NEH Application Cover Sheet
Digital Humanities Start-Up Grants

PROJECT DIRECTOR
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Field of expertise: U.S. History

INSTITUTION
Cornell University
Ithaca, NY USA

APPLICATION INFORMATION
Title: Freedom on the Move: A Crowdsourced, Comprehensive Database of North American Runaway Slave Advertisements
Grant period: From 5/1/2015 to 4/30/2016
Project field(s): U.S. History; African American History

Description of project: Freedom on the Move (FOTM) creates a digital resource from an estimated 100,000 runaway slave advertisements from pre-1865 U.S. newspapers. Placed by enslavers when enslaved people attempted to escape, these ads included extensive information about fugitives. They comprise the richest source of information about enslaved individuals in the United States, yet no comprehensive collection of them exists. FOTM will collect these ads and use crowdsourcing to parse their data into a database, enabling sophisticated new analyses of the history of U.S. slavery. A crowdsourcing interface will provide a site for public engagement with an enduring national trauma, supporting lessons for K-12, university, and museum education. The database will be freely available for browsing and exportable for research. NEH start-up funding will enable us to build tools for incorporating large-scale data from contributors, creating a prototype for future expansions of this and similar digital resources.

BUDGET
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<th>Outright Request</th>
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<td>Cost Sharing</td>
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<td>Total Budget</td>
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GRANT ADMINISTRATOR
Columbia J. Warren
Office of Sponsored Programs
Grant & Contract Officer
Cornell University
Ithaca, NY 14850-2820
USA
E-mail: cjw43@cornell.edu
Phone(w): 607-255-0655
Fax: 607-255-5058
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</tr>
<tr>
<td>• Appendix 4: Evaluation Criteria and Evaluation Methods</td>
<td>I-10</td>
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</table>
Attachment B. Freedom on the Move: List of Participants

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>INSTITUTIONAL AFFILIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROJECT PARTICIPANTS</strong></td>
<td></td>
</tr>
<tr>
<td>Edward E. Baptist, PI</td>
<td>Cornell University – Associate Professor, History</td>
</tr>
<tr>
<td>William C. Block, Co-PI</td>
<td>Cornell University – Director, Cornell Institute for Social and Economic Research</td>
</tr>
<tr>
<td>Madeleine Casad</td>
<td>Cornell University – Curator for Digital Scholarship, Cornell University Library</td>
</tr>
<tr>
<td>Jason Kovari</td>
<td>Cornell University – Metadata Librarian, Humanities and Special Collections, Cornell University Library</td>
</tr>
<tr>
<td>Michelle Paolillo</td>
<td>Cornell University – Project Manager/Business Analyst, Cornell University Library: Digital Scholarship and Preservation Services; Archival Repository; HathiTrust</td>
</tr>
<tr>
<td>Jeremy Williams</td>
<td>Cornell University – Software Engineer, Cornell Institute for Social and Economic Research</td>
</tr>
<tr>
<td><strong>COLLABORATORS on Freedom of the Move Overall Project</strong></td>
<td></td>
</tr>
<tr>
<td>Mary N. Mitchel</td>
<td>University of New Orleans - Professor</td>
</tr>
<tr>
<td>Joshua Rothman</td>
<td>University of Alabama - Professor</td>
</tr>
<tr>
<td><strong>ADVISORY BOARD MEMBERS</strong></td>
<td></td>
</tr>
<tr>
<td>Tim Causer</td>
<td>University College of London – Research Associate, Bentham Project</td>
</tr>
<tr>
<td>Steve Kelling</td>
<td>Cornell University – Director of Information Science for the Lab of Ornithology</td>
</tr>
<tr>
<td>Lincoln Mullen</td>
<td>George Mason University—Associate Professor, History</td>
</tr>
<tr>
<td>Adam Rothman</td>
<td>Georgetown University – Associate Professor, History</td>
</tr>
<tr>
<td><strong>EXPERTS – SUPPORT LETTERS</strong></td>
<td></td>
</tr>
<tr>
<td>Edward Ayers</td>
<td>University of Richmond - President</td>
</tr>
<tr>
<td>Drew Faust</td>
<td>Harvard University – President and Lincoln Professor of History</td>
</tr>
</tbody>
</table>
Attachment C. Abstract and Statements of Innovation and Humanities Significance

Abstract

“Freedom on the Move” (FOTM) creates a digital resource from an estimated 100,000 runaway slave advertisements from pre-1865 U.S. newspapers. Placed by enslavers when enslaved people attempted to escape, these ads included extensive information about fugitives. They comprise the richest source of information about enslaved individuals in the United States, yet no comprehensive collection of them exists. FOTM will collect these ads and use crowdsourcing to parse their data into a database, enabling sophisticated new analyses of the history of U.S. slavery. A crowdsourcing interface will provide a site for public engagement with an enduring national trauma, supporting lessons for K-12, university, and museum education. The database will be freely available for browsing and exportable for research. NEH start-up funding will enable us to build tools for incorporating large-scale data from contributors, creating a prototype for future expansions of this and similar digital resources.

