

# **Museums for America**

Sample Application MA-30-17-0231-17 Project Category: Collections Stewardship Funding Level: \$5,000-\$500,000

## **Eric Carle Museum of Picture Book Art**

Amount awarded by IMLS: \$173,414 Amount of cost share: \$175,297

Attached are the following components excerpted from the original application.

- Abstract
- Narrative
- Schedule of Completion

Please note that the instructions for preparing applications for the FY2018 Museums for America grant program differ from those that guided the preparation of FY2017 applications. This year, the maximum that may be requested from IMLS is \$250,000. Be sure to use the instructions in the FY2018 Notice of Funding Opportunity for the grant program and project category to which you are applying.

### The Eric Carle Museum of Picture Book Art Collection Management System Upgrade

The Eric Carle Museum of Picture Book Art (The Carle) requests a \$173,414, three-year IMLS Museums for America Collections Stewardship grant to replace its outdated collections database with a new, cloud-based collections management system (CMS) and a digital asset management (DAM) system. These platforms are crucial for The Carle to manage the 11,600 objects in its care, track the location of the pieces, and improve its ability to curate in-house and traveling exhibitions. The result will allow The Carle to implement the best standards in collections care and increase its capacity to share its collections with the public, partnering institutions, artists, and scholars of children's literature and art.

Since opening its doors in 2002, The Carle has organized over 100 exhibitions, many of which have travelled nationally and abroad. The need for a new CMS and DAM became especially evident when the Museum increased its number of traveling exhibitions. To compile exhibitions, its collections team currently uses a FileMakerPro database it inherited at is inception from the Eric Carle Studio. Presently, only two percent of the 7,300 objects in its Permanent Collection have been digitized. Within the database itself are a plethora of inaccurate, both factual and typographical, records that are unreliable and often unusable. To research artwork for exhibitions, the collections staff must physically go through storage boxes to view objects. This process is a highly inefficient and places artwork needlessly at risk, due to unnecessary handling. The need for both systems was further confirmed by the results of a 2010 IMLS-funded Conservation Assessment Program (CAP) assessment of The Carle. Findings from the CAP also lead to the development of its 2014-2019 Strategic Plan that transitions the Museum from a young institution to a mature and sustainable organization with a broad impact. In 2015, an expert in FileMakerPro made improvements to the database that increased functionality but demonstrated the futility of attempting to build an in-house CMS. This led the collections team to investigate professional CMSs and DAMs used by other museums. While the outright purchase of the new systems was cost prohibitive at that time, this research proved invaluable.

Within the first year of the grant period, The Carle will purchase the CMS, MuseumPlus<sup>RIA</sup>, and work with the support team at Zetcom to migrate data from its existing collections database to the new system. Concurrently, it will purchase the DAM, ResourceSpace, begin transferring existing digital images to the system, and set up an inhouse digital photo lab. During the remaining two years, The Carle will verify and/or update information on its collections and conduct basic condition assessments of all of its holdings. At the end of the grant period, the museum will have an integrated CMS that will allow staff members to quickly reference reliable information on the objects in its collections.

The immediate beneficiaries of this project are the collections team at The Carle. This project will build staff capacity by eliminating redundancies in data entry, allowing the registrars to streamline the processing of deposits, accessions, and loans. The long-term beneficiaries will be the visitors to the exhibitions, researchers, students, educators, and representatives from fellow museums from around the world. Because of the CMS and DAM, the collections team will have a framework to launch online access to the database for everyone to enjoy.

The intended outcomes of this proposed project will enable staff members to 1) properly catalog all works using standardized terms, 2) prioritize conservation efforts, 3) improve staff efficiency, 4) provide baseline data on objects, and 5) further enable future collaboration and exhibitions with other museums. This in turn will allow The Carle to meet its standards of excellence in collections management by following best practices, provide the framework for continuing to maintain accurate and complete records, and identify collection care priorities.

Evaluation of this project includes both implementation and achievement measures of stated objectives. The evaluation team consists of the chief curator, collections manager/registrar, assistant registrar, exhibition coordinator, and the special assistant to the executive director. This team will collect evaluation information to generate quarterly reports based on key metrics identified by The Carle, Zetcom, and other project partners.

#### 1. PROJECT JUSTIFICATION

**Project Overview:** The Eric Carle Museum of Picture Book Art (The Carle) proposes to replace its outdated collections database with a new, cloud-based collections management system (CMS) and a digital asset management (DAM) system. These new platforms are crucial for the Museum to manage the 11,600 objects in its care. The result will allow The Carle to implement the best standards in collections care and increase its capacity to share its collections with the public, partnering institutions, artists, and scholars of children's literature and art.

