. Quotes from vendors may be provided in lieu of more formal contract documents as necessary, as long as the relevant work to be conducted and costs incurred are clearly delineated.

If your project will involve multiple subcontracts, combine them into one PDF document for upload into the system.

<table>
<thead>
<tr>
<th>Subcontract(s)</th>
<th>Luna &amp;amp;amp;amp;amp;amp;amp;amp;amp;amp;amp; Atthowe.pdf</th>
</tr>
</thead>
</table>

Funding Justification

Explain why this project is uniquely suited to this funding program and how it reflects the program’s core values. What prior efforts, if any, has the applicant made to identify other sources of funding for this project?

<table>
<thead>
<tr>
<th>Justification</th>
<th>The scholarly value of the map collection has been demonstrated in the work and publications of researchers in diverse disciplines—such as Japanese historian Mary Elizabeth Berry (UC Berkeley) in Japanese history, Brian Atwater (USGS and University of Washington) in geology, and scholar of digital humanities Akihiro Tsukamoto (Tokushima University), in digital humanities.*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The East Asian Library has demonstrated its commitment to sharing its resources with scholars, students, and interested members of the public by partnering with organizations known for their advocacy of open access, like Internet Archive and David Rumsey and Cartography Associates. The library has been hampered in putting the entire collection on the web only by a lack of funding.</td>
</tr>
<tr>
<td></td>
<td>For examples of their work incorporating the maps, see Chizu to ezu no seiji bunkashi (Maps and the history of Japanese political culture), ed. Berry (Tokyo: Tokyo University Press, 2001), and</td>
</tr>
</tbody>
</table>

*
Applicant Information

Applicant Institution Address

In the event this proposal is approved for funding, payment will be made to the applicant institution as named at the beginning of this application form, and will be mailed to the address listed here.

Address

Proof of Nonprofit Status

Nonprofit Status (Max. 2MB, .pdf format only) Proofnonprofit.pdf

Board/Trustee List (not required for colleges or universities; required for all other applicants)

Upload a current list of board or trustee members. The list must be on the applicant institution’s letterhead.

Board/Trustee List (Max. 2MB, .pdf format only)

Contact Information for Principal Investigator(s)

Provide the contact information for the proposed project's primary Principal Investigator(s) (PIs). The PI(s) will take direct responsibility for completion of the project, should funds be awarded. He or she must be significantly involved with the project’s direction and execution and will be responsible for submitting required narrative and financial reports to CLIR.

Note: Applicants may propose up to three PIs for their project. All applicants must assign at least one PI. Information for co-PIs should be included below as applicable.

PI #1: Mr./Ms./Dr. Dr.
PI #1: First Name Peter
PI #1: Last Name Zhou
PI #1: Title Director, East Asian Library, & Asst University Librarian
PI #1: Institution University of California, Berkeley
PI #1: Email
PI #1: Address
PI #1: City
Application Contact

If CLIR’s point of contact during the application period should be someone other than the proposed Principal Investigator(s) (e.g. a grants administrator), enter the name and contact information for the relevant individual here.

Application Contact: Mr./Ms./Dr.  Mr.
Application Contact: First Name  Kristofferson
Application Contact: Last Name  Leonardo
<table>
<thead>
<tr>
<th>Application Contact: Title</th>
<th>Financial Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Contact: Institution</td>
<td>University of California, Berkeley</td>
</tr>
<tr>
<td>Application Contact: Email</td>
<td>[redacted]</td>
</tr>
<tr>
<td>Application Contact: Address</td>
<td>[redacted]</td>
</tr>
<tr>
<td>Application Contact: City</td>
<td>[redacted]</td>
</tr>
<tr>
<td>Application Contact: State/Province</td>
<td>[redacted]</td>
</tr>
<tr>
<td>Application Contact: Zip/Postal Code</td>
<td>[redacted]</td>
</tr>
<tr>
<td>Application Contact: Country</td>
<td>[redacted]</td>
</tr>
</tbody>
</table>

To view your complete application, including the contents of the files you have uploaded, [click here.](#)
(Remember that this view-only portal has a separate password provided to you by CLIR in the email notifying you of your advancement to the second round. If you've misplaced that, just contact us at [hiddencollections@clir.org.](mailto:hiddencollections@clir.org).)
## Digitizing Hidden Collections Proposal

