









A Guide to Creating a Digital Public History Project

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This guide details each phase of creating Histories of the National Mall, http://mallhistory.org, developed by the Roy Rosenzweig Center for History and New Media at George Mason University, and generously funded by the National Endowment for the Humanities.





Histories of the National Mall

Histories of the National Mall is a digital public history project developed by the Roy Rosenzweig Center for History and New Media at George Mason University, and generously funded by the National Endowment for the Humanities.

This guide details each phase of creating *Histories of the National Mall*, <u>mallhistory.org</u>, including planning, interpretative approach, user experience and design, testing, and outreach efforts of the project team. "Building *Histories of the National Mall: A Guide to Creating a Digital Public History Project*" is co-authored by Sheila Brennan and Sharon Leon, together with Megan Brett, Jannelle Legg, Michael O'Malley, Spencer Roberts, and Jim Safley (October 2015).

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Project Rationale

The National Mall has a history of its own that is nearly invisible when walking its paths, and there is very little interpretation available on the Mall. Most visitors see what appears to be a finished product: a deliberately planned landscape with memorials, monuments, and museums symbolizing the history and values of the United States. The Mall, however, is a contested public space and its meanings, uses, and purposes have changed over time. In its earliest days, the Mall was a messy place where transportation arteries and commercial markets existed, and was bordered by lively neighborhoods.



Figure 1: Washington City Canal running through what is now the Mall.

Visitors, and many DC area residents, