



Museums for America

Sample Application MA-30-19-0673-19
Project Category: Collections Stewardship and Public Access

Georgia O'Keeffe Museum

Amount awarded by IMLS:	\$187,825
Amount of cost share:	\$188,475

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 FY2020 Museums for America grant program differ from those that guided the preparation of FY2019 applications. Be sure to use the instructions in the [FY2020 Notice of Funding Opportunity](#) for the grant program and project category to which you are applying.

The Georgia O'Keeffe Museum (the O'Keeffe) respectfully requests funding from the Institute of Museum and Library Services Museums for America grant to increase public access to our collections via high quality images of these assets, which will feature in the digital infrastructure available through the website and multiple interpretive functions, enhancing the visitors' experiences. As a museum dedicated to one of the most significant artists of the twentieth century, public accessibility to high-quality images of Georgia O'Keeffe's artworks is vital.

The majority of the Museum's current digital images are scans of photographs from over twenty-five years ago. Originating from film, many of these digital images show scratches and dust. Others require color correcting. Some images lack professional origins. In late-2018, the O'Keeffe realized the goal of using Linked Open Data to fundamentally change the integration of our distinct collections, which include fine art, archives, and photography, in addition to O'Keeffe's personal property, such as her two homes, wardrobe, and art supplies. Now that the Museum has made the technological leap in data management, it needs high-quality images to activate tools that include detailed image viewing.

The Museum has engaged the services of a field expert in cultural heritage digitization as a project consultant. With the O'Keeffe's curatorial and collections teams, the consultant devised digitization strategies, including staffing and logistics, to work with our unique constraints, such as geographic location, image standards compliance, workspace limitations, and ongoing collection digitization. Accessing contractors with appropriate caliber equipment and skill set is challenging, given the relative remoteness of Santa Fe, New Mexico, and the historic properties. The Museum proposes to create the highest resolution imaging currently in practice, complying with federal agencies' guidelines. Although technological advances are fast moving, imaging for this project will meet the upmost archival standards, estimated to remain in effect for at least 10 years.

Due to the variety of collections, the O'Keeffe has created a specific strategy for each capture based on object media, primarily: oil on canvas, paper, photography, and textiles. In the proposal, four work sprints are outlined. These involve two different photographers, each documenting the fine art collection, and items from the personal property category, which require distinct capabilities. The Museum has additionally requested funding for a medium-format camera, associated equipment, and training to outfit and operate a photography studio on-site for image capture of the entire fine art photography collection. Moving forward, staff can then produce imaging of photography acquisitions and archives.

Increasing public access is vital to the Museum's mission of inspiring current and future generations, by preserving, presenting, and advancing the artistic legacies of Georgia O'Keeffe and Modernism. The scope of this project represents objects of the cultural and artistic significance: 141 oil paintings, 1,156 fine art photographs, 204 works on paper (pastels, charcoals, and watercolors) in the fine art collection, and a selection of 70 representative objects from the personal property collection. At the project's conclusion, high-quality images for 1,571 collection objects will be available through the Museum's digital infrastructure platform, publicly accessible via the gokm.org website and available for free search and discovery, as well as detailed zoom viewing and personal downloads. Significantly, O'Keeffe staff will have the tools for onsite digital capture, advancing our collections stewardship and accessibility, by updating collections object records with current imaging.

1. PROJECT JUSTIFICATION

What we propose to do: The Georgia O’Keeffe Museum (the O’Keeffe) respectfully requests funding from the Institute of Museum and Library Services in the amount of \$187,825 to produce Federal Agency Digital Guidelines Initiative (FADGI) compliant images and training, and accomplish image capture of two distinct areas of the Museum’s collections: fine art and personal property. (SD #1: Glossary of Terms). The O’Keeffe seeks support to create high-quality digital captures for a substantial part of our fine art collection: oil paintings, watercolors, pastels, and charcoals. Prior efforts digitized the majority of these objects by scanning film transparencies in the 1990s. While an efficient and appropriate strategy at the time, the resulting digital captures are of inadequate quality for contemporary archival documentation and reproduction standards. The O’Keeffe additionally wishes to obtain images for a representative sampling of the personal property collection, specifically furniture and art/source materials. At present, the Museum has only reference images of objects from these categories. Should this proposal be successful, the Georgia O’Keeffe Museum will be the only cultural organization in New Mexico with the caliber of equipment necessary to create reproduction master files, making the Museum an important statewide resource.

Thanks to funding by the Institute of Museum and Library Services, the O’Keeffe recently concluded a two-year digital infrastructure project grant, which has drastically improved the integration of our collections across the organization through linked open data. First introduced in 2016, the Museum’s digital assessment management system (DAM) currently provides access to 1,985 assets from the Museum’s fine arts collection, 3,549 images of the artist’s personal property, and 28,119 assets derived from the archives. The images in this repository are of varying states of quality. Using the DAM to supply assets, the O’Keeffe is now in the beta testing stage of a digital infrastructure structure with plans to make it publicly accessible through the Museum’s website in early 2019. High-quality images of our collection are requisite to realize the full potential of this platform, which includes functionality such as image delivery; detailed zoom viewing; and complete collection discovery freely available for viewing, research, and online study. Increasing accessibility to all audiences—in person and virtually—enables the Museum to meet the mission to inspire all current and future generations, by preserving, presenting, and advancing the artistic legacy of Georgia O’Keeffe and Modernism.

The need, problem, or challenge the project addresses: As a museum dedicated to one of the most significant artists of the twentieth century, public accessibility to accurate high-quality images of Georgia O’Keeffe’s artworks is vital. Best known for her abstractions, large-scale flower depictions, New York City cityscapes, and New Mexican skies, canyons, and architecture, O’Keeffe’s paintings are characterized by line, color, and composition. Visual inspection of original artworks reveals artistic techniques obscured by the low fidelity of our current images. Currently, 90% of oil painting images are derivatives from transparency scans produced for *Georgia O’Keeffe: Catalogue Raisonné* (1999). Because these images originated from film, the film grain is indistinguishable from the canvas texture and medium. At the time of production, the only tool available to adjust color accuracy was the use of gray scale and color control patches for manual calibration. Consequently, these images show residue of the analog digital transfer, require color correction, and are of low resolution. Over the years, a

selection of artworks has received new drum scans and color-corrected proofs, with only 13 objects being re-photographed recently. This ad hoc approach to digitization has created inconsistencies in quality, making it difficult to discern the veracity of images to artwork, resulting in unreliable visuals for scholarly research, publication, and reproduction. Additionally, the O’Keeffe has only reference images of the rich and varied belongings from her homes. (SD #2: Objects Requiring New Photography).

Importantly, this project builds internal capacity and literacy surrounding effective professional practices for digital capture, asset management, and dissemination. In addition to working with two professional photographers to acquire new photography of personal property and fine art, specifically, paintings—the most technically demanding material to photograph—the O’Keeffe has employed the services of noted cultural heritage digitization consultant, Erik Landsberg, to identify equipment, workflow, and training so that staff can produce high quality imaging of the fine art photography collection. (SD #3: Letter of Commitment from Erik Landsberg). Noted photographers include Ansel Adams, Alfred Stieglitz, Todd Webb, and Tony Vaccaro.

Project beneficiaries:

Collections: The scope of this project is the first tier of imaging priorities that encompasses 141 oil paintings, 1,156 photographs, and 204 works on paper (pastels, charcoals, and watercolors). First tier imaging comprises our most heavily demanded images, also those of the highest cultural and artistic significance. To capture accurate images, artworks require un-framing. As a number of items from the fine arts collection are fragile, require limited light exposure, and/or are undergoing conservation, it is the best interest of the artwork to produce preservation master files, which represent the highest possible imaging, in order to prolong the lifespan of the digitized images and minimize future handling. The files produced by this project are 100-400 megapixels, the highest resolutions currently available. While future technology developments are unknown, the estimated lifespan for images is 10 years. The first tier also includes 70 objects classified as personal property, from Georgia O’Keeffe’s two homes in Abiquiú and Ghost Ranch, New Mexico. While these require a lower and less time-consuming image standard, these objects, which include furniture and emblematic sampling of art/source materials, benefit from staging for context. (SD #4: Collections Photography Priorities).

General Audience: The O’Keeffe will utilize products of this project for multiple interpretative functions that enhance the visitor experience: didactics, signage, in the members’ magazine, and digital infrastructure. As with other museums, only a percentage of our collection is on view at any given time. Comprehensive search and discovery on the digital platform will allow visitors to experience the entire O’Keeffe collection, not available elsewhere. As most people experience O’Keeffe’s artworks as reproductions, high-quality images also support print and digital publications.