Statement of Innovation

Teaching tool, research archive, and collaborative public history project: FOTM links many digital-humanities approaches while also connecting data-driven statistical methodology to interpretive research in primary documents. This grant will yield a new tool for ingesting data from multiple sources. This tool will be of value for constructing similarly comprehensive humanities resources, while also provisioning FOTM for eventual publication as linked open data.

Statement of Humanities Significance

Detailed information about individual enslaved African American people is rare. FOTM will develop the largest available “census” of such information. The data will be organized to enable new inquiries into the history and long-term impact of African-American slavery, bringing together humanities and social sciences and inviting the public into the process. In addition to educational programming, FOTM will promote collaboration with similar digital resources: documents, databases, and tools.
Attachment D. Narrative: Freedom on the Move

1. Enhancing the humanities through innovation

Between the first days of slavery in colonial North America and emancipation in the Civil War, enslaved people ran away from their enslavers. They did so for many reasons: to reach a place where they could be free, to hide from a violent enslaver, to get back to family, to gain some leverage in negotiation. After newspapers started to appear in the 18th century, enslavers began to place advertisements for the capture and return of their escaped human “property.” By 1865, we estimate from counts of some major newspapers, enslavers had placed approximately 100,000 such ads. These runaway ads, currently available in archived newspapers from the 18th and 19th centuries, are unique in the detail they provide about individual enslaved people, and in their number. The FOTM database will enable analysis of the information contained in the ads, including details about fugitives’ gender, height, skin color, skills, mannerisms, dress, states of origin, families, and suspected destinations. (See Appendix for examples.)

Data collected by FOTM will enable researchers to address four problems that particularly affect slavery studies, but which have implications for humanities research and education more broadly. The first problem is rarity of documentary evidence about the lives of individual enslaved people. Second is the inaccessibility of such evidence to non-specialists, despite broad public interest in slavery as an historical topic. Third is the lack of dialogue between proponents of different methodological frameworks for interpreting evidence. And fourth is the need for multidisciplinary approaches to understanding and teaching such significant, traumatic, and far-reaching histories.

Many recent projects in slavery studies have been small-scale, intensely-focused analyses. These studies have yielded advances in understanding the situational interplay of culture and power. Some phenomena, however, are more visible on the large scale, with large bodies of data that can be tracked across space and time. Examples might include resistance of enslaved people to cotton production, or to the massive forced migration that moved one million people from the older to the newer areas of the South between 1790 and 1860, long-term changes in marriage and kinship patterns, use of clothing and other consumer goods by the enslaved, or indicators of physical health, wellbeing, or violence.

FOTM’s innovative approach will allow users to “telescope” easily between statistical data points and individual source documents. Each runaway ad offers an inferential window onto one person’s experience of American slavery, rewarding interpretive close reading with a powerful story and a sense of human connection to the individuals whose resistance prompted the ads. Though written by enslavers, runaway ads are also a record of events caused by individual slaves’ unwillingness to remain enslaved. Far from excluding consideration of individual human stories (as data-driven research methodologies are occasionally accused of doing), FOTM keeps these stories central by design, relying on them as an asset for recruiting and retaining the crowd of contributors who will enter data and make the FOTM project a dynamic resource for teaching and public engagement, as well as historical research. Recognizing the American public’s deep and abiding interest in the historical trauma of slavery, our goal is to engage an extensive online community of users from all walks of life and all levels of experience.

Since no comprehensive “census” of information about African-American slaves yet exists in any form, FOTM will produce a significant addition to human knowledge. We also see the entire project as a prototype for new tools to break down barriers between public and scholarly engagements with American history, and between digital and traditional scholarly research. Users of the interface will also be able to browse the digital versions of escaped slave advertisements, or carry out data, text, or spatial analysis. They will be able to export data in a number of formats, such as CSV, SAS, SPSS, etc. We are even considering how best to represent the FOTM model as linked open data and publish it as a “semantic triplestore” that would allow researchers to expand their research questions into other disciplines and across disparate data sources. We are also mindful of the possibility of integrating FOTM’s digital collection of runaway slave advertisements into broader national platforms like NARA’s Citizen Archivist projects or the Digital Public Library of America (DPLA), and have molded our preliminary collection-sharing agreements on their model.
The proposal at hand focuses on creating a framework for collaboration between collectors of digital advertisements. We seek Level II Digital Humanities Start-Up funding to build infrastructure that will allow FOTM to unite the data produced by the efforts of multiple smaller-scale collaborators’ projects, including some legacy projects, into one collection formatted to support the kinds of analyses discussed above. Working with our partners and advisors, we will create protocols and workflows for integrating other runaway ad projects’ work with FOTM. This exercise will refine FOTM’s data model and data standards, lay the groundwork for publishing our information as linked open data, expand our archive of available advertisements, and, above all, greatly facilitate current and future collaborations. With NEH start-up funding, we will develop web-based tools and instructions to enable archivists and researchers across the country to create and contribute advertisements and metadata to the FOTM project. We will create simple automated checks to guide troubleshooting of contributors’ uploads, and we will prototype querying functions that will allow users to search the FOTM database and download data in formats compatible with most statistical, data modeling, and visualization software. We hope documenting a process and building these tools for data upload could serve as a prototype not just for FOTM, but for other projects that seek to collect multiple sources (whether from smaller-scale digitization projects, scraped metadata, or analog sources) onto one digital plane where they can be collectively analyzed in complex ways.

