

Abstract

DC Public Library (DCPL), with the Public Library Association, requests \$245,000 for a two-year project to embed digital preservation tools and education in public libraries across the United States, following the model of the DCPL Memory Lab. Seven libraries will receive training, mentoring and financial support to create digitization stations and curriculum to build public knowledge and skills around the complex and paralyzing concepts of personal digital archiving.

Today we document our lives digitally. Communities risk massive loss of vernacular history and culture, unless the public is equipped to sustain their digital memories. Libraries and archives can offer the public knowledge and tools to document and preserve their own histories.

DCPL created the Memory Lab as a National Digital Stewardship Residency (NDSR) project to meet public demand for access to digitization equipment. The Memory Lab became much more, through a holistic approach to public digital preservation education. It provides access to digitization equipment and software, resources for best practice, and classes around personal digital archiving. The Memory Lab contributes to DCPL's place in its community as a technology access and education hub, by empowering citizens to migrate and manage their digital archives.

The Memory Lab was built to be a national model. Through open documentation, including guides for individuals and institutions to create their own labs, it is a proven resource and inspiration to libraries nationwide. Librarians across the country have asked DCPL how they can build their own Memory Labs, but many feel they lack the expertise or financial support to get started. Leveraging the momentum and interest created by the NDSR project, we propose strategic and coordinated distribution of Memory Labs to public libraries across the country.

DCPL will work with the Public Library Association (PLA) to create and promote a call for proposals from public libraries. Libraries will be selected based on their interest and commitment, and diversity of geographic location, library system size, and population served. At the end of the project, evaluation of this varied group of participants will allow us to study the Memory Lab model across different library systems and determine how to adapt to differing community needs. To apply, libraries will create a statement of interest, designate two staff members to dedicate time to the project, and provide a brief sustainability plan. These staff will gain practical knowledge in digitization and the digital object lifecycle, as well as guidance on building digital preservation workstations, public classes, and outreach strategies.

Staff members from the selected libraries will travel to D.C. to learn from experienced Memory Lab staff and digital preservation and personal digital archiving experts. The cohort will meet virtually with guest speakers and webinars. The cohort and project team will act as a support network and to share questions, successes, challenges, and best practices.

A project manager will coordinate the project. This includes overseeing project outreach and publicity; selecting libraries; arranging virtual and in-person trainings and meetings; evaluation and iteration of Memory Lab resources; timeline management; and presentation and publication of findings.

PLA will work with DCPL to create and promote the call for proposals. DCPL and PLA will build an advisory board for participant evaluation and selection, project guidance and promotion.

Project Narrative

The Memory Lab Network: National distribution of the public library Memory Lab model

I. NATIONAL NEED

The Need for Personal Digital Archiving Tools and Education

Today we document our lives digitally. Communities risk massive loss of vernacular history and culture, unless the public is equipped with knowledge and tools to sustain their digital records. Many libraries, archives and museums offer workshops for the public on physical preservation of photo albums, family letters, and scrapbooks. However, few are currently teaching the public how to care for digital memories.

What we call digital memories are known in the archival field as “personal digital archives,” defined by Gabriela Redwine in a Digital Preservation Coalition report as “a formal term for the ‘digital stuff’ we create and save every day. These digital files can be as banal as a text message confirming a meeting time, or as significant as a digital video of a baby’s first steps.” Redwine goes on to explain why archivists should care about personal digital archives:

Personal digital archives matter because individual lives matter. The records of people’s lives are intrinsically important and worth preserving. If individuals, archivists, librarians, curators, and others do not do more to safeguard personal digital archives, historical documentation of how people lived in the late 20th and early 21st centuries will be lost... Regardless of any perceived historical or cultural value, personal digital archives represent an important chance for individuals to give voice to their own perspectives, to make sure the cultural record reflects their lived experiences, and to share their stories with other people if they choose.

As Redwine asserts, personal digital archives are important not just because of their potential value to future scholars, but because they are important to the people who created them. Digital records are necessary for the activities of daily life, including work, healthcare, and finance, as well as the family, social, cultural, and creative identities of the people who create or inherit them.

Despite the vast importance of digital materials, they face many threats to survival, including format and file obsolescence, carrier destruction or degradation, and loss of meaning or context. In the age of digital files stored and created within apps and in the cloud, Catherine Marshall identified user behavior as the most pernicious threat to personal archiving of digital material: “The study participants had lost their online content largely by losing track of it, by not understanding the terms and conditions of the storage they used, and by storing it in proximity to illegally stored stuff, but not by what we generally think of as the most immediate path to loss: hardware failure”.