### List of Collections to be Digitized

<table>
<thead>
<tr>
<th>Holding Institution</th>
<th>Collection Title</th>
<th>Collection Size</th>
<th>Collection Material Formats (e.g. manuscripts, photographs, etc.)</th>
<th>Reusage rights (note all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asian Library, University of California, Berkeley</td>
<td>Japanese map collection</td>
<td>2300 items</td>
<td>sheet maps (folded &amp; unfolded), atlases, folding screens, hand scrolls &amp; hanging scrolls</td>
<td>Free, no watermarks (FNW), Free, onsite only (FO), For a fee (FEE)</td>
</tr>
</tbody>
</table>

Free, no watermarks (FNW) Free, with watermarks (FWW) Free, onsite only (FO) For a fee (FEE)
Map of Japan. This map gives equal weight to textual and graphic elements. Provinces, whose names appear in black cartouches, are located only relatively, their borders rendered with little effort at accuracy. Text within the boundaries identifies local daimyo, the amount of rice produced within the domains, and so on. The table at the foot of the map provides information on major routes, temples, shrines, and administrative units in the empire.

Map of Hokkaido, Sakhalin, and the Kuril Islands. The beauty of this map is due to the contribution of ukiyo-e artist Sadahide. The appearance of longitudes and latitudes, the carefully depicted coastlines, roads, and sea routes, and the wealth of geographical detail represent advancements in Japanese cartography; they also reflect the Japanese shogunate’s heightened concern that it might have to defend the islands against Russian expansionism.
3) *Kōyasan sōezu*. Woodblock. [Koyasan]: Yamamoto Heiroku, 1800s. 65 x 37 cm (open). Oriented with north to the left.

Map of Mount Kōya (a Buddhist pilgrimage site south of Osaka). Maps of temples and shrines form a distinctive subgenre of Japanese maps. Often distributed free of charge, frequently underwritten by religious devotees, they uniformly ignore cartographic accuracy in favor of a pictorial approach to their subject, thus serving as both guide to the pilgrim and souvenir to the traveler returned home.

Map of Mount Fuji. Although described as depicting a bird’s-eye view of the mountain, this map actually employs five different perspectives. In the center is the crater of Mount Fuji, filled with water, viewed from above. Sights to the north, south, east, and west are depicted as if viewed from each of those directions, allowing the artist to provide information about the pilgrimage site from all aspects while keeping Fuji the focus of attention.

Plan of Edo Castle. The castle appears only as an undefined area on maps published before 1868. Access to it was restricted, dissemination of information about it prohibited—this map would have been unpublishable when it was produced. Just years after it was, Honmaru (at the center of this map), the innermost portion of the castle containing the shogun’s residence, was destroyed by fire and never rebuilt.

Map of Reiganjima (Shinkawa). As Edo (Tokyo) grew, single-sheet maps proved inadequate for many practical purposes. The first series of sectioned plans of the city appeared in 1755; this map belongs to the second series produced, complete in over thirty sheets. This section identifies residences, businesses, and so on; it also portrays the prevalence of canals, once vital to Edo’s water supply and transportation, and now paved over.

Route map of Japan (detail). This diagrammatic map is intended for the traveler rather than the geographer. In earlier eras, maps of this sort guided the traveler along major routes, from one post station to the next. This map, published ten years after the introduction of the railroad in Japan, includes rail stations, as well as timetables and vignettes concerning local products and manufactures.
Rights, Ethics, and Re-Use Statement

No Copyright or Use/Re-use Restrictions
To the best of the East Asian Library’s knowledge, the maps to be digitized are in the public domain and were published prior to 1923. The Regents of the University of California do not assert any copyright claims over the maps to be digitized, and users do not need to seek EAL’s permission to make use of the digital copies. Digitized copies will not contain watermarks.

The East Asian Library further intends to add the following or similar language on the project website promoting users’ right to make open and unrestricted use or re-use of the images:

The East Asian Library is committed to supporting research, teaching, and scholarship, and encourages open use of the digital files from the Japanese Historical Maps collection without restriction. The Library does not claim to hold copyright in these Japanese Historical Maps and does not require users to seek permission to publish or otherwise distribute materials deemed to be in the public domain. EAL suggests that citations to these maps contain the following information: [identification of the item], C. V. Starr East Asian Library, University of California, Berkeley.

Such language currently appears on the existing website for this project at http://www.davidrumsey.com/japan/about.html.

Ethics and Community Sensitivities
The East Asian Library does not anticipate any moral or ethical concerns about the maps’ digitization. The maps contain no sensitive information. The only personally identifiable indicia are collectors’ seals, which attest to the maps’ provenance, authenticity, historical value, and cultural significance. Rather than portray personal data, the maps bring visibility to historical cities, towns, landscapes, and geographical regions. The maps are being digitized without content modification and without commentary on, or judgment of, the cartographers’ renderings.
Project Plan

Before the digitization project formally begins, East Asian Library staff will select and prioritize maps to be digitized, and pull existing cataloging records that will serve as metadata. It will also finalize digitization and shipping schedules with Luna Imaging and Atthowe Fine Art Services. The timeline below refers only to digitization and web publishing.