Once these tools are built, we will host a one-day workshop to introduce the project and its capabilities to potential partners at colleges and libraries. The workshop will demonstrate how participants might create and contribute a collection of advertisements at their home institutions using FOTM’s collaboration tools. The workshop will provide instruction and exploration of basic statistical modeling and data visualization tools, demonstrating some of the new research possibilities opened up by FOTM as a digital humanities initiative. It will also offer participants a forum to discuss the research and pedagogical potentials of such digital tools from a variety of perspectives.

2. Environmental scan

Recognizing the usefulness of runaway slave ads, a variety of projects have addressed these documents. Several projects, for instance, have digitized or plan to digitize a geographically or chronologically bounded set of advertisements. Such projects exist at UNC-Greensboro, the University of Virginia, University of Richmond, the East Texas Research Center, the University of North Texas and Rice University, and the University of Southern Mississippi. These are all admirable projects, but they differ from FOTM in several respects. They are not comprehensive, in that they do not aim to take in all c. 100,000 runaway ads and present them in a single format optimized for multiple types of use. Together, these projects currently appear to encompass 13% of all extant ads, but they exist in multiple formats and cannot be searched or analyzed as one set. Creating technological frameworks to coordinate between these varied projects is an essential goal of the proposal at hand.

None of the other runaway advertisement projects mentioned above include crowdsourcing components or the boundary-crossing pedagogical and public history frameworks that FOTM envisions. Our innovations will enable a broader variety of uses by a more expansive universe of users, and these groundbreaking aspects of FOTM have already brought us into long-term partnerships with many of these other projects. Mary Mitchell of the University of New Orleans and Professor Joshua Rothman of the University of Alabama have joined FOTM as full partners, and projects at UNC-G, Virginia, LSU, and the University of Richmond have committed to sharing data with FOTM. We have also initiated a cooperative relationship with a Michigan State University project called the Atlantic Slave Databases Network (http://slavebiographies.org/project), which seeks to coordinate a wide variety of databases that will gather information on various slavery societies and experiences. The tools and tutorials we develop through the proposed grant project will allow all partners to combine collections, avoid duplication of effort, and create new possibilities for all involved; they will also make it possible for partners without significant technical support at their home institutions to become productively involved with FOTM in an equal way.

While there are no existing tools that work precisely with the protocols and guidelines that we plan to build and automate, existing technical solutions will be leveraged to develop the system. We will largely

D-2
use Talend to expedite the development of more generic aspects of data ingest, and will rely on Java libraries to build custom quality assurance tools for research teams to validate their data. Solr will be configured and instantiated for the FOTM search engine. Our Application Programming Interface (API) will be built with JOOQ as the data access layer and Jersey will be used to provide the web service endpoint and handle all HTTP requests. PostgreSQL will serve as our database technology.

3. History and duration of the project
The Freedom on the Move project (“FOTM”) is a cooperative venture launched by Dr. Edward E. Baptist of the Cornell History Department, Cornell University Library (CUL), and the Cornell Institute for Social and Economic Research (CISER). It now incorporates, as key collaborators, Professor Mary N. Mitchell of the University of New Orleans and Professor Joshua Rothman of the University of Alabama. FOTM began with Ed Baptist’s research for his book on the expansion of slavery in the U.S. from the Constitution to the Civil War [The Half Has Never Been Told: Slavery and the Making of American Capitalism, (New York: Basic Books, 2014).]. Baptist realized that the existing runaway ads are first of all enormous in number, second of all enormously informative, and thirdly, too numerous for one researcher alone to collect in a comprehensive database. A conversation soon developed with Dr. William C. Block of CISER, Madeleine Casad of CUL, and others. The team collectively realized the project’s unique potential as both a scholarly resource and a massively collaborative public history project that could open up unprecedented ways to study crucial issues of U.S. history and culture. Our team has met roughly once a month since December 2012. Since that time, the team has laid considerable groundwork for the project’s start-up phase. Tasks accomplished to date include:

Technical and Content
- Assessing technological feasibility and identifying initial infrastructural requirements
- Selecting initial newspapers, locating collections, clearing access and copyright permissions
- Developing digitization and storage workflows
- Creating initial data model for the relational database, designed to permit the emergence of accurate reports about individual runaways, despite the complexity of information from advertisements; revising this model with an early test bed of advertisements
- Researching and selecting a web interface for the project (DRUPAL) as well as a database architecture for the dataset (PostgreSQL); planning a sustainable model for hosting and storing web-based aspects and secure data aspects of the project
- Planning to realize the project’s draft data model as a Drupal instance and adapting Transcribr (a Drupal software module) to allow users to transcribe digitized ads
- Alpha-testing of data-parsing process in Baptist’s Fall 2014 course HIS 2293, using a Google Forms interface; continued refinement of the data model in response to feedback

Collaboration, Guidance, and Outreach
- Assembling preliminary advisory board and work plan for this and other proposals
- Initiation of full collaboration with Professors Mitchell and Rothman, including design of new shared protocol for digitization. Most technical development remains based at Cornell, but this collaboration brings FOTM additional historical expertise, source materials and digitization labor.
- Initiation of collaborations with other data-collection projects. Over summer 2014, we reached tentative agreements with projects at UVA and UVA-Wise, at UNC-Greensboro, and at the University of Richmond to share data. We are now producing memoranda of understanding that assure these contributors that we will credit their digitization of sources, plus their production of metadata, most likely according to the standards being used by the Digital Public Library of America. These agreements should bring approximately 7500 additional ads to the project.
- Tentative sharing agreement with the Special Collections Library at LSU, whose newspaper digitization project is yielding thousands of ads
- Ongoing publicity/outreach efforts, including multiple public talks in public libraries and university campuses, and a panel of papers at the Social Science History Association in November 2013.
Funding to Date
- Securing funding from the Cornell Department of History to digitize an early test set of ads
- Securing grant award of $10,000 from Cornell’s ISS (Institute of the Social Sciences), for additional digitization of our testbed set of runaway ads over spring and summer 2014
- Submission of [redacted] to support interface design and advisory group expansion

4. Work Plan
While FOTM has accomplished much to date, Level II Digital Humanities Start-Up funding is needed to build FOTM infrastructure to unite the data produced by collaborators and contributors into one collection formatted to support the innovations described earlier. Our work schedule is specific, accomplishable, and will result in protocols and workflows for integrating other runaway ad projects’ work with FOTM.

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<th>Task</th>
<th>Staff</th>
<th>Completion</th>
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<tr>
<td><strong>With current collaborators, flesh out ingest standards and workflows for ETL and QA:</strong></td>
<td>Williams (CISER), CUL-IT staff, Paolillo (CUL), Kovari (CUL)</td>
<td>9/01/15</td>
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<tr>
<td>• File and data field naming conventions.</td>
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<td>• Standard for metadata of data store</td>
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<td>• Workflow documents for future collaborators</td>
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<tr>
<td>• Generic FOTM guidelines for future collaborators, including ability to update existing data as produced</td>
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<tr>
<td><strong>Refine the FOTM model to adjust for the results of standardization exercise above:</strong></td>
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<td>9/15/15</td>
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<tr>
<td>• Transform PostgreSQL database to support ingest of collaborator datasets</td>
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<tr>
<td><strong>Set up network infrastructure for data upload</strong></td>
<td>Williams (CISER)</td>
<td>9/30/15</td>
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<tr>
<td>• Investigate MoveIT service</td>
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<tr>
<td>• Use SFTP to upload files to a staging area</td>
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<tr>
<td><strong>Schedule workshop, circulate call for applications</strong></td>
<td>Baptist, Casad, Block</td>
<td>9/30/15</td>
</tr>
<tr>
<td><strong>Program connectors to automate ingest of collaborator files into the FOTM database:</strong></td>
<td>Williams and Block (CISER)</td>
<td>11/15/15</td>
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<tr>
<td>• build modular set of programs to map, validate and ingest data from disparate sources to the FOTM repository via Java and code and via command line</td>
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<tr>
<td>• document these tools for other developers and for use by researchers</td>
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<tr>
<td><strong>Build FOTM index for optimized searching</strong></td>
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<td>• set up SOLR instance based on transcription content for use by the query API [follows]</td>
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<td><strong>Review workshop applications; select and notify accepted participants</strong></td>
<td>Baptist, Advisory Board, FOTM team</td>
<td>2/15/16</td>
</tr>
</tbody>
</table>
5. Staff

FOTM is the result of a collaboration among Cornell scholars recognized for their expertise and leadership in their respective fields:

Principal Investigator and Project Director
Edward E. Baptist, Associate Professor, Department of History, Cornell University, is a leading expert in American slavery and capitalism. Baptist will serve as PI and direct the implementation of FOTM innovation. Baptist will also build alliances with scholarly, teaching, and public history audiences for the project. Baptist’s most recent book, The Half Has Never Been Told: Slavery and the Making of American Capitalism (New York: Basic Books, 2014) just appeared.

Co-Principal Investigator
William C. Block is director of CISER and Executive Director of the Social Science History Association (SSHA). In addition to his Ph.D. in U.S. History, Block served as the Information Technology Director for IPUMS and other large-scale data dissemination projects at the Minnesota Population Center for nearly 10 years. He was a co-PI on the National Historical GIS Project (NHGIS), a $5M NSF project that provides, free of charge, aggregate census data and GIS-compatible boundary files for the United States from 1790 to the present. Block is currently a co-PI on a second large-scale NSF award related to advancing the science of microdata and metadata production, discovery, and access. He will manage development aspects of this grant and build alliances with social sciences and big-data audiences.

Lead Developer
Jeremy Williams is Software Engineer at CISER. Williams has a master’s degree in Information Science from Cornell and has developed software solutions in the financial sector, the GIS industry and academia. At CISER, Williams leads projects related to complex systems automation; software security; metadata repository and service infrastructure, and tools for research data analysis and dissemination.