Educators/Scholars: As the O’Keeffe holds copyright to most of Georgia O’Keeffe’s artwork, the Museum is the first destination for educators and scholars seeking fair use images from our collection. Additionally, the O’Keeffe regularly collaborates with other museums by lending artworks to nationally and internationally significant exhibitions of Georgia O’Keeffe, and provides accompanying image files for purposes such as scholarly exhibition catalogues. (See SD #5: Letters of Support from Joanna Groarke, Dr. Wanda Corn, and Dr. Amy Von Lintel).

Advancing the O’Keeffe’s strategic plan: In 2017, the O’Keeffe’s Board of Trustees and senior management revised the strategic plan and agreed upon six initiatives. This project advances each of these initiatives, both directly and indirectly. As most of Georgia O’Keeffe’s oeuvre is under copyright, high-quality images support revenue from Art on Demand print products and a rights and reproductions program, netting a combined \$227k per year, contributing to our financial position. The project will benefit the visitor experience, grow a culture of learning, and expand our commitment to the community, initiatives two, four, and five, with accurate images of the fine art collection for study and pleasure, utilized by general audiences, scholars, and available to local teachers free-of-charge in downloadable resource kits. The project strengthens our collections management, touched on in initiative three, through compliance with guidelines for digitizing cultural heritage materials. Finally, a reliable image bank increases staff efficiency for the accomplishment of the O’Keeffe’s priorities, objective six. Additionally, in 2018, each of the three Museum divisions adopted their own specific objectives. This project aligns with Collection and Interpretation Division’s objective to acquire professional quality digital assets. (SD #6: Letter of Support from Director Robert Kret).

Museums for America program goal and accessibility alignment: Since the Museum was founded in 1997, it has welcomed more than 3.84 million visitors worldwide and has become the most frequented art museum in New Mexico. In 2017, the O’Keeffe received 189,000 combined ticketed visitors to the Santa Fe museum galleries and Abiquiú home and studio tours. The same year, the O’Keeffe website recorded 487,000 user sessions. This investment in the infrastructure dramatically increases accessibility for people unable to visit the museum. This is especially true for access to the Abiquiú home. Due to seasonal availability, advance ticketing, and remote location, the historic property receives fewer than 9% of the visitors than the Santa Fe galleries, yet contains O’Keeffe’s personal possessions, of great interest to general audiences and scholars alike. Aligning with the Museums for America goal to increase public access, using the O’Keeffe’s website as a portal to high quality images presents our collection in its full vibrancy and detail. Significantly, this project progresses the O’Keeffe’s collections management, creating systems and processes for future digitization, updating 1,571 object records with federally compliant images. The O’Keeffe built the digital infrastructure with accessibility in mind. A “browse” component makes the data usable to a non-technical audience, and item level descriptions serve low-to-no-sighted audiences.

2. PROJECT WORK PLAN

Specific activities, including evaluation and performance measurements: This project involves digital capture of treasured objects from the O’Keeffe’s collection according to specific technical protocols for execution, quality, storage, and accessibility.

Pre-digital stage/equipment purchase: Two main activities will need to occur prior to image capture and ingest of FADGI-compliant digital assets. (1) All legacy assets need labels with use restrictions detailing that borrowers may only use the assets for reference purposes only. (2) Asset management systems and file servers will need restructuring or augmentation to accommodate the anticipated digital assets, with additional metadata fields to align with

FADGI-compliant schemas. The O’Keeffe will purchase recommended equipment. (See SD #7: Equipment).

Work sprints: The O’Keeffe has defined and designed four distinct image capture sessions to minimize impact on the collection, visitation, and to maximize staff and contractor time. (1) The first sprint takes place in Georgia O’Keeffe Museum on Johnson Street. During this period, a gallery is stanchioned and the space re-purposed as a photography studio. The collections team will remove and document each of the artworks on view at a rate ten artworks per day, to account for un- and re- framing. Sprints (2) and (3) take place in the Museum’s vault and include image capture for artworks not documented in the first sprint, focusing primarily on works in the vault and therefore will have an expected rate of 15-30 artworks per day with paintings being a slower throughput than works on paper. The O’Keeffe will adapt the Museum’s vault located alongside the conservation lab for this purpose. The final sprint (4) addresses 70 three-dimensional items of personal property located in Georgia O’Keeffe’s Abiquiú Home and Studio.

Training: Image capture training for the fine art photography collection is planned during year one. Consultant Erik Landsberg will provide this training, so that Rana Chan and other O’Keeffe staff may gain the expertise necessary to address the fine art photography collections during Activity 7. After the grant period concludes, Rana Chan address the archival materials and future 2-D acquisitions in Tiers II and III.

Evaluation and performance: The motto “capture once, output many” guides the creation of a preservation master from which derivatives will automatically generate as needed. The collections team will archive three versions of each capture in the digital asset management system (DAM), and will attach corresponding object record in the collection management system (CMS). Color profiling procedures utilized throughout the workflow will use standards publicized by the International Color Consortium (ICC). Digital image capture for the project will comply with FADGI for still images, at minimum achieving a 3-star rating in all parameters, and optimally achieving the highest 4-star rating where applicable, e.g. Color Encoding Error, Total Noise, and Illumination Uniformity. Prior to full ingest into the DAM, a final review by curatorial staff will confirm image orientation and cropping.

Image file creation and distribution: The file outputs include: RAW file, including Digital Image Conformance Evaluation (DICE) target, required by the FADGI; TIFF master file, 16 bit-per-channel, that includes DICE target, and manual color correction by the photographer; and a TIFF presentation master file, 16 bit-per-channel, cropped slightly outside the edge of the artwork (eliminating the target and card), in a manner suitable for presentation. The RAW and the TIFF with DICE target may together be considered the preservation master. Camera metadata will automatically copy into the image file’s International Press Telecommunications Council (IPTC) header panel. Additionally, artist name, registration number, photographer, software used, and other administrative metadata will record in the IPTC panel. The Digital Asset Management system will store three versions of each capture, deriving and delivering assets at the appropriate resolution for various uses.

Project’s maturity level: The O’Keeffe identifies this project as mainstreaming. In advance of the grant period, the curatorial department held meetings to define photographic priorities. Accompanying these meetings, the digital team completed a collections photography assessment that identified the percentage of objects in each category with professional images, and defined parameters for measuring quality. Beginning in October 2018, the Museum started consulting with Erik Landsberg, who provided internationally recognized technical protocols for the still image digitization of cultural heritage materials and three possible workflow/cost strategies to meet the O’Keeffe’s imaging goals. The equipment acquisition and staff training in medium format camera digital capture positions the O’Keeffe Museum as a national resource. Lastly, the tangible products of this project will be publicly available to a global audience.

Project risks: As much as possible, staff have identified project risks through a series of internal meetings to discuss risk mitigation. They associated risks with the transport, handling, and security of the fine art collection; limited light/heat exposure, and preparation for photography. Importantly, the O’Keeffe has resolved risks associated with meeting current imaging standards and employing appropriate equipment by hiring a field expert as project consultant.

Key personnel for planning, implementation, and management: The following people will be involved in project planning: Liz Neely, Curator of Digital Experience; Rana Chan, Digital Assets and Right Coordinator; and Stephanie Wilson, Project Manager, Collections and Interpretation. Individuals who will implement workflow will be: Rana Chan; Judith Chiba Smith, Registrar/Collections Manager; Dale Kronkright, Head of Conservation; Jason Malone, Preparator. Additionally, it is anticipated that two professional photographers will be contracted in this project, one with expertise in fine art photography and one with expertise in 3-D object photography. Contracted photographers will conduct this specialized work as it requires a level of expertise not easily trainable. In addition, due to the rural nature of New Mexico, local photographers are not available with the required expertise; therefore, it is necessary to plan for their travel. (SD #8: Project Staff and Consultants). Liz Neely is responsible for broad level management. Consultant Erik Landsberg will ensure quality assurance and provide training to Rana Chan and other O’Keeffe staff for in-house photography of 2-D works on paper (i.e. photographs).

Activity timing and sequence: Activity 1: Pre-digital stage, November 2019 - December 2019. Activity 2: Work Sprint 1, January 2020 - February 2020: Approximately 85 works from the fine art category. Activity 3: Training, April 2020: Training staff on in-house reproduction image creation. Activity 4: Work Sprint 2, May 2020. Approximately 83 oil paintings. Activity 5: Work Sprint 3, August 2020. Approximately 177 works on paper (watercolors, pastels, and charcoals). Activity 6: Work Sprint 4, January 2021 - February 2021. All 70 objects from the personal property category. Activity 7: Ongoing fine art photography image capture produced in-house, April 2020 – November 2020. All 1,156 fine art and historic property images. Activity 8: Project closeout, month of March 2021.

Required resources: In addition to enlisting key staff and hiring Erik Landsberg for training and quality assurance, the O’Keeffe will contract an additional preparator to handle collection objects as detailed in the activities. Should this project be awarded funding, a call for photography proposals will be posted on the specialized online discussion group, Image Muse. The work plan reflects timing considerations, such as gallery visitation, workspace availability, exhibition loans, and staff availability. Due to these factors, activities are arranged in four work sprints, allowing staff to focus on digitization for defined timeframes that maximize contractors’ and staff availability and workspace. Consequently, the timeline reflects four sprints to accomplish tier I photography priorities.

Progress tracking: In the planning phases leading up to the four work sprints, key personnel will meet on a monthly basis to discuss evolving issues. During the sprints, when half of key staff are actively engaged in the digitization process, Rana Chan will record the project’s progress. Rana Chan will track and report via weekly email the number of objects available for print publishing in the DAM and for digital publishing from the IIF server, as well as the velocity of an image moving from initial capture to being ready for publish. After the first sprint has concluded, the full group will meet for a de-brief, and to modify the budget and workflow for the next sprint. Throughout the process, the O’Keeffe will consult with Erik Landsberg for quality assurance.

Result sharing: The Museum approaches this digital capture project to also serve as a model for other single-artist research portals and repositories; therefore, the Museum’s senior management intends to share the project’s results, lessons learned, and other relevant information widely with other institutions and the public. The Museum will present at appropriate museum conferences (such as the Museum Computer Network and Museums and the Web conferences), host workshops to introduce the model with colleagues, highlight the project on the Museum’s social media platforms, and encourage the Museum’s team to be open to working informally with colleagues from other institutions. Finally, as the end product will be an application programming interface and open access to the collections, the O’Keeffe will tangibly share the results with all of the Museum’s audiences, including the creation of a technical manual.

3. PROJECT RESULTS

Description of project success, including data collected and reported:

Success criteria 1: Generate high-quality digital captures adhering to image protocols for 100% of Tier I objects: fine art (1,501) and representative samples of select personal property (70). The number of digital images captured will be documented in the final report.

Success criteria 2: Prepare and disseminate image captures to distribution channels with proper metadata. For print publishing, assets will be accessible to all Museum staff and appropriate partners in the DAM where each asset has proper metadata and ICC color profile information to ensure accuracy by printers with minimal staff effort. The DAM allows O’Keeffe staff to quickly share these images and their metadata with printers and those to whom the Museum has granted rights to publish the images. For digital publishing, the O’Keeffe will

publish the newly captured high-quality digital assets and associated profiles to the Museum’s International Image Interoperability Framework (IIIF) server to allow for multiple public and internal uses.

Success criteria 3: Build internal capabilities and literacy for digital capture and dissemination to ensure sustainability beyond the grant period. Through this project, the O’Keeffe staff will increase its knowledge and proficiency to ensure sustainability of the project. This capacity building ensures that any work done internally (on copy stands) or future imaging projects for new acquisitions will continue to meet all established standards for accurate preservation masters.

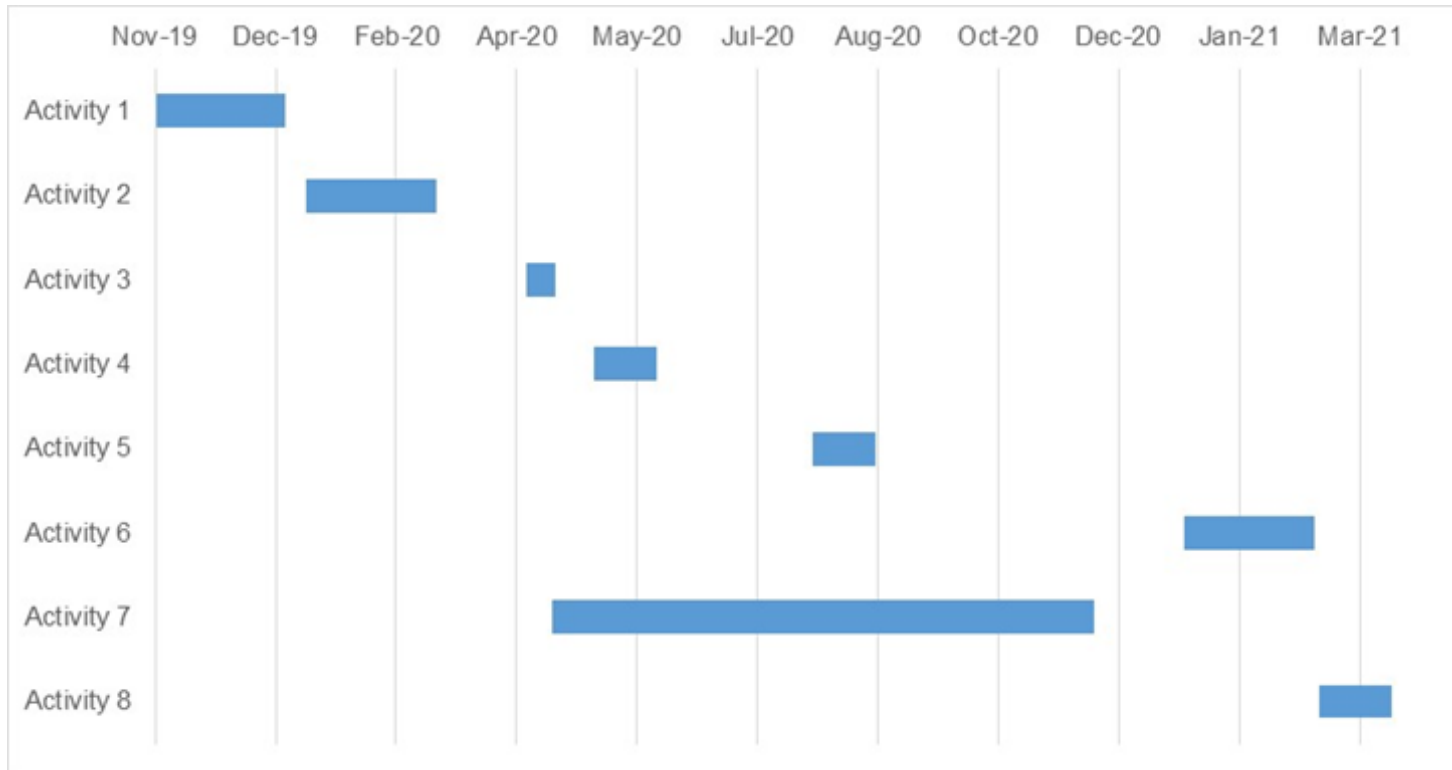
Improved accessibility to the O’Keeffe: Over the last few years, the O’Keeffe has invested in its digital and publishing infrastructures to provide processes for greatly increasing access to its collections by: implementing a digital asset management system (DAM) to manage digital assets; adopting the International Image Interoperability Framework (IIIF) to provide a platform for image dissemination; and developing a linked data browser to provide access to the IIIF images accompanied by object metadata. The organization has also increased staffing in these areas by hiring a Curator of Digital Experience as well as a Digital Assets and Right Coordinator. With these infrastructures and staff in place, the demand for high-quality images has never been stronger. This project aims to provide quality image assets to these delivery platforms and meet the needs for interpretive and scholarly use of the collection images.

Intended results: Project results are threefold. First, to meet the highest of museums’ capture standards, and facilitate accurate reproduction and usage for print and digital purposes, such that these works do not need to be unframed and re-photographed more than necessary. Second, building internal capacity via training from Erik Landsberg for internal creation of FADGI compliant images. Third, begin building an image bank of professional images of personal property from O’Keeffe’s homes.

Tangible products resulting from project: Full resolution, uncompressed, uncropped TIFFs with color targets (_CC) will be provided for any high-quality print usage. Appropriately lowered resolution files will be derived from the cropped-for-presentation full resolution TIFFS (_CCCR) and will be provided in JPEG format and as IIIF as access copies for broader use, for instance the O’Keeffe’s website. The O’Keeffe will retain _RAW images for use as backup, in the event that processing artifacts are observed in any TIFF files.

Sustainability: This project is a catalyst. Fine art and personal property photography requires a very specialized skill set, not readily available. This project will allow the O’Keeffe to essentially “catch up” with current standards. Additionally, it is important for the Museum to build its capacity to document the types of assets that are anticipated to make up the bulk of our collection growth: photographs. Equipment and training will sustain the value of this grant via in-house expertise in 2-D imaging, so that we may also share it with our local peers. The O’Keeffe will document the workflow developed to serve as a technical manual, so that staff may capture future images using the same protocol, standards, and procedures established in this project.

FY19 IMLS Museums for America, Collections Stewardship and Public Access
 Georgia O’Keeffe Museum
 Schedule of Completion



KEY	
Activity 1	Pre-digital stage and equipment purchase
Activity 2	Work Sprint 1 - Works in galleries
Activity 3	Imaging training
Activity 4	Work Sprint 2 - Oil paintings in vaults
Activity 5	Work Sprint 3 - Works on paper in vaults
Activity 6	Work Sprint 4 - Personal property objects
Activity 7	On-going fine-art photography image capture
Activity 8	Project closeout