

**Award Number:** P14AC01070

**Project Number**: NAU-450

**CFDA #:** 15.945

**Park/NPS Unit:** Acadia National Park

**Title of Project:** Leveraging Digital Methods for Historical Interpretation

**Administered through the:**  Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number P14AC00921

**CESU Partner:** Northern Arizona University

**PROJECT CONTACTS:**

**Principal Investigator:** *Michael Matthew Kelly, School of Earth Sciences and Environmental Sustainability, Northern Arizona University, P.O. Box 4099, Flagstaff, Arizona 86011, (phone) 928-523-5044, (fax) 928-523-7423, (email)* *michael.kelly@nau.edu*

**Partner Administrative Contact*:*** *Cindy Judge, Grant and Contract Administrator, Office of Grant and Contract Services, Northern Arizona University, 1298 S. Knoles Dr., ARD Bldg. 56, STE. 240, Flagstaff, Arizona 86011-4130, (phone) 928-523-6917, (fax) 928-523-1075, (email)* *cindy.judge@nau.edu*

**NPS Certified ATR:** *Christie Denzel Anastasia, NPS DOI ACAD, 207.288.8806,* *Christie\_anastasia@nps.gov**; Post Office Box 177, Bar Harbor, ME 04609*

**FUNDING INFORMATION:**

**Amount Funded:** $29,998.00

**NPS Account Numbers (amounts in parentheses):**

Cost Center:  PPNEACAD00

Functional Area:  PFE00FEPR.I00000

WBS Element:  PH.P0187309A.01.7

**Fund Source (e.g., ONPS, FLREA, CRPP, CESU, etc.): FLREA**

[x] NPS Funding

[ ]  Is this funded using a reimbursable account number? If yes, IMR contracting needs a copy of the Interagency Agreement.

**PROJECT DATES:**

**Start Date:** October 1, 2014

***NOTE: This Task Agreement will become effective on the date of final signature or the effective date of the Award document, whichever is later.***

**End Date:**  December 31, 2016

**NPS Administrative Contacts**

**Interim CESU Coordinator**: Dr. Todd Chaudhry, Northern Arizona University PO Box 5765 Flagstaff, AZ 86011-5765

Phone: (928) 523-6638, Fax: (928) 523-2014 Todd\_Chaudhry@nps.gov

**Intermountain Region Administrative Contact:** Kelly Adams, Grants and Agreements Specialist, National Park Service, 12795 West Alameda Pkwy, Lakewood, CO 80228. Phone: 303-969-2303 Fax: 303-969-2992 Email: Kelly\_adams@nps.gov

**FEDERAL FINANCIAL REPORTS AND DRAWDOWN SCHEDULE:**

***Federal Financial Reports*** (Check as required for project based on spending plan, period of performance, risk, cooperator history, etc.)

{X} Quarterly { } Semi-annually { } Annually {X} Final

**Project SCHEDULE AND TECHNICAL REPORT DEADLINES:**

List all technical reports and products in sequential order as required in the scope (more lines and milestones can be added as needed):

*Project Start Date* – October 1, 2014

*Technical progress reports –* { } Quarterly {X} Semi-annually { } Annually

*Final design product provided to the NPS ATR* – October 31, 2016

*Draft Final Report* – October 31, 2016

*Final Report* – December 1, 2016

*Project End Date* – December 31, 2016 (project reports/deliverables are due)

*Final SF425 FFR* must be submitted within 90 days of project end date

**PAYMENTS**

**2 CFR PART 215.22*:*** Cash advance (drawdown) to recipient organization shall be limited to the minimum amounts needed and be timed to be in accordance with the actual immediate cash requirements of the recipient organization in carrying out the purpose of the approved program or project. The timing and amount of cash advances shall be as close as is administratively feasible to the actual disbursements by the recipient organization for direct program or project costs and the proportionate share of any allowable indirect costs.

**2 CFR PART 215.25 (8)(e)(1):** Incur pre-award costs 90 calendar days prior to award or more than 90 calendar days with the prior approval of the Federal awarding agency. All pre-award costs are incurred at the recipient’s risk. (i.e. the Federal awarding agency is under no obligation to reimburse such costs if for any reason the recipient does not receive an award or if the award is less than anticipated and inadequate to cover such costs.)