Digital Humanities Advisor
Madeleine Casad is Curator for Digital Scholarship at Cornell University Library in the department of Digital Scholarship and Preservation, and Associate Curator of Cornell’s Rose Goldsen Archive of New Media Art. She will advise on outreach and educational aspects of FOTM.

Metadata and Collections Advisor
Jason Kovari is Head of Metadata Services at Cornell University Library. Kovari will work on issues around metadata, vocabularies and infrastructure requirements. He provides consultation on a wide range of digital projects.

<table>
<thead>
<tr>
<th>Build services (APIs) to query and download data from the FOTM database in a variety of formats:</th>
<th>Williams and Block (CISER)</th>
<th>3/15/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>• provide data in raw json, csv</td>
<td></td>
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</tr>
<tr>
<td>• offer downloads in formats that can be opened by popular quantitative and qualitative statistical software (SAS, SPSS, Stata, Atlas.ti)</td>
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<td></td>
</tr>
<tr>
<td>• limited to HTTP GET requests</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Write plain-language documentation and tutorials and publish to the FOTM website</th>
<th>Williams (CISER), Casad (CUL)</th>
<th>3/30/16</th>
</tr>
</thead>
</table>

| Host workshop at Cornell University to introduce current and potential research and archival partners to the collaboration toolkit and data analysis possibilities of FOTM | Baptist, FOTM team | 4/30/16 |
Digital Access, Development, and Sustainability Advisor

Michelle Paolillo is a project manager and business analyst in Cornell University Library’s department of Digital Scholarship and Preservation Services. She manages CUL’s digitization with Google, serves as the liaison to HathiTrust, and is familiar with the creation and management of digital objects at scale, and strategies for preservation of digital assets.

6. Final product and dissemination

All software developed as part of FOTM will be made available on an open-source basis. The data itself, as detailed in our included data management plan, will also be made publicly available, per CISER procedures for historical data and using the FOTM website itself as a primary point of access.

The proposal at hand will produce three innovative deliverables reusable by the greater research community. The first phase involves engaging with the growing body of FOTM collaborators in a prototyping exercise to develop initial standard practices, workflows and protocols to ingest their digitized data into the FOTM system. The result of this phase will include a documented procedure and guideline detailing how to integrate and upload data to the FOTM system. Some of the steps in the workflow for a given project will necessarily be manual, but many tasks can be automated. All of these developments will be documented, and may be transferrable to other kinds of projects. The second phase will focus on building software to automate many aspects of workflows defined in phase one. This will result in a suite of executable tools that will assist with the extraction, transformation, and loading of data to the FOTM system, as well as tools to aid research teams with quality assurance as they produce their data. In addition to the software deliverable, the documentation created in phase one will be augmented with information as to how to use the software, with examples and visual aids. Once the first two phases are complete, FOTM’s database will contain data from digitization efforts across the country. The third phase will create a search application programming interface (API) that will allow users to search across all collective FOTM datasets, multiplying the value of each collaborator’s work for analysis. Project deliverables and documentation will be available on the FOTM website. We will also host a workshop on the Cornell University campus to share these tools, and also to help participants explore and discuss the range of interdisciplinary investigations that FOTM enables by combining data-driven research with deeply humane primary document investigation.

Upon completion of the deliverables proposed here, the remaining steps to full implementation of the FOTM platform will be: completing the FOTM user interface, adding new analytical tools, and implementing crowdsourcing on a large scale. Outreach to cultural heritage and public history organizations, K-12 education, and interest communities will promote participation in FOTM. For this full-implementation stage, we will seek major grants designated for digital humanities, public history, and “big data” in the historical social sciences. Baptist and other members of the FOTM team presented a panel at the November 2013 meeting of the Social Science History Association (SSHA), and they continue to plan presentations and papers that focus on participatory public history, data-driven humanities research, and technological design challenges.

FOTM is already primed to directly support “traditional” scholarly output. Ed Baptist will write a book using data accumulated in the project. Rothman, Mitchell, and Baptist are planning a special issue of a major historical journal with articles devoted to early analysis of the FOTM dataset, organizing a major digital-history effort, pedagogical implications, and public engagement with history in the crowdsourcing process. We anticipate an eager audience for our discussions of the process of building FOTM, and hope it could become a model, with ready-to-adapt-and-adopt open-source software, for other crowd-sourced archival digitization and analysis projects. This would have the potential to help transform historical archives, making them more open and interlinked, and permitting more flexible and comprehensive research about the American past. We anticipate that our investigations of this question will have an audience, and we plan to report on this aspect of the project in our white paper and in papers and presentations by FOTM team members. In addition to formal publishing and presentations, we will create a project website and make our project report publicly accessible online.
COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1150532082A4  DATE: 09/12/2013

ORGANIZATION:
Cornell University
341 Pine Tree Road
Ithaca, NY 14850-2820

FILING REF.: The preceding agreement was dated 01/14/2013

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES

<table>
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<th>RATE TYPES:</th>
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<td>Use the same rates and conditions as those cited for fiscal year ending June 30, 2016.</td>
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ORGANIZATION: Cornell University
AGREEMENT DATE: 9/12/2013

**BASE**

Modified total direct costs, consisting of all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts up to the first $25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, student tuition remission, rental costs of off-site facilities, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of $25,000.
ORGANIZATION: Cornell University  
AGREEMENT DATE: 9/12/2013

SECTION I: FRINGE BENEFIT RATES**

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</table>

FIXED  7/1/2013  6/30/2014  61.30 Contr. Coll  All Employ.(3)
PROV.  7/1/2014  Until amended  61.30 Contr. Coll  All Employ.(3)

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:
Salaries and wages.