Benign neglect, or the idea of hoping for the best but not actively working to preserve personal records, has many causes: the scale of digital records; the inability to decide what’s worth saving; money; time; and, above all, motivation. So what will make someone archive? Kirk and Sellen suggest defining the self, framing the family, fulfilling duty, connecting with the past, honoring those we care about, and forgetting as key motivations for archiving, and Cushing points to periods of life transition as a time to find archiving valuable. Noah Lenstra witnessed during his work with Illinois Public Library patrons that the ability to connect with others’ lives and histories was a primary motivator for archiving, citing the popularity of sharing sites such as Facebook.

Many of the physical materials that constitute personal histories are also at great risk of loss. In recent years, it has been accepted that archivists have an approximate 15- to 20-year window of opportunity

to digitally preserve legacy audio and video recordings on magnetic tape. This is due to the rate of degradation and the obsolescence of the equipment needed for their playback and digital capture. Photographs and film, particularly color slides and negatives and moving image film formats, will also fade and degrade over time. Digitization can preserve images from these materials before advanced deterioration, though digital surrogates will also require care to ensure their future survival.

So how do we foster more responsible care of our personal digital materials? First, the public must believe they are important, which can be aided by engaging programming and outreach. Then they must know about the threats to digital preservation and how to avoid them. Finally, they must have access to tools that allow them to safeguard their digital materials.

Best practices for digital preservation are well established in archival practice, but guidelines and documentation are generally written for a professional audience. Personal digital archiving resources for a lay audience, from organizations such as the Library of Congress, WITNESS, Culture in Transit, POWRR, and Indie Preserves, represent a rich array of engaging and accessible efforts, but their distribution across the web makes them difficult to find.

The two major sources for information specific to personal digital archiving are the annual Personal Digital Archiving Conference and the Library of Congress “Personal Archiving” website. The annual conference is not organized or overseen by a formal association. The Library of Congress site remains groundbreaking and useful, but is no longer being actively maintained or updated, and thus does not address cloud storage or social media, recent personal digital archiving game-changers.

In addition to digital preservation education, the public needs access to tools that will allow them to create metadata and manage issues of deterioration, equipment and media obsolescence, and file format migration. Many “digitization as a service” businesses have emerged in recent years. However, these companies do not necessarily provide their customers with any guidance for continuing care of their newly reformatted digital memories. Additionally, digital preservation must be accessible to all, not just those who can afford it.

Extensive research before creating of the DC Public Library (DCPL) Memory Lab yielded only six examples of free digital transfer labs or programs for the public: Vancouver Public Library's Inspiration Lab; Kalamazoo Public Library's The Hub; Brooklyn Public Library's Info Commons; Indiana University at Bloomington's Scholars Commons Digitization Lab; XFR Collective, a nonprofit in New York City that provides low-cost digitization for artists, activists, and other groups; and Culture-in-Transit, “a partnership between the Metropolitan New York Library Council (METRO), the Brooklyn Public Library, and Queens Library to bring mobile scanning equipment to smaller libraries, archives, museums, and the communities they serve.” Only two programs, XFR Collective and Culture-in-Transit, included care for the lifespan of the created digital files as a part of their service missions.

Many public digitization programs such as community scanning days are focused on archives' collection building rather than digital preservation for its own sake. However, as Redwine said, research value is not the only possible value of personal digital archives. Digital preservation of personal digital materials should not be limited by institutional collecting scope.

The Memory Lab Model

The DC Public Library Memory Lab was created as a local response to the national needs outlined above, and intended to be a replicable national model. The Memory Lab, a partnership between DCPL Special Collections and the Labs at DCPL (digital literacy-focused maker spaces), consists of three key

components: a digitization lab in the central branch's public computing space, the Digital Commons; digital preservation class curricula for the public; and a website with equipment and workflows instructions, and resources for long-term storage and preservation of personal analog and digital archival materials. The creation of the Memory Lab and its programs were managed by a National Digital Stewardship Resident (NDSR), funded by a grant from the Institute of Museum and Library Services (IMLS) administered by the Library of Congress.