**Year one, first quarter**
- Send first of four shipments to Luna, with hard drives for transfer of image files.

**Year one, second quarter**
- Send second of four shipments to Luna.
- On receipt of Luna files, upload files to Library servers and perform automated quality control.
- Submit verified digital masters to digital storage.
- Return of first shipment.

**Year one, third quarter**
- Send third of four shipments to Luna.
- On receipt of Luna files, upload files to Library servers and perform automated quality control.
- Submit verified digital masters to digital storage.
- Deliver images to David Rumsey for mounting on the Japanese Historical Maps website.
- Return of second shipment.

**Year one, fourth quarter**
- Send fourth and final shipment to Luna.
- On receipt of Luna files, upload files to Library servers and perform automated quality control.
- Submit verified digital masters to digital storage.
- Deliver images to David Rumsey for mounting on the Japanese Historical Maps website.
- Return of third shipment.
- Recruit limited-term staff to help with compilation and transfer of metadata.
- Finalize specifications for digital collections website.

**Year two, first quarter**
- On receipt of Luna files, upload files to Library servers and perform automated quality control.
- Submit verified digital masters to digital storage.
- Deliver images to David Rumsey for mounting on the Japanese Historical Maps website.
- Return of fourth and final shipment.

**Year two, second quarter**
- Start development of digital collections website.
- Gather MARC records for collection.

**Year two, third quarter**
• Upload files to geoserver.
• Create landing pages for maps.

Year two, fourth quarter
• Create electronic MARC records and load to Library opac, OskiCat
• Release digital collections website.
• Submit files and metadata to preservation repository Merritt.
Technical Plan

Digitization of the East Asian Library’s Japanese maps will be done by vendor Luna Imaging, in Los Angeles. Luna’s quote has been uploaded under “Subcontracts,” in the section Funding. Technical standards specified in the original proposal will be encapsulated in the Library’s contract with Luna.

**Digitization Overview**
- Luna will digitize the maps using planetary scanners.
- Resolution will reach up to 600 ppi for the smaller maps, and 300 ppi for the largest maps.
- Large maps will be scanned in sections, which will be stitched together electronically.
- Image files will be transferred to the East Asian Library on external hard drives.

**Quality Control**
- Luna will be expected to perform quality control.
- The Library will perform automated quality control.

**Handling**
- Items are handled carefully and as little as possible.

**Image Manipulation**
- Global brightness, contrast, and color editing to content standards.
- Crop to paper edge.

**File Formats**
- TIFFs for original (master) files

**File Naming**
- File names will be assigned from digital image identifiers contained in an Excel spreadsheet, submitted to Luna by the East Asian Library.

**Digital Preservation**
- The Library will be responsible for insuring digital preservation of all files through verification and submission to CDL’s Merritt repository service.

The site employs Luna Imaging’s Insight client/server and browser software. The hosted service includes reliable web access to collections, software updates and upgraders, servers, databases, and back-up and recovery.

Luna Imaging uses Google Compute Engine for all its hosted environments. GCE is a reliable infrastructure that scales easily and offers fast, consistent performance across the range of computing, storage, and application services. It makes use of global networking that speeds up the delivery of Luna content. Google also has one of the largest and most advanced computer networks in operation and have established a reputation for their cloud services.

Digital files will also be stored on Berkeley library servers initially. All files will be backed up to tape, which will be retained for six months, with copies sent out of state. Bit checking is run continuously on library servers to ensure continued integrity of the files. The TIFFs will also be submitted to the California Digital Library’s Merritt repository, https://merritt.cdlib.org/. Merritt provides a trustworthy and dependable environment for long-term management of digital files. When transferring files to different hardware, whether library servers or Merritt, checksums are validated to ensure that image files have transferred successfully.

The MARC records that already exist for the print maps will be manipulated into MARC records for the electronic versions. These MARC records will be loaded into Berkeley’s online catalog, OskiCat, and submitted to OCLC. For an example of how these will display, see http://oskicat.berkeley.edu/record=b21348876.

To provide easy access to the entire collection, the maps will become part of the UC Berkeley Digital Collection website, which is currently being built. When completed, the site will allow users to zoom and pan using image technology like OpenSeadragon, https://openseadragon.github.io/. The images will also be harvested by California Digital Library, to appear in Calisphere, https://calisphere.org/, and the Digital Public Library of America, http://dp.la/.