**CESU REQUIRED PRODUCTS (may be different from those products required by the ATR – See Statement of Work for Products required by the NPS unit):**

The Principal Investigator will prepare a brief report abstract suitable for public distribution and two hard copies and an electronic version (in PDF file format) of the final report and mail all to Dr Todd Chaudhry, National Park Service, CPCESU, NAU P.O. Box 5765, Flagstaff, AZ 86011. Please be sure to include the project number (e.g.; NAU-###, UMT-###, UAZDS-###) and the P number on the cover page of the final report.

**PROJECT ABSTRACT:**

Acadia National Park (ACAD) staff will work together with Northern Arizona University (NAU) personnel on the digital interpretation of the George B. Dorr estate site at the Acadia National Park. NAU staff will modify existing mobile device interpretive software developed previously by the PI to address the unique interpretive opportunities and challenges of the Dorr estate.

**Scope of Work:**

Working together, NAU and ACAD staff will review the interpretive goals of the current programs for the Dorr estate, and develop strategies and best practices for leveraging existing efforts with smart device digital methods. The NAU Principle Investigator (PI) has over 10 years of experience creating NPS exhibit designs across the country, including visitor-centered design projects at Acadia National Park and mobile interpretive projects at Colorado National Monument, Bents New Fort National Historic Site and Sand Creek Massacre National Historic Site. The PI will hire an NAU graduate student to work on the project in order for the student to gain practical experience, and to help conduct research on how park staff adapt to new media approaches to interpretation.

This interpretive effort would be delivered through the park visitor's own smart device using an application that they will download before they come to Acadia, or at the park using the public wireless system available at two park locations.

In pre-scoping meetings NAU and ACAD staff proposed several ways of facilitating this interpretation:

* Using Augmented Reality, a realistic model of the outside of the main house would be displayed when the visitor views the old foundation area through their own smart device camera. This would allow multiple views of the main house from different angles. Voiceover and ambient sounds could be cued to different viewpoints. NPS staff indicated that enough high-resolution images of the main house exist from different angles so that an overlay texture can be developed for the 3d model that will add realism.
* Displaying high-resolution photos of the main house exterior and interior on the smart device when the visitor is in the location that the photo was taken to give a sense of the beauty of the house. Voiceover and ambient sounds could be cued to different viewpoints.
* Cueing recordings of "historic" contrived conversations and ambient sounds to the visitor depending on where they are in the main house. A simple "you are here" floor map would allow the visitor to also switch from the first to second and third floors to experience what life might have been like throughout the main house.

Northern Arizona University tasks:

* Conduct an on-site inspection and collect GPS, signal strength and photographic data for use in the application.
* Lead a mini-charrette with staff to develop a strategy for leveraging existing media and existing interpretive material already developed for the site.
* Provide written suggestions for equipment purchases if necessary for the project.
* Modify existing mobile software frameworks, previously developed by the PI to fit the goals of the Dorr Estate project.
* Ensure that software design, layout, and formatting in the final designs will conform to official NPS media standards.
* Aid the park in the publication of any mobile software developed.
* Submit semi-annual progress reports to the ATR, due December 1, 2014 and June 1, 2015.

Acadia National Park tasks:

* Review documents and photographs and produce a comprehensive finding aid of the historical resources for the estate.
* Purchase one-time use fee rights for any photograph or document belonging to another institution that will be used in the designs.
* Provide the PI and graduate student with digital text, digital photographs, digital video and digital audio required for completion of the digital products.
* Review draft digital products sent by the PI and/or graduate student and provide comments within 30 days of receipt.
* Approve the final product.

**COOPERATIVE AGREEMENTS OR TASK AGREEMENTS INVOLVING COOPERATORS WORKING ON-SITE**

**Background**

In cooperative agreements or task agreements with universities where the university utilizes interns, student employees, research associates (RAs) or cooperators on-site (hereafter called “cooperator personnel”), these cooperator personnel sometimes work on government sites in close proximity to federal employees. It is illegal (without specific statutory authority) for federal employees to directly supervise the cooperator personnel or any university employees or for the students or other university employees to supervise federal employees. When cooperator personnel are working on an NPS site, it is important that there is a clear distinction between students and federal employees.