The digitization lab was built for the most common personal records formats (including photographs, negatives, audio cassettes, and various magnetic video tape) and to be a "do-it-yourself" space. Existing staff of the DCPL Labs manage scheduling and troubleshooting and trained with the NDSR resident to take over daily operations after the residency ended. The digitization lab meets patrons' immediate needs to transfer home movies, audio recordings, and photographs into easily shared, viewed, and mixed digital files. It is also an entry point to raise awareness and educate patrons on personal archiving, and the importance of preserving records born digital on personal computers, electronic media, and the web. As outlined above, motivating the public is a central challenge to digital preservation outreach. Though many documents and photographs do not need to be digitized for preservation purposes, they are some of the most meaningful memory objects in personal archives. Scanning, often for sharing or using these materials in creative projects, is one of the lab's most popular services and can be used as an entry point for learning about preserving other digital files.

Thorough documentation was key to creating a "do-it-yourself" digitization lab. With detailed online workflow documentation, users could transfer their materials with minimal help. Lab workflows embed digital preservation practices such as embedded metadata, unique file naming, and sustainable file formats. To encourage continued personal archival stewardship, the website also aggregated guides and readings on digital and physical preservation from across the web. A section on how to "Build your own Memory Lab" was also added to help organizations, individuals, or other libraries build their own in-house transfer workflow.

The resident developed lesson plans for a trio of core classes -- Digital Preservation 101, Digital Preservation and Social Media, and Digital Estate Planning -- distributed throughout the library system through a professional development program. Fifty DCPL employees participated in a personal archiving professional development program, where they learned to run similarly themed workshops. They also learned how to help patrons evaluate popular file types, software, cloud platforms and devices with preservation in mind. Because social media is often a default storage medium, a class was developed to give attendees a rubric to measure if a new platform is preservation-friendly. Because many retirees are interested in archiving projects, Digital Estate Planning was developed to cater to these users.

The Memory Lab also made educational partnerships a priority and partnered with senior centers, other cultural institutions, and arts organizations to reach a wider audience with the standard workshops and more creative digital preservation events, including artist workshops and a Home Movie Day.

DCPL Memory Lab events show the public demand for classes and workshops on digital preservation topics, not just published resources. Webinars and lesson plans for librarians and archivists wanting to teach personal archive classes have been published by the Library of Congress, the American Library Association, the Society of Georgia Archivists, the Atlanta Chapter of ARMA International, and the Georgia Library Association. Personal archive programming can also be found in public libraries in San Francisco and Madison, WI, and by groups such as the Los Angeles Archivists Collective. Interviews with

teachers of these classes revealed that attendees often have mixed digital literacies, found tool demonstrations valuable, and came with different motivations -- to save their archive, delete it out of privacy concerns, or learn how to teach others. One librarian said he even had requests for home visits.

In the long term, the Memory Lab's distribution of digital preservation education, combined with increased availability of what otherwise would be transfer services at cost, is intended to create a trickle-up effect on the condition of the personal collections that may someday be accessioned by archives such as DCPL's own Special Collections. This could help ensure a diverse cross-section of the District's history is saved for future generations.

DC Public Library's commitment to patron privacy is complementary to this interest. Though the library encourages customers to share, digital files created in the Lab do not automatically go to the archive. A hands-off, advisory-only approach creates a culture of privacy and avoids inundating staff with material outside the library's collecting scope. Allowing communities, especially those whose histories have been ignored, exploited, or denied by traditional repositories to archive their histories themselves shifts the relationship between archivists and the community from protectors to enablers of cultural stewardship.

A personal digital archiving lab presented an opportunity to extend the expertise offered to the public by Special Collections and to further the Labs' commitment to connecting D.C. residents to technology and lifelong learning. Users don't just walk away with migrated data, they learn how to transfer media and take care of their digital files, supporting the library's efforts to democratize digital literacy in the District.

The Memory Lab began as a project to meet public demand for access to digitization equipment, but ended up being much more through a holistic approach to public digital preservation education. Since the lab opened in February 2016, it has been overwhelmingly successful, with lab appointments often booked 45 days in advance. From February through December 2016, nearly 500 sessions have been booked -- more than 1,200 hours of digitization of D.C.-area residents' photos, slides, videos, audio cassettes and other personally valuable materials. More than 160 patrons also attended drop-in lab orientations. The first year of DCPL Memory Lab operations show such overwhelming need and demand for its services, that the library plans to create additional Memory Labs in branch libraries in the near future. The Memory Lab contributes to DCPL's place in its community as a hub for technology access and education, by empowering citizens to migrate and manage their own digital archives.

The Need for Distribution of the Memory Lab Model

Leveraging the momentum and interest created by the DCPL Memory Lab project, we propose strategic and coordinated distribution of Memory Labs to public libraries across the country. We will distribute access to digital preservation tools and education and foster continued evaluation and reiteration of the Memory Lab model, adjusting to the challenges and needs of diverse public library communities and centralizing information to help meet these challenges.

Through open documentation, including guides for individuals and institutions to create their own labs, the Memory Lab website is a proven resource and inspiration to libraries nationwide. Librarians across the country have contacted DCPL for advice on building their own Memory Labs, but many feel they lack the expertise or financial support to get started. The most common questions sought information on equipment, budget, and scalability. While the website is helpful, greater outreach, funding, and in-depth education is needed to ensure the spread of the Memory Lab model. Research interviews with existing transfer program managers revealed that their labs were also highly valued and very

popular. DCPL Memory Lab staff share information about the lab through presentations, publications, and correspondence with other librarians as much as possible, but these efforts and the Lab website can only share the DCPL experience, that of one major metropolitan library system.

Public personal digital preservation programs distributed throughout the United States and based on the successful DC Public Memory Lab Model will meet the national need for digital preservation tools and education. DCPL believes that public libraries are poised to meet the need for public access to digital preservation tools and education because they are dedicated community spaces, have a history of public digital literacy education, and a commitment to accessibility. A National Leadership Grant creating Memory Labs in diverse public libraries across the country will allow study and analysis of the Memory Lab model in different communities and refinement to meet new and different challenges.

II. PROJECT DESIGN

Summary

DC Public Library (DCPL), in partnership with the Public Library Association (PLA), requests \$249,882 for a two-year project to embed digital preservation tools and education in public libraries across the United States, following the model of the DCPL Memory Lab. Seven libraries will be selected to participate in the project to build their own Memory Lab programs based on an application process. The seven Memory Lab Network sites will receive training, mentoring, and financial support to create digitization stations and curriculum to build public knowledge and skills around the complex and paralyzing problems of personal digital archiving. The experience and data gathered at these seven Memory Labs will be used to refine and inform current and future models. The resulting white paper, project guides and educational products and existing personal digital archiving resources will be centralized in a project website.

The project is divided into three phases: planning and training, building the Memory Labs, and evaluation and sharing.

Phase 1: Planning and Training (9 months)

As soon as funding of the project is announced, DC Public Library will begin the hiring process for a Project Manager to begin work the day grant funding begins. The Project Manager will be supervised by DCPL Digital Curation Librarian, who supervised the NDSR project to build the DCPL Memory Lab.

The Project Manager will embed with Labs staff to gain hands-on experience in all three aspects of the Memory Lab model: the digitization lab, resources, and classes. This DCPL Memory Labs education will be overseen by the DCPL Labs Manager, who will also serve the project as a subject expert in this area. The Project Manager will use this experience to create the training curricula, following the areas of focus outlined below; securing training spaces and teaching partners for boot camp and virtual trainings; building a website for centralization of digital preservation resources, including project training materials and deliverables; and developing a project plan template for the individual organizations to follow.

The project manager will also convene and lead a seven-member advisory board, recruited before the start of project funding. The seven-member advisory board, convened with input from PLA, will be responsible for advising on the creation and distribution of the call for applications from libraries around the country, as well as developing the criteria for application and selection of the seven Memory Lab sites. Additionally, the advisory board will oversee the evaluation of the Memory Lab model and implementation at the end of the grant. The Project Manager will sit on the board, along

with: a DC Public Library representative, a personal digital archiving expert, a national library staff member in digital preservation and/or public education, a national library association board member, and a digital preservation expert.

DC Public Library will work closely with PLA to advertise and promote the project opportunity widely. This is pivotal, as a varied and diverse group of participating libraries will be crucial in determining how the Memory Lab model works across public library systems of all kinds, and how it needs to be adapted to community needs. The project will be promoted extensively across the PLA website, membership, and committees, as well as other organizations, including the Association for Rural and Small Libraries and the Association of Tribal Archives, Libraries, and Museums. The Project Manager and advisory board will reach out to libraries and librarians using professional listservs, blogs, and publications and in-person outreach at conferences and virtually through informational webinars. Additionally, the project manager will host informational webinars for potential applicants by providing feedback on application requirements, selection criteria, and how to get institutional buy-in. We hope to reach and include major metropolitan library systems, libraries serving mid-size communities, rural libraries, and tribal libraries.

The Advisory Board will craft a selection mission statement, which will be provided to applicants and will guide the selection process. Libraries will be selected based on this statement and evaluation of their application packet. Though it will be the board's responsibility to define the selection criteria, we hope that the mission statement and a broad and diverse pool of applicants will lead to the selection of libraries that serve communities diverse in geography, size, economic opportunity, age, and ethnicity.

To apply, libraries will have to submit demographic data, a statement of interest, and a brief sustainability plan; designate two ambassadors, staff members who can dedicate a combined minimum of 10 hours' time weekly to the project; and identify a physical space for the lab (permanent or mobile). The sustainability plan will have to address how they will continue to staff the Memory Lab and its programs, cover overhead costs such as equipment maintenance and replacement, and outreach. Libraries will also have to submit a letter of support from a local or national organization that has digital preservation expertise and will agree to mentor and partner with them on one event during the project. Selections will be made by the advisory board and announced in the sixth month of the project.

At the beginning of month nine, the two ambassadors from the selected libraries will travel to Washington, D.C. for five days of in-depth digital preservation boot camp from experienced Memory Lab staff and experts in preservation and personal digital archiving. The ambassadors will gain practical knowledge in digitization and the digital object lifecycle, as well as guidance on building digital preservation workstations, classes, and outreach strategies for the public. The trainings will include four areas of focus:

The Memory Lab (half day) - Presentations and tours on the history and operations of the DC Public Library Memory Lab, broken down by its three components: digitization lab, online resources, and classes. This background will frame the rest of the training through the lens of the Memory Lab model.

Preservation (2 days) - Digital preservation training will address the core areas of digital preservation practice identified by the Library of Congress' Digital Preservation Education and Outreach (DPOE) training, which breaks down digital preservation into six topics: identify, select, store, protect, manage, and provide access. In addition to the DPOE curriculum, we expect to pull from the excellent Personal Digital Archiving Train-the-Trainer workshops developed by the Society of Georgia Archivists and

Digital POWRR (Preserving digital Objects with Restricted Resources) Project workshops. The preservation module will also include training on the basics of preservation of analog materials and magnetic media.

Digitization (1 day) - Ambassadors will learn about tools, workflows, and archival best practice for digitization of photographs, documents, and audio-visual materials, with an emphasis on scanning and transfer of audio cassettes and VHS tapes, which are likely to be part of each Memory Lab.

Project Planning (1 day) - The last day of in-person training will be focused on developing a project plan for each participating library and setting a timeline and benchmarks. Ambassadors will receive training on project management strategies and will begin creating an individualized project plan for building a Memory Lab program in the year following the boot camp at their location using a project template created by the Project Manager.

Memory Lab and project planning workshops will be led by DC Public Library staff members, while the three days of preservation and digitization training will be taught by experts from those fields. All topics will be learned through a combination of lecture, discussion, and hands-on activities and an eye toward how to teach the same information to the public.

The boot camp will provide the first opportunity for the project cohort to meet and collaborate. Ambassadors will be encouraged to use the cohort and DCPL team throughout the project as a support network and to share questions, successes, challenges, and best practices as they return to their home libraries to begin implementation of project plans. An online communication tool, such as a listserv or Slack space, will be set up for this purpose.

Phase 2: Building the Memory Labs (12 months)

After their week in Washington, the cohort will remain in close communication with the project manager, who will make sure each site is on track to meet timeline benchmarks, give feedback on issues that arise, and talk through deviations from the project plan. The ambassadors will also be required to attend virtual cohort check-in meetings, led by the project manager every two weeks, to share strategies and talk through issues as a group. The ambassadors will additionally be required to contribute to a project blog to share individual project progress, as well as victories and challenges, with the world.

The cohort members will continue to receive preservation and digitization professional development through monthly webinars featuring presentations and Q&As with speakers from the field who can provide ongoing teaching and advice as the ambassadors begin building, testing, and maintaining their labs. Speakers will be booked by the project manager and are likely to include the staff of other public digital preservation labs and managers of professional digitization labs. The educational content of the webinars will be recorded and published on the project website.

Upon returning to their libraries, ambassadors will immediately begin planning and teaching digital preservation classes for the public following the lesson plans from boot camp. A suite of repeatable classes will be the first step in introducing digital preservation to their communities. The classes will also allow the ambassadors to find interested individuals and organizations who may later be partners for programming or pilot users of the digitization lab. The classes will also allow the ambassadors to determine the communities' greatest digital preservation concerns and to tailor future events and the digitization lab to those needs. Class curricula and outreach should tap into community interests such as genealogy, creative storytelling, art projects, estate planning.

Ambassadors will also begin building their digitization lab in coordination with the project manager, beginning with space planning and equipment selection. Each site's Memory Lab will vary, based on the needs and affordances of that library in terms of equipment, specific outreach strategies, and community partnerships. Initial Memory Lab purchases, including core equipment and software, will be approved by the project manager and funding allocated for the selections as soon as possible. These initial equipment purchases will be made within two months of boot camp. Based on equipment use in the DC Public Library Memory Lab, we expect most sites' initial orders to include necessities for scanning and VHS and audio cassette digitization workflows. Software and equipment selection will place a priority on workflows using open source software and encouraging metadata capture. After development and testing of initial equipment and workflows, remaining funds can be allocated to purchase equipment for additional workflows, enhance existing workflows or spaces, or allow for special programs (such as a projector to host a Home Movie Day).

The project manager will conduct site visits halfway through Phase Two. By then, each participating library should have a digitization lab that is fully operational and open to the public. Each site will have taught all three of their core classes at least once, and organized an additional creative digital preservation-related program for the public. The visit will allow the project manager to work with the ambassadors at each site to work through problems with digitization workflows, brainstorm improvements to public outreach and programs, and any other issues specific to each individual location.

During Phase Two, the ambassadors will determine tools and protocols for managing the daily operations of the lab including workflow documentation, maintenance, and scheduling. Special attention must be paid to specific daily metrics for valuation and comparison of the different sites during phase three. Long-term management and sustainability also require the ambassadors to train other site staff to teach digital preservation and maintain the digitization lab.

The local mentor identified by each site on their initial application will also assist in sustaining the Labs and providing ongoing digital preservation advice, information networks, and program partnerships. The mentor organization must partner with its Memory Lab site for at least one joint public program. Additionally, the mentor should be available to the site to give feedback on their digital preservation curricula, provide advice during the lab's implementation, and assist in outreach.

Phase Three: Evaluation and Sharing (3 months)

With the building phase complete, the project will have created the following outcomes: seven operational Memory Labs at nationally distributed and diverse public library systems and a website centralizing personal digital archiving resources, webinars, and a project blog.

With three months remaining in the grant project, the project manager will begin evaluation of the implementation of the Memory Lab model at disparate libraries. The information gathering for this evaluation process will include interviews, site visits, surveys, and data from the network libraries on their labs and programs in order to evaluate the significance of the Memory Lab for each institution, identify differences in need and implementation among the institutions and their communities (including DC Public Library) and articulate findings of how to create and sustain successful Memory Lab programs.

During a final site visit, the project manager will interview the ambassadors and site staff, including members of library administration, and observe the digitization lab and at least one digital preservation class or program. Data will also come from the statistics each site started to collect in

Phase Two, including program attendees and lab users, numbers of hours, types of media transferred, common issues, and feedback from attendees/users, following specific guidelines developed by the project manager.

With PLA and advisory board oversight, the project manager will publish a white paper summarizing the information gathered, evaluating the Memory Lab model and making recommendations for its future iterations, implementation, and distribution. The white paper and its conclusions will be shared widely through professional blogs and publications and conference presentations, with outreach led by PLA and assisted by the project manager and advisory board.

The white paper will be published on the Memory Lab project website, which will be used throughout the project to centralize links to existing digital preservation and personal digital archiving resources, such as how-to guides, videos, and topical resources. The website will be built by the Project Manager in collaboration with the DCPL Technology and Innovation Manager. The website will share all project training and assessment resources, including recorded webinars, project plans, assessment tools, and the project blog, as well as local resources created by the individual Memory Labs, such as their documentation and workflows. The Memory Lab website will fill the need for a centralized personal digital preservation learning resource, serving both the project and the general public.

Finally, during Phase Three, the seven Memory Lab site libraries will be required to do at least one local outreach event to share their project regionally -- at a forum, such as a regional library conference, local historical group, or technology meetup.

The Memory Lab Network is intended to create ongoing services at sites across the nation, operating after the end of this IMLS grant project. Therefore, we have built many safeguards into the project to combat its greatest risk: sustainability.

The communication and support networks created by the cohort, local mentors, and project website will continue to support the ambassadors and their labs as they continue to manage and hopefully even expand the reach of their regional programs. Ambassadors will have gained extensive experience purchasing and troubleshooting digitization equipment and workflows and developing digital preservation classes and events. At the time of application, the Memory Lab sites will have created brief sustainability plans, which will be adjusted and finalized by project end. Other library staff trained by the ambassadors will create a support network for Memory Labs continued operations and potential loss of embedded knowledge over time.

III. NATIONAL IMPACT

The Memory Lab Network project will have three modes of national impact: national distribution of digital preservation education and tools at seven diverse public library systems; evaluation and refinement for the Memory Lab model as a replicable answer to the national need for personal digital archives preservation; and innovation in the fields of public librarianship and archival science.

On Libraries and Their Users

The immense impact of the seven Memory Labs on their immediate users, home library systems, and regional communities can be predicted by the overwhelming popularity and success of the DC Public Library Memory Lab. We will gather and summarize data on the impact of the seven individual Memory Lab Network programs in the project white paper.

The Memory Labs will create the environment, tools, and education necessary at each library for patrons to care for their digital histories. The project will build the labs and workflows to allow community members to digitize and connect with their own personal archives. It will also create classes and programs to engage members of the public in issues of digital preservation and teach them about risks to their digital records and strategies for digital stewardship. These innovative programs will engage community members, provide them with a critical service, and encourage lifelong digital learning.

By integrating digital preservation into the professional wheelhouse of a public library, Memory Labs also expand the definition of public library service not only to its users but to library staff and administrators. The Memory Lab will also impact other organizations in their home communities through programming partnerships forged throughout the project and by serving as an example of innovative digital literacy programming and education.

On the Memory Lab Model

By expanding the number of Memory Lab programs nationally, creating variation among those labs, and assessing their successes, challenges, failures, and adjustments, the Memory Lab Network will create a model that is robust, flexible, and adoptable by public libraries across the world. The white paper created by the project will communicate this improved model and create a roadmap for future exploration and iteration. By creating more Memory Labs and a clear evaluation of the model, the project will also create more chances for libraries to learn about and to consider adding digital preservation tools and programs to their own public services, thereby providing yet more opportunity for iteration, improvement, and adoption of Memory Labs.

On Librarianship and Archival Science

The Memory Lab Network illuminates an emerging area of impact and responsibility for public libraries and archivists. It challenges archivists to take a leadership role and to partner with public libraries by providing digital preservation expertise, bringing highly needed professional knowledge to a lay audience. The Memory Lab model is not about accessioning collections, but about public archival knowledge and the understanding that digital records do not have to have research value to have value and that personal digital archives are above all else personal. Memory Labs empower creators to be responsible custodians of their own digital memories, an endeavor which all collecting archives must support to ensure their own survival. The Memory Lab model also pushes public libraries to expand the definition of digital literacy to include the preservation of digital assets and to aid their communities in that endeavor.

We know from firsthand experience at the DC Public Library Memory Lab and other personal digital archiving labs like XFR Collective and the Madison Public Library that labs can impact the immediate digital preservation of materials. By creating seven additional Memory Labs and a model and tools for other libraries to build their own, this project is building a model and use cases necessary for future longitudinal study of personal digital archiving methodologies.

Specifically for the field of personal digital archiving, the project refines and extends the Memory Lab model as a strategy to address the massive need for the information and tools to steward their personally valuable digital materials. The project planning tools, educational curriculum and webinars, documentation, and resource list will centralize and add to the current body of digital preservation knowledge and tools. The project data and white paper will establish priorities for further research and lay the path for the next innovation in the field.

Project Benchmarks	Pre-project	Phase 1: 9 months									Phase 2: 12 months											Phase 3: 3 months			Ongoing activities	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		24
Hire PM																										
Recruit advisory board members																										
PM Memory Lab training																										
Create application process																										
Promote project to public libraries																										
Build website																										
Develop selection criteria																										
Apply period																										
Applications due/ Awarded																										
Create training curriculum																										
Secure bootcamp spaces and teachers																										
Book webinar guest speakers																										
Boot camp training for ambassadors																										
Monthly webinars for ambassadors																										
Bi-weekly virtual check-in meetings																										
Initial order of Memory Lab supplies																										
Sites plan and teach first classes																										
Sites test equipment and workflows																										
Sites refine and continue classes																										
Site Memory Labs open to the public																										
PM first site visit																										
Sites gather data for evaluation																										
Final orders of Memory Lab supplies																										
Sites finalize workflow documentation																										
Sites train system staff																										
PM develops evaluation surveys																										
PM second site visit																										
PM conducts interviews and surveys																										
PM gathers and evaluates project data																										
White paper completed																										
Publication of white paper and outreach																										
Website finalized																										