Need Statement: Founded in 2002, The Carle is the only full-scale museum dedicated to the collection, preservation, and exhibition of picture-book art in the U.S. today. Its mission is to *inspire a love of art and reading through picture books*. Its Permanent Collection includes art by world-renowned picture book artists Maurice Sendak (*Where the Wild Things Are*), William Steig (*Shrek!*), Arnold Lobel (*Frog & Toad*), and Leonard Weisgard (*The Little Island*). In total, The Carle has 7,300 objects in its Permanent Collection, 3,800 artworks in the Eric Carle Collection, and 500 works by other artists on long-term loan. In tandem with its collections management, The Carle staff processes on average 400 temporary exhibition loans per year, among them works by Mo Willems (*Knuffle Bunny*), Hilary Knight (*Eloise*), Chris Van Allsburg (*The Polar Express*), and Robert McCloskey (*Make Way for Ducklings*).

The Carle strives to attract the next generation of museum patrons. It is an art museum that celebrates picture-book illustrations and the book-making process in a manner accessible and engaging for visitors of all ages. Over 50,000 people visit its 43,000 square-foot facility annually from the local area, across New England, the U.S., and abroad. Its exhibitions engage families with young children, educators, students, scholars, artists, and book and art enthusiasts. Family-friendly programming includes hands-on art studio activities and play areas, age-appropriate gallery tours, films, theater, musical performances, and interactive story times.

The Carle develops seven in-house exhibitions, three-to-five traveling shows, and processes numerous outgoing loans from its Permanent Collection and Eric Carle Collection annually. Since opening its doors, The Carle has organized over 100 exhibitions, many of which have travelled both nationally and abroad. In the past eight years, it sent exhibitions to the Children's Museum of Pittsburgh, the Contemporary Jewish Museum in San Francisco, the High Museum of Art in Atlanta, the Montclair Art Museum in New Jersey, the National Museum of American Jewish History in Philadelphia, the New-York Historical Society Museum and Library, the Santa Barbara Museum of Art, the Setagaya Art Museum in Tokyo, and the Tacoma Art Museum. The Carle also developed training and curriculum for teachers and students in Korea and led annual educator tours in Pistoia, Italy. Its most recent traveling exhibition opened last month at the Museum of Fine Arts in Boston. In spring 2017, The Carle will send shows to Atlanta, New York, and Tokyo. Each exhibition draws record attendance, demonstrating the breadth of intergenerational audiences that embrace the art of the picture book. The Carle also works closely with a consortium of 10 museums in western Massachusetts known as Museum10 and the Five College Consortium (Amherst, Hampshire, Mount Holyoke and Smith Colleges, and the University of Massachusetts Amherst).

Coordinating in-house or traveling exhibitions using its current database is extremely time consuming due to its limitations. The Carle inherited FileMakerPro, as a non-relational database, from the Eric Carle Studio prior to its founding 14 years ago; it essentially functioned as a spreadsheet to track the artwork of Eric Carle including over 1,000 records for objects belonging to other institutions or private collectors. While the former registrar attempted to modify and update FileMakerPro, she was unprepared for the enormous success and rapidly growing popularity of the museum as a collecting institution. At its inception, The Carle housed approximately 60 boxes of artwork by Eric Carle and accepted donations of 103 works by other artists. As artists and collectors around the country viewed The Carle as an invaluable resource and repository for picture-book art, the Permanent Collection grew tenfold in four years. Coupled with an ambitious exhibition schedule, this dramatic increase in objects greatly taxed staff resources, leaving little time to catalog new accessions properly resulting in errors, both factual and typographical, and rendering the current data unreliable and often unusable.

The current system used for managing digital images also has its limitations. Since 2002, the Museum digitized 85 percent of the artwork by Eric Carle; however, many of these images were taken prior to 2004 and stored on CDs and DVDs. Recently, The Carle attempted to transfer these images to more sustainable media, but some discs were already failing and unreadable. Other images, often hastily taken, are blurry or the files are so small that it is impossible to use them to identify the objects correctly. Currently, an estimated two percent of the Permanent Collection are digitized. To research artwork for exhibitions, the collections staff must physically go

through storage boxes to view objects. This process is a highly inefficient to obtain pertinent information and places objects needlessly at risk, due to unnecessary handling.

The need for a new CMS became evident when The Carle increased its number of traveling exhibitions. When communicating with well-established institutions such as the Museum of Fine Arts in Boston and the New-York Historical Society, collections staff often discover that they must significantly edit their data in regards to verification of media and measurements as well as standardization of terminology before they can share it. In addition, exporting information directly from FileMakerPro to other programs such as MS Word or Excel is a multi-step endeavor. A 2010 IMLS-funded Conservation Assessment Program (CAP) assessment of The Carle further confirmed the need for a new CMS. One of the goals of the CAP was to *prioritize collection management within museum operations*. In 2015, an expert in FileMakerPro volunteered her time to streamline and make improvements to the database that increased functionality but demonstrated the futility of attempting to build an in-house, fully functioning CMS. That same year a student intern from Simmons College (Boston) conducted a case study on DAMs for The Carle. This led collections staff to investigate professional CMSs and DAMs used by other museums. While the outright purchase of new systems was cost prohibitive at that time, the research proved invaluable.

The Carle secured its first IMLS Museums for America Collection Stewardship grant in September 2015 to remediate, stabilize, and catalog 125 illustrations by picture-book artist Leonard Weisgard. As a result, The Carle developed a new collections policy, a collections procedure manual, and database cataloging protocols. In the process, it quickly became apparent that the task of implementing a new professional CMS was the next highest priority.

The establishment of a robust CMS and the creation of a well organized, backed-up, and easily accessible digital archive at The Carle is a crucial step in assessing, conserving, and preserving the precious artworks within its care. It has already taken a step toward implementation by recently connecting to the fiber optic network of the Five College consortium. It researched several CMSs based on partner recommendations and narrowed the field to two products: the cloud-based MuseumPlus<sup>RIA</sup> by Zetcom and the server-based Vernon Systems. It evaluated DAMs in the same manner: Portfolio by Extensis and ResourceSpace. Based on its thorough vetting of these systems, The Carle selected MuseumPlus<sup>RIA</sup> and ResourceSpace. Zetcom is based in Bern, Switzerland and has many international clients using MuseumPlus including The Louvre in France. ResourceSpace is an open source system currently used by nearby museums and archives at Mount Holyoke, Smith, and Williams Colleges; The Carle will be able to draw upon their expertise and experience. Both software products are intuitive, Microsoft-based applications.

Beneficiaries of the Project: On an immediate level, collections staff at The Carle will be able to improve their efficiency by expanding their capacity to manage the 11,600 objects in their care. The proposed new systems will also allow staff to handle art less often and locate, view, assess, track, and identify objects, either for featured exhibitions or in need of conservation, based on accurate data and clear digital images. The efficiency gains and lessons learned from this project will ultimately benefit a wide audience including visitors to The Carle and other museums that exhibit art from the collections, members of Museums10 and the Five College Consortium, educators, scholars, artists, book enthusiasts, researchers, and curators.

**Advancing Strategic Plan:** This project is integral to the mission of The Carle and its long-term strategic goals. Its current Strategic Plan (2014-2019) outlines the transition of The Carle from a young institution to a mature and sustainable organization with a broad impact. The plan focuses on the following three overarching strategies:

- Achieving excellence: Develop exhibitions and educational programs onsite that meet standards of museum excellence, and evaluate and improve all internal systems, including collections management, IT systems, and facility maintenance.
- <u>Building capacity</u>: Focus on the resources needed for sustained growth through board development, staff development, an increased focus on major donors and grants, a facility master plan that will enable The Carle to prioritize and fund future projects, and a sustainable collections management plan.
- Expanding reach: Create new revenue streams and expand its reach through collaborative projects with other institutions and online presence.

Addressing IMLS Museums for America and Collections Stewardship Goals: The new CMS and DAM will satisfy the IMLS goal of supporting exemplary stewardship of museum and library collections and promoting the use of technology to

facilitate discovery of knowledge and cultural heritage. By migrating the current FileMakerPro records, purging duplicated information, correcting inaccuracies, creating digital reference images, properly cataloging objects using industry standard vocabularies, and incorporating best practices in its collections management and care, The Carle will be in a better position to share its collection with the world and further expand knowledge of and appreciation for the power of picture-book illustrations. This project also satisfies the IMLS Collections Stewardship goals as follows:

- 1. Strengthen its ability to provide exemplary management, care, and conservation of its collection.
- 2. Improve stewardship of its collections by ensuring long-term preservation and access to objects.
- 3. Facilitate access and discovery of its collections both in-house and externally.

Additionally, the proposed project will allow The Carle to invest in the professional development of its staff members, volunteers, and interns to enhance their skills and ensure the highest standards in all aspects of museum operations. From this project, The Carle will be able to build its capacity to manage and digitize its collections, improve workflow, share knowledge with other museums, and curate, properly document, and catalog works of art. By capturing a visual record of each object and linking a standardized condition record within the new CMS, The Carle will have a baseline for subsequent condition checks and identification of future conservation priorities. The registrars will also be able to improve the housing and storage of objects and ensure their corresponding identification numbers are readily visible with minimal handling.

### 2. PROJECT WORK PLAN

Activities and Performance Measures: The goal of the proposed new CMS system is to provide exemplary care of the original illustrations housed at The Carle using best practices and the newest technology. The implementation of a new CMS and DAM will enhance the overall access to the 11,600 objects in its care to create both in-house and external exhibitions, prioritize restoration, and maintain accurate records. Items that have never before been on public display will be become part of future exhibitions. To accomplish these goals, The Carle established the following process objectives, performance measures, and indicators:

<b>OBJECTIVES</b>	PERFORMANCE MEASURES		INDICATORS/METRICS
Improved	■ 100% of 11,600 holdings and 500 short-term	•	# of images uploaded to DAM
cataloging,	loans transferred from FileMakerPro to	•	# of updated database records
preservation,	MuseumPlus <sup>RIA</sup> .	-	# of staff members trained to use
conservation, and	■ 15% of the remaining Eric Carle Collection and		the new CMS
care of the	98% of the Permanent Collection (total 7,650		
collections at The	objects) digitized.		
Carle.	■ 85% of the Eric Carle Collection, 2% of the		
	Permanent Collection, and 200 existing condition		
	images (3,400 objects) uploaded to DAM.		
Increased staff	■ 10% increase in staff digitization output within	-	# of minutes to digitize and
efficiency.	three months of launching the new DAM.		upload new object files
	■ 100% of trained collections staff on new CMS	-	# of staff trained to use the new
	will produce checklist and reports quickly and		DAM
	with confidence.	-	# of checklists and reports
			generated and time to complete
			each task
Improved	■ 100% of trained staff will conduct condition	-	# of staff trained in condition
assessment of	assessments using best practices.		assessment
object condition	■ 100% of permanent collection assessed.	-	# of condition assessments
and conservation	■ 100% of exhibition (curatorial and education)		completed
priorities.	staff will have access to high-quality digital	-	# of CMS queries and reports
	images.		generated for exhibition planning

<b>OBJECTIVES</b>	PERFORMANCE MEASURES		INDICATORS/METRICS
Improved	■ 100% of trained staff will respond quickly to loan	-	# of loan requests answered and
efficiency of loan	or research requests without need to check the		time to complete each task
requests and	accuracy of CMS information.	-	# of research request answered
research inquiries.	-		and time to complete each task
Provide	■ 100% of collections staff trained on new CMS,	-	# of staff members trained to use
opportunities for	DAM, and digital photo lab with more in-depth		new CMS, DAM and digital photo
professional	training based on job responsibilities.		lab
development of	■ 100% of trained staff train and supervise	-	# of volunteer and interns trained
staff, volunteers,	collections volunteers and interns.		in collections management and
and interns.	■ 100% of collections volunteers and interns gain		digitization
	new collection management and digitization		_
	skills.		

With support from the IMLS, The Carle will implement a new CMS using the capabilities of the MuseumPlus<sup>RIA</sup> platform; this includes establishing protocols and workflows for data entry, reporting, integrating attachments and multimedia, and setting user permissions and access. Staff members will easily access information about the collections and make informed decisions about loans, publications, and exhibitions. The collections manager/registrar will work exclusively with the Zetcom project manager to transfer all data from FileMakerPro to MuseumPlus<sup>RIA</sup>. Once the data has been successfully migrated and standardized, Zetcom will conduct on-site training sessions for select staff members including the chief curator, assistant registrar, exhibition coordinator, and preparator. These trainings will help Zetcom discover current workflow and business practices to customize MuseumPlus<sup>RIA</sup>. As a final step, Zetcom will test the system with the collections staff to ensure proper operation. There will be weekly project calls and ongoing updates to ensure proper project scope and schedule control. The Carle staff members will learn to create and modify reports as needed.

Concurrently, The Carle will begin an inventory of existing digital images of its collection. A DAM consultant and the exhibition coordinator will setup the new system and train staff members. Within five months, staff members will begin importing the existing digital images into the new DAM.

In the second year of the grant period, the collections manager/registrar and assistant registrar will begin a systematic examination of each object within each collection. They will divide each task by artist so they can work independently on a portion of the collection. Each collection is currently stored in boxes organized by artist then by book title. They will complete a condition assessment form (see Support Documents) for each object and assign a conservation priority level. A professional paper conservator from the Williamstown Art Conservation Center (WACC) will assist with the condition assessment process. All resulting information will be entered directly into the new CMS. Interns and volunteers trained in proper art handling procedures will assist in this process. On average, it will take seven minutes per object to complete the condition assessment task. At this rate, it will take 1,400 hours to complete this portion of the project.

The team will catalog and assess the condition of several boxes of artwork at a time before creating digitized images of the contents. The Carle will convert a small storage space into a digital photo lab for this purpose. The photographer/DAM consultant will train the collections manager/registrar, assistant registrar, and exhibition coordinator to create high-resolution digital images of artworks through the purchase and installation of a digital copy stand linked to two dedicated workstations with calibrated monitors and Adobe Lightroom and PhotoShop software. One workstation will be dedicated to the camera while the exhibition coordinator will use the other workstation to adjust color, format files, and incorporate tombstone metadata drawn from the CMS. Each image will be saved as a 16-bit TIFF file, 300 ppi and 4600 pixels on the longest dimension. Based on previous experience with similar digitization projects, The Carle anticipates it will take 15 minutes per object to complete the digitization. The consulting photographer will digitize approximately 150 objects that are too large or complex to photograph with the in-house digital copy stand.

The new DAM will function as a key image repository for the new collections database. The Carle will purchase three additional workstations to access the new CMS and DAM. These units will have Adobe PhotoShop Elements installed so that the chief curator, collections manager/registrar, and assistant registrar can view the

images clearly and edit them as needed for reporting or presentation purposes. All images will contain embedded tombstone metadata added by the exhibition coordinator. Digitization will permit staff members to manage the collection more efficiently and conduct curatorial and collections research without handling the objects while moving toward the long-term goal of publishing the collection online. The consulting photographer will create the digital photo lab, establish the DAM workflow, and train staff after the initial set up and training done by ResourceSpace.

**Risks/Challenges:** Due to the volume of objects within its collection, this project may take longer than the projected three-year timeline. Key staff involved in this project will work together to regularly review progress and prioritize high-interest items. This effort will allow staff members to maximize their time and that of the consultants. Additionally, reliance on a cloud-based CMS could prove periodically challenging; times may arise when the data is inaccessible. In such instances, The Carle will rely on backups stored in multiple locations, at least one local and one off-site.

Planning, Implementing, and Managing the Project: The key personnel for this project are the chief curator, collections manager/registrar, assistant registrar, exhibition coordinator, and preparator. Additional personnel from The Carle include the special assistant to the executive director and the director of finance and administration. The Carle will also contract four consultants for specific roles as described below.

<u>Ellen Keiter, Chief Curator</u> – 7% of time. She will serve as project director. Her role is to oversee all team members and to assist with prioritizing cataloging, condition assessments, and digitization.

<u>Erica Boyd Jacob, Collections Manager/Registrar</u> – 40% of time. Having undergone implementation of a new CMS at a previous job, she will lead the database conversion from FileMakerPro to MuseumPlus<sup>RIA</sup>, serve as primary liaison with Zetcom, and work with the assistant registrar to assess and digitize objects within collections.

<u>Kate Kearns</u>, <u>Assistant Registrar</u> – 30% of time. She will lead the cataloging and digitization portion of the project. She will work with the collections manager/registrar to prepare the records for migration, review the new CMS iterations, assess and digitize objects, assist the photographer/DAM consultant with oversized objects, enter data into the CMS, maintain ongoing files, and train and supervise the student intern and volunteers working on the project.

Exhibition Coordinator, to be hired – 30% of time. This person will serve as project manager for the implementation of the DAM and be responsible for image correction and adding metadata. The Carle has a strong applicant pool and intends to fill the full-time position in early 2017.

<u>Mark Bodah, Preparator</u> – 2% of time. His responsibilities include assisting, as needed, with the handling and mounting of original artwork to be digitized and coordinating supply and special orders for materials. He will also participate in training on use of the CMS, DAM, and digital photo lab.