**Office Environment and Vehicles**

* The office space of the cooperator personnel and NPS personnel should be clearly labeled (name and NPS or University affiliation on office or cubicle space).
* Cooperator personnel should be listed separately from NPS personnel in telephone lists, other identification or organizational rosters, and publication credits.
* Cooperator personnel should not receive “all-employee” e-mail or other communications intended for NPS personnel (unless it relates directly to the work the cooperator is doing for the NPS). When the e-mail does relate to the work being done, a copy of the same e-mail message should be sent to the University or cooperator’s supervisor.
* Cooperator personnel may use NPS e-mail systems when the communication relates directly to the work the cooperator is doing for the NPS. The e-mail addresses of the cooperator personnel must include a label associated with their NPS e-mail address that identifies the cooperator’s status (i.e., “Linda Webb, Cooperator” would be the label associated with the e-mail address, linda\_webb@contractor.nps.gov). Doing so clearly identifies this individual each time they send an e-mail message using the NPS system, and it identifies their status as a research associate, student intern or student employee in the e-mail directory.
* Unless stipulated in the agreement, cooperator personnel should not drive government vehicles.
* Unless stipulated in the agreement, cooperator personnel should not ride as a passenger in a government vehicle. When this is planned as part of the agreement, an appropriate amount of liability insurance should be negotiated.
* Prior written approval by the Park Superintendent or Center Manager must be obtained in order for a task to allow cooperator personnel to drive or ride in government vehicles.

**Supervision and Scheduling**

* Each task must specify the university’s/cooperator’s supervisor for the cooperator personnel.
* Unless stipulated in the agreement, NPS staff should not set hours for cooperator personnel, specify where the work should be done, or conduct performance appraisals. National Park Service staff may give performance feedback to the cooperator personnel supervisor.
* Cooperator personnel should report leave, scheduling, and other related issues to the university or cooperator’s supervisor, not to NPS employees. The supervisor of the cooperator personnel should then communicate with the NPS. National Park Service employees cannot directly supervise cooperator personnel on a day-to-day basis. Work should be given to the cooperator personnel (via the cooperator’s supervisor) on a “task basis.” Cooperators should work without NPS supervision to accomplish each task, although technical consultations and cooperation is permissible.
* The Cooperator will be responsible for any disciplinary action needed to correct student employee conduct or performance problems. The NPS agreements technical representative will inform the university/cooperator’s supervisor of any conduct or performance problems.
* The Cooperator will remove student employees from their positions if they fail to improve performance or address conduct issues.
* The NPS will review and provide feedback to students or interns regarding work assignments.
* The NPS will inform the cooperator of conduct or performance problems with cooperator personnel so that the university can counsel employees and correct the performance problems.
* The NPS will recommend to the cooperator dismissal of cooperator personnel based on conduct or performance issues.
* The Cooperator will hire students, interns or RAs to work on NPS tasks identified in the agreement. Hiring will be conducted in consultation with the NPS Agreements Technical Representative (ATR).
* The Cooperator will: pay students, interns or RAs for hours they have worked in support of the agreement.

**Representation and Communication**

* Cooperator personnel cannot in any way represent themselves to the public as NPS employees.
* Cooperator personnel are required to wear visible identification at all times.

**Other Issues**

* Cooperator personnel should not list an NPS affiliation on publications, but rather should list the cooperative agreement under which the work was performed.
* Cooperator personnel should not be invited to official NPS “social” events.
* Cooperator personnel will follow the local policy of the facility when federal facilities are closed due to early release for holidays, snow days, etc.

**PRODUCTS:**

* A mobile device framework for providing digital interpretation around the Dorr Estate.
* Two (2) semi-annual reports on progress made during the project: due December 1, 2014 and June 1, 2015.
* One (1) final electronic report to the NPS ATR due on December 31, 2015. Hardcopies of report delivered to CPCESU.