KEY

- Phase 1: Planning and Training
- Phase 2: Building Memory Labs
- Phase 3: Evaluation and Sharing

DIGITAL PRODUCT FORM

Introduction

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (i.e., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products can be challenging. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

Instructions

You must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

PART I: Intellectual Property Rights and Permissions

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

Content created as part of this project will be the intellectual property of DC Public Library (DCPL), and will be licensed under the Creative Commons Attribution license (CC BY), allowing anyone else to distribute, remix, tweak, and build upon the work as long as they credit DCPL's original creation.

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.

There will be no restrictions to access to and use of any digital content created by the project (aside from the attribution requirement of the CC BY license). All project results, products, and documentation will be posted publicly online for public access and use with clear information about the license and its attribution requirement.

A.3 If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

Webinars will be created as part of project training and will be saved and posted on the project website for public access and use. All webinar presenters and participants will be required to sign a release form before recording begins, consenting to the recording and publication of the video. Interviews and surveys will also be conducted with project participants as part of the project evaluation. Permission to record and publish individuals' comments will be obtained at the outset of information gathering, in order to preserve individual privacy. Any individuals specifically quoted in the white paper will have a chance to review those quotes in context before publication. No other privacy concerns or culturally sensitive activities are anticipated in the project.

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.

All digital content created will be published on a project website, using an open-source platform such as WordPress. The website will include a project blog and will centralize links to existing online personal digital archiving resources, as well as the project products, including at least 12 recorded webinars; the project white paper; digitization workflow documentation; assessment tools; and training documents. Recordings of the webinars will be retained and derivatives will be embedded in the project website. All documents, including the white paper and other project products, will be posted on the website as PDF documents.

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.

All products will be created by project staff and partners. The website will be created using open online web editing tools and platforms, such as WordPress. Standard document creation software such as Microsoft Word will be used to create all project documentation. Project webinars will be recorded using DC Public Library video recording equipment or remote presenter-supplied equipment, such as a laptop, and a webinar platform such as WebEx or GoToMeeting.

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).

Project products will be created in open source or well-supported formats, such as PDF-A and MOV. Digital video quality will be dependent on the webinar platform, which will be selected with high-quality video as a priority, and all video will be recorded and retained at the highest resolution available.

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).

Webinar software will be tested thoroughly before the first webinar for quality of broadcasting and recording, and a workflow for creating, saving, and sharing the recording will be created. The website will undergo thorough usability testing during its creation. After being added to the website, all videos and documents will be downloaded, opened, and/or played to ensure accessibility.

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

As they are created, all digital assets, including a copy of the project website, will be backed up on DC Public Library Network drives. Once a project product is finalized, it will also be ingested into the DC Public Library Special Collections' digital repository, in the Preservica platform, for permanent retention as part of the DCPL Archives. Either DC Public Library or its partner institution will host the project website and its content for at least five years, but we expect to support access to the project resources indefinitely. The project website will also be crawled and included in the DCPL web archive and submitted to the Internet Archive.

C. Metadata

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

When content is added, Preservica automatically conducts Quality Assurance needed to ensure content is properly preserved, including checking fixity and metadata integrity; checking for viruses; and file characterization, using technical metadata. Technical metadata is preserved and administrative and preservation metadata are generated by the system. Descriptive metadata will also be added to project materials following the institutional Dublin Core-based schema.

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

As stated above, all metadata will be stored in the DCPL digital repository, which is backed up on geographically distributed cloud servers and all files and data are regularly checked for integrity and authenticity.

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).

DCPL is in the process of creating a Digital Public Library of America (DPLA) hub for Washington, D.C., with local partners. The D.C. hub is expected to be live by the time of project completion and any appropriate digital products from the project will be included in DCPL digital resources aggregated by DPLA. Materials aggregated by DPLA generally see a significant increase in their discovery and use.

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 project products will be most findable through the project website, in the full context of the project, which will be accessible using a standard web browser. The website will incorporate search engine optimization strategies to maximize its audience. However, all project products will also be published and searchable by their descriptive metadata, through an institutional repository public web interface.

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.

Dig DC, the portal to digital collections from DC Public Library Special Collections - <http://digdc.dclibrary.org/>
DC By The Book, a crowdsourced project aimed at geolocating literature set in Washington, D.C. - <http://www.dcbythebook.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?