<u>Alexandra de Montrichard, Special Assistant to the Executive Director</u> – 3% of time. She will support the team with program management, evaluation, and grant reporting.

<u>Andrea Powers, Director of Finance and Administration</u> – 1.5% of time. She will oversee the IT consultants and serve as liaison for in-house technical support questions.

Student Trinket Clark Intern- 120 hours. He/she will assist the collections manager/registrar, assistant registrar, and exhibition coordinator with cataloging, condition assessment, and digitization in years two and three. He/she will spend one quarter of the eight-week, four-days-a-week, paid summer internship on this project for a total of 60 hours each year.

<u>Volunteer Collections Assistants</u> - 960 hours. They will assist the collections manager/registrar, assistant registrar, and exhibition coordinator with cataloging, condition assessment, and digitization in years two and three. Based on past experience, the work is divided into 10 hours a week for 30 weeks during the academic year for one volunteer and 15 hours a week for six weeks during the summer for two volunteers for a total of 480 hours each year.

#### Consultants:

Leslie H. Paisley, Department Head and Conservator of Paper, WACC. She will assist with the development of the

customized condition assessment form within the CMS, provide on-site and remote consultation to prioritize future conservation, and provide additional guidance as needed.

Jim Gipe, Photographer and DAM consultant. Taking over from ResourceSpace trainers, he will set up workflows and train personnel using the new DAM. He will install the new in-house digital photo lab, photograph oversized objects in the collection, and assist the team as needed.

<u>Deb Zeigler, Network Specialist, Innovative Business Systems (IBS)</u>. Having worked as a consultant with The Carle since 2002, she will provide IT support for the new CMS and DAM. Note: The Carle does not have on-site IT staff.

Sequence of Activities: This three-year project will occur in two phases from October 2017 to September 2020.

Phase I: October 2017 – September 2018

- Purchase two dedicated workstations with specialized photo editing software and three user workstations
- Conduct an inventory of all digital images of objects in all collections
- Purchase a license and support for a new, cloud-based DAM system, ResourceSpace
- Receive training from photographer/DAM consultant in the use of ResourceSpace
- Establish metadata standards to identify currently digitized files based on Metadata Object Description Standards (MODS) used by the Five College Consortium
- Upload all existing digital images of objects to the DAM with embedded metadata
- Contract with Zetcom to develop and deploy the new CMS, MuseumPlus<sup>RIA</sup>
- Purchase four user licenses for the new MuseumPlus<sup>RIA</sup>
- Coordinate with Zetcom to convert former collections database (FileMakerPro) to MuseumPlus<sup>RIA</sup>
- Receive training from Zetcom to use MuseumPlus<sup>RIA</sup> and configure reports
- Create a condition assessment form to aid in object evaluations
- Consult with paper conservator to review condition assessment form and process and to evaluate setup for digital photography stand for condition photographs
- Convert current storage room into a digital photo lab
- Purchase digital camera, lighting, copy stand

Phase II: October 2018 – September 2020

- Check condition and verify object information for all objects in Permanent Collection and Eric Carle Collection
- Enter and/or update all verified object information into the new CMS
- Capture high-resolution digital images of all objects that do not have an existing high quality image in accordance with Federal Agencies Digitization Guidelines Intitative (FADGI) standards
- Link images from the DAM to the new CMS for all object records
- Conduct quarterly evaluation of CMS, DAM, digitization, cataloging and assessment efforts, and staff efficiency

It will take 12 months to transfer files from FileMaker Pro to MuseumPlus<sup>RIA</sup>. This timeline is based on initial planning, a Zetcom estimate for data migration, training of key personnel, and evaluation of the customized system. During the first year, staff members will conduct an inventory of existing digital images and set up the new DAM and digital photo lab. In years two and three, the team will catalog approximately 11,600 objects, assess conditions of each, adjust housing as needed, identify objects that may need future restoration or conservation, and digitize 7,650 objects.

Financial, Personnel, and Other Resources: The proposed collections stewardship project is labor intensive. The Carle project team calculated the number of hours to achieve each objective based on its pilot study and in consultation with Zetcom, ResourceSpace and PivotMedia. The budget uses the required number of hours to complete each task, taking into consideration a three percent annual increase in salaries for personnel plus actual equipment costs. The requested IMLS grant will support the project time of the assistant registrar and a portion of the time of the collections manager/registrar, fees of the three consultants, purchase of licenses and training of staff members on the CMS and DAM, five new workstations and related software, and digital photography equipment and software. As part of its cost-share, The Carle will pay salary and benefits not covered by the grant, plus IT tech support and professional digital photography in the second and third years of the grant. The Carle will also use

operating funds not part of its cost share to hire a part-time exhibitions registrar to process loans while the collections team is focused on the grant.

Tracking Results: Based on input from museum partners and Zetcom, The Carle will track specific measurable tools/metrics for this project. (See above table in Activities and Performance Measures.) Evaluation of this project includes both implementation (formative) and achievement measures of stated objectives (summative). The evaluation team consists of the chief curator, collections manager/registrar, assistant registrar, exhibition coordinator, and the special assistant to the executive director. This team will collect evaluation information to generate quarterly reports. The special assistant to the executive director is responsible for compiling and submitting the progress and final reports to the IMLS. The other team members will assist in collecting data and reviewing progress toward the stated objectives and performance measures. The team will meet monthly to determine the effectiveness of the CMS and DAM.

**Dissemination:** The Carle will share its findings of installing a new CMS and DAM with other interested museums through the New England Museum Association, Museums10, and the Five College consortium. Since Zetcom is promoting its new cloud-based MuseumPlus<sup>RIA</sup> platform, it will refer other museums to The Carle for candid feedback and guidance. The collections manager/registrar, assistant registrar, and exhibition coordinator will also conduct a session at an upcoming Museums10 meeting and at the 2020 NEMA conference to discuss the CMS and DAM; at least three of the ten Museums10 institutions will be using ResourceSpace. The Carle will also welcome informal inquiries about the CMS and/or DAM from museums across the country.

#### 3. PROJECT RESULTS

Intended Results: The overarching result of this project will be improvements to the stewardship and management of collections at The Carle. The benefits of this project will enable staff members to 1) properly catalog all works using standardized terms, 2) prioritize conservation efforts, 3) improve staff efficiency, 4) provide baseline data on objects, and 5) further enable future collaboration and exhibitions with other museums. Additional benefits include continued professional development for staff members, increased intern and volunteer participation, and increased access of the collection by scholars, students, and researchers.

**Improvements:** With the new systems, The Carle will improve its accuracy and functionality in maintaining its collections. The new CMS and DAM also satisfies several goals within the three areas of its Strategic Plan. This project will directly support long-range institutional plans for advancing stewardship including:

- Documenting works of art digitally as well as identifying conservation priorities.
- Reducing the risk of damage to objects by decreasing the need to examine them by hand.
- Accurately cataloging of all objects within the collections with full descriptive metadata.
- Leveraging enhanced access to collections to create timely, thematic changing exhibitions and long-term installations.
- Sharing enhanced access to collections with other museums to coordinate traveling exhibitions.

**Tangible Products:** The new CMS and DAM will create an improved system of cataloging, assessing, and preserving picture-book art. This will include descriptive metadata associated with each object that uses controlled vocabularies to search the in-house system versus the current, inconsistent terminology used by different staff members over the years. The proposed project will allow The Carle to create a photo lab to digitize all objects in its collections for easy reference instead of staff members handling objects in order to retrieve important information. This in turn will allow The Carle to share its collections with other museums and organizations.

**Sustainability:** The proposed collections stewardship project is a long-term investment in the care of works of art at The Carle. Any additional costs beyond the three-year grant period including software upgrades, maintenance of the new systems, and annual license fees for both MuseumPlus<sup>RIA</sup> and ResourceSpace will be the responsibility of The Carle. It is committed to allocating the required funds.

Page 1 of 3 .

Project Year	r:	1
Calendar Year		2018
	Oct Nov Dec	Mar Apr May Jun Jul
Implementation of new Digital Asset Management System (ResourceSpace)		
Inventory of existing digital images started prior to grant period is completed and all images are backed up to existing external hard drive		
Initial planning meeting with Deb Zeigler/IBS and Jim Gipe/Pivot Media; set up of new drobo drive, workstations, and software		
All existing image files are transferred drobo drive; Descriptive metadata is embedded in the existing files by exhibitions coordinator		
New Digital Asset Management (DAM) System is set up by consultant; Staff is trained in use of DAM		
New DAM is connected to MuseumsPlus RIA; Existing digital images are uploaded to ResourceSpace and linked to MuseumPlus records		
Implementation of new Collections Management System (MuseumPlus RIA)		
MuseumPlus RIA project begins (contract signed, scope of work finalized, schedule, responsibilities, milestones, deliverables, billing)		
Review current data usage, workflow, and business procedures with Zetcom staff; Recommended data clean up completed by Museum staff		
Zetcom designs and develops customized prototype for Museum		
Zetcom submits 1st iteration of data migration to Museum staff for review and testing; Staff submits comments/requests for corrections		
Museum staff completes any additional parsing or cleanup of data; Zetcom staff makes changes resulting from data review		
Museum freezes data for final data review; FilemakerPro database is read-only; Zetcom prepares final iteration; Museum staff reviews		
Database is installed on zetcom host servers; Database goes live		
Museum staff trained to use MuseumPlus RIA (train-the-trainer, power users, system administrators, report creation and modification)		
New Collections database is tested by collections staff and any needed fixes are completed by Zetcom staff		
Condition Assessment, Updating of Catalog Records, and Digitization		
Staff visits WACC conservation photography lab		
Condition assessment form and instructions are created and reviewed with Williamstown Art Conservation Center staff		
Purchase digitization equipment including camera, copy stand, and copy lights; Set up in-house digitization lab with assistance from Jim Gipe		
Conservator visits Museum to train staff in condition assessment		
Digital photography training for collections staff with Jim Gipe		
Staff hires interns, trains interns in proper art handling techniques and use of CMS and DAM		
Chief curator and assistant registrar create priority list of permanent collections items to be processed in Year 2		
Administrative Activities		
Project director monitors project progress and expenditures with help from the special assistant to the executive director		
Project director prepares and submits interim report to IMLS with help from the special assistant to the executive director		

Page 2 of 3 .

Project Year:		2			
Calendar Year:	2018		2019		
	Oct Nov Dec	Jan Feb	Mar Apr May	Jul Aug	
Condition Assessment, Updating of Catalog Records, and Digitization					
Conservator visits Museum for follow-up training in condition assessment					
Digital photography training for collections staff with Jim Gipe					
Team of one staff member and one intern/volunteer processes one box at a time in collecton storage to complete the collection database update and					
condition review and assess whether each object has an adequate existing image, can be digitized in-house, or must be professionally photographed.					
Once a box of objects has been processed, staff produces a checklist of objects that have been selected for in-house digitization. Objects that are too					
large or complex to digitize on copystand are flagged in the database for professional photography.					
Objects selected for in-house digitization are digitally photographed by collections staff. Raw files are saved to drobo drive.					
Exhibitions coordinator color corrects and crops image files, embeds descriptive metadata retrieved from CMS, and saves each image as a high-res TIFF					
file.					
Master TIFF files are uploaded to DAM and linked to new collections database.					
Professional photographer digitizes objects that cannot be photographed on copy stand.					
Staff hires interns, trains interns in proper art handling techniques and use of CMS and DAM					
Chief curator and assistant registrar create priority list of permanent collections items to be processed in Year 3					
Administrative Activities					
Project director monitors project progress and expenditures with help from the special assistant to the executive director					
Project director prepares and submits interim report to IMLS with help from the special assistant to the executive director					

Page 3 of 3 .

Project Year:  Calendar Year: 2019	3 2020
	9 2020
	2020
	Dec Jan Feb Mar Apr May Jun Jul Aug Sep Sep
Condition Assessment, Updating of Catalog Records, and Digitization	
Digital photography training for collections staff with Jim Gipe	
Team of one staff member and one intern/volunteer processes one box at a time in collecton storage to complete the collection database update and	
condition review and assess whether each object has an adequate existing image, can be digitized in-house, or must be professionally photographed.	
Once a box of objects has been processed, staff produces a checklist of objects that have been selected for in-house digitization. Objects that are too	
large or complex to digitize on copystand are flagged in the database for professional photography.	
Objects selected for in-house digitization are digitally photographed by collections staff. Raw files are saved to Drobo.	
Exhibitions Coordinator color corrects and crops, embeds descriptive metadata retrieved from CMS, and saves each image as a high-res TIFF file.	
Master TIFF files are uploaded to DAM and linked to new collections database.	
Professional photographer digitizes objects that cannot be photographed on copy stand.	
Staff hires interns, trains interns in proper art handling techniques and use of CMS and DAM	
Administrative Activities	
Project director monitors project progress and expenditures with help from the special assistant to the executive director	
Project director prepares and submits interim report to IMLS with help from the special assistant to the executive director	