(1) Full benefit employees, includes benefits listed in #2 below and see special remarks section for additional benefits covered.

(2) Applicable to visiting faculty, summer faculty without retirement, Executive Education faculty appointments, non-benefit eligible temporary employees, summer students (if not registered) and bonus payments. Includes mandated benefits such as Social Security, Worker's Compensation, Disability and Unemployment.

(3) Contract College fringe benefits are claimed using approved rates contained in the New York State-Wide Cost Allocation Plan plus a small add-on for the university paid component.
SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. The fringe benefits included in the rate(s) are listed below.

TREATMENT OF PAID ABSENCES

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences.

1. The rates in this Agreement have been negotiated to reflect the administrative cap provisions of the revisions to OMB Circular A-21 published by the Office of Management and Budget on May 8, 1996. No rate affecting the institution's fiscal periods beginning on or after October 1, 1991, except rates for DOD contracts and subcontracts, contains total administrative cost components in excess of that 26 percent cap.

2. Extraordinary electrical costs for the Laboratory Of Nuclear Studies and extraordinary electrical costs, telecommunications costs and chilled water costs of the Theory Center program associated with, but not including normal utility costs for building maintenance are excluded from the modified total direct cost base. In addition, the electrical costs of the NAIC Arecibo radio telescope site in Puerto Rico are also excluded from the modified total direct cost base. The exclusion of these costs from the MTDC base does not represent an agreement that these exclusions are accepted for subsequent negotiation of future years' rates.

3. In addition to the fringe benefits listed in the Fringe Benefits Section of this agreement, the following fringe benefits are included in the full benefit rates: retirement, health insurance, life insurance, long term disability, employee-only tuition, employee wellness and assistance program and childcare.

4. Equipment means an article of nonexpendable, tangible personal property having a useful life of more than one year, and an acquisition cost of $5,000 or more per unit.

5. This rate agreement updates Contract College fringe benefit rates only.
SECTION III: GENERAL

A. LIMITATIONS:
The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) only costs incurred by the organization were included in the facilities and administrative costs pool as finally accepted; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) the same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) similar types of costs have been accorded consistent accounting treatment; and (4) the information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:
This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowance.

C. FIXED RATES:
If any fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:
The rates in this Agreement were approved in accordance with the authority in Office of Management and Budget Circular A-21, and should be applied to grants, contracts and other agreements covered by this Circular, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:
If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected program(s), and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these program(s).

BY THE INSTITUTION:

Cornell University

[Signature]

Joanne M. DeStefano

(NAME)

VP Finance/CFO

(TITLE)

9/27/2013

(DATE)

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

[Signature]

Darryl W. Hayes

(NAME)

Deputy Director, Division of Cost Allocation

(TITLE)

9/12/2013

(DATE) 0942

HHS REPRESENTATIVE: Michael Leonard

Telephone: (212) 264-2069
Attachment G. Freedom on the Move – Data Management Plan

Expected Data. The project is expected to produce the Freedom on the Move (FOTM) database and its metadata, source codes of data entry applications and scripts used to automate data processing and management. Fields from the FOTM database mainly come from ads about runaway slaves in the United States pre-1865 scanned from original newspapers and stored in PDF form by researchers participating in this crowdsourcing project and by subscription-based private repositories. The FOTM database contains transcript (text) of the ads, the links to the PDF version of the ad, demographic and physical characteristics of caught and runaway slaves, their children, and their owners; and other information such as newspaper edition and geographic location of the runaway, owner, and newspaper, among others. By including in the database, the actual texts along with the researcher-generated codes derived from the texts, researchers have the option to apply computational analysis (“text mining” tools), or quantitative research techniques, or both to analyze the data.

Static and dynamic versions of the FOTM database will be produced and made publicly accessible for browsing, local analysis, and download for research and analysis with no restrictions imposed on its use.

We will also share the source codes of the web-based user interface so it could be used as a model for other crowd-sourced archival digitization analysis projects.

Period of data retention. It is expected that the FOTM database produced by this project will be dynamic and continue to grow as newfound ads are added, transcribed, and processed. As soon as new records are added to the database, the dynamic version, which is the most up-to-date, will be made available immediately to the public. The static version will be released on a regularly scheduled basis, once a year.

Data formats and dissemination. We will provide three mechanisms of sharing the FOTM database. The static version of the database will be hosted at the CISER Data Archive. The dynamic version will be made available via the download form on the FOTM website. An SQL script will also be provided so that users can execute the script in their own instances of PostgreSQL (an open source data entry program) and produce a replica of the FOTM relational database including all tables, keys, constraints, and data.

The FOTM database will be made available in CSV format so it can be used in various analytical software packages. The SQL script will be made available in .sql format, which is viewable in any text editor.

To enable project and data searching, discovery, versioning, sharing, and access, the Data Documentation Initiative (DDI) metadata standard will be used. DDI allows for the discoverability and access of all metadata pertaining to this project across the data life cycle (i.e., from data conceptualization to collection, processing, distribution, discovery, analysis, repurposing, and archiving). The metadata will reside at CISER’s Data Archive indefinitely. While no data archive can be guaranteed to exist forever, CISER is a university-supported data archive now in its 31st year of existence with good support at the highest university levels.

The source codes of the data entry applications or web-based user interface and SQL scripts will be made publicly available at Github (github.com), an open repository for collaboration, review and management of codes. The release of this source code will be concurrent with the release of the FOTM database.
Data storage and preservation of access. The metadata and static version of the database will reside at the CISER Data Archive and the dynamic version’s FOTM database will be hosted at the CISER Database Production Server. CISER is committed to providing researchers access to the database past the end of the project. Cornell University Library will continue to host the FOTM website and its interface for crowd-sourcing and downloading of dynamic version of the database. Github will continue to be used for sharing of the source codes, the SQL scripts for as long as their use policy does not change. In the event of a change, these codes will be hosted on the CISER Data Archive.
Attachment I. Freedom on the Move: Appendices

Appendix 1: Images

Images A1-A2: Examples of runaway slave advertisements I-2

Image B: Concept diagram for the full Freedom on the Move project I-4

Images C1-C2: Examples of the FOTM data model draft I-5

Image D: Concept Diagram for the proposed Suite of Collaboration Tools I-7

Appendix 2: Workshop Agenda and Participants I-8

Appendix 3: Works Cited I-9

Appendix 4: Evaluation Criteria and Evaluation Methods I-10
Richly detailed information about the fugitive woman’s appearance, habit, skills, allows a reader to imagine what this woman may have been like. Ads like this one would be extremely useful in a pedagogical context, helping students develop a sense of historical empathy and curiosity, and introducing them to the rewards and also the difficulties of primary-document analysis.

This particular advertisement refers to Harriet Jacobs, activist, abolitionist, and author of *Incidents in the Life of a Slave Girl*, a foundational work of African-American autobiographical literature. This example illustrates the fact that some advertisements may be historically significant documents in and of themselves. It also illustrates the great importance of bringing such information to light for the thousands of runaways who were not able to author their own stories of humanity and resistance.

FOTM’s API will enable information from the FOTM database to be linked to other kinds of digital resources—for example, U.S. Census data about this slaveowner, GIS data about his plantation, or the full text of Jacobs’ autobiography.
This advertisement refers to several people at once, one of many data modeling complexities FOTM must address.

The precise shade of a fugitive’s skin color is a detail that is nearly always included in such ads; the FOTM database would allow the specific language for such racialized classifications to be tracked over time and region, and correlated across the database with other information.

In addition to information about fugitives’ coloration, gender, and body type, advertisements often included information about distinguishing bodily characteristics like the growth mentioned here, but also, frequently, scars, which speak volumes about the lives the fugitives were attempting to escape. Making such information available to statistical analysis and correlation with other kinds of data (for example, information about specific plantations, states, or significant events), will open up new avenues of research into the social, economic, and human history of slavery in this country.

Escaped slave advertisements were so common that newspapers included standard visual icons for runaways in their typesets. The woman “Minty” referenced in this advertisement is now well known by her preferred name, Harriet Tubman.
This figure demonstrates how the FOTM data parsing tool will be used to crowdsource the coding of data from runaway ads and import the data to our large relational database, built in in PostgreSQL.
Images C1-C2: Diagrams of the FOTM data model

By their nature, fugitive slave advertisements pose challenges for data modeling and management. The same “runaway event” might be referenced in several non-identical advertisements; a single ad might refer to multiple people; a single person might have run away several times. Moreover, names of fugitives are often ambiguous (i.e., the same person might have gone by multiple names), and often commonplace (i.e., there might be several runaways named “Jack”).

The following diagrams, drawn from our draft FOTM data model, demonstrate some of the relational complexity required in order for this body of information to yield statistically meaningful results about important categories of information.

The screen shot in this appendix was derived from the current draft version of the data model that can be explored at the following site: http://ciser.cornell.edu/fotm/data/. The screen shots have been annotated in ImageD2, but would be best understood if explored on the site, which was generated with Schema Spy and uses the following legend:
Figure C2 illustrates the non-congruent relationship between individual slaves, “runaway events,” and runaway advertisements. An advertisement might mention many runaways; by the same token, a single runaway might be mentioned in many advertisements that may or may not refer to the same escape attempt.

For the FOTM database to be the valuable research tool we envision, the data model must at the very least permit the extrapolation of a table of runaways—a “census” of enslaved people who attempted to escape—from this complex input data. Our data model will also build a table of slaveowners, whose information might eventually be linked to other kinds of digitally available data—official U.S. Census information, for example, or historical real estate records.
Image D illustrates the project work proposed for the grant at hand. NEH support will make it possible to establish standards and protocols for sharing collections, as well as easy to use collaboration tools and guidelines to assist researchers and archivists in joining the FOTM project. A prototype search API will enable researchers and the general public to investigate the FOTM database and export data files in a variety of usable formats – even before completion of FOTM’s public crowdsourcing platform.
Appendix 2: Workshop Agenda and Participants

At the close of the grant project, in spring of 2016, we will hold a one-day workshop at Cornell University for approximately 20-25 participants, approximately 10 of which will be local academics and archivists. We will invite 10-15 participants directly, reaching out to potential partners who have expressed an interest in FOTM. We will also circulate an open call for participation through U.S. history, digital humanities, and archives email lists and conference networks. Workshop participation will be free, and we will use a part of our grant award to support a limited number of travel stipends. All events will take place on the Cornell University campus in Ithaca, NY.

The workshop agenda will assume little prior experience with digital tools or digital humanities projects. The main goal will be to publicize FOTM’s new collaboration tools and attract project partners by demonstrating the simplicity of the technical processes and the enormous intellectual, pedagogical, and public history potential of the FOTM project as a whole. A secondary goal will be to solicit feedback from participants about the usability of our collaboration tools. We will also use FOTM as a concrete focal point for participants to engage in broader discussion of digital humanities and data analysis in the disciplines. Our final session will be devoted to conversation about how multimodal interdisciplinary initiatives like FOTM, which brings together data-driven and primary-document research methods, might be used in educational, research, and outreach in a variety of contexts.

We will publish workshop plans and proceedings to the FOTM website and plan to repeat the workshop, pending funding, after the close of the grant term.

Proposed participants:
Ellen Amster, Associate Professor, History, University of Wisconsin, Milwaukee
Rick Bell, Professor, History, University of Maryland
Greg Downs, Associate Professor, History, CUNY
William Harris, Assistant Professor, Hobart and William Smith College
Graham Hodges, Professor, History, Colgate
Thomas Humphrey, Assoc. Professor, History, Cleveland State University
Barbara Krauthamer, Associate Professor, History, UMass
Bonnie Ryan, Librarian for African-American Studies, Syracuse University
Randolph Scully, Assoc. Professor, History, George Mason University
Kirsten Wood, Assoc. Prof, History, FIU

Proposed schedule:
8:00 – 9:00 am: Continental breakfast and introductions
9:00 – 9:45 am: Overview of FOTM, its objectives, and its possibilities
9:45 – 10:00 am: Break
10:00 am –12:00 pm: Hands-on instruction in the use of FOTM collaborative tools
12:00 – 1:00 pm: Lunch
1:00 – 3:00 pm: Overview of FOTM data extraction tools and breakout sessions.
   - We will tailor breakout sessions to the interests and experience level of workshop participants.
   - Between CISER and CUL we would be prepared to offer entry-level instruction in: SPSS, Atlas.ti, Many Eyes, Gephi.
3:00 – 3:30 pm: Break
3:15 – 3:45 pm: Reports from breakout groups
3:45 – 5:30 pm: FOTM as tool and model for collaborative digital humanities initiatives
   - Open discussion led by Ed Baptist, with virtual participation by advisors Lincoln Mullen and Pamela Wright.
Appendix 3: Works Cited

Many, many scholarly works and digital projects have informed our developing vision for FOTM. For the sake of brevity, we reference here only a few works directly relevant to our project proposal.

WORKS CITED

Print

Web
--*Geography of Slavery.* University of Virginia, Center for Digital History. http://www2.vcdh.virginia.edu/gos/
--*Mining the Dispatch.* University of Richmond Digital History Lab. http://dsl.richmond.edu/dispatch/pages/intro
--*Runaway Slaves Project,* University of North Texas. http://torget.us/HIST5100/runaway-slave-ads-project/
Appendix 4: Evaluation Criteria and Evaluation Methods

By using the methods outlined below we seek to affirm that we have met the evaluation criteria listed. If most or all of the criteria are found to be met, we will have created a new window into the history of slavery by providing a new, standardized framework for ingesting data that facilitates the work for future collaborators and provides a new platform for disseminating results to all interested parties.

Evaluation Criteria

1. Can the FOTM incorporate data and metadata from partners?
2. Can partners effectively use FOTM tools and guidelines for ingest?
3. Can partners use web-based search API tool to analyze and export data from the FOTM database?
4. Can workshop participants with little prior experience use FOTM tools and guidelines to assemble and upload small collections of data and metadata to the FOTM database?
5. Can workshop participants with little prior technical expertise use search API to analyze and export data from FOTM database?
6. Does a broadly defined community of potential users see the value of a tool like FOTM for research, teaching, and public history education?

Evaluation Methods

1. Conversation with project partners and advisors.
2. Observation of workshop participants’ experience using FOTM tools for the first time.
3. Feedback from workshop participants about FOTM tools.
4. Closing conversations with project advisors, partners, and workshop participants about how collaboration infrastructure might be improved for next project phases.
5. Closing conversations with project advisors, partners, and workshop participants about how FOTM might be used in various research and educational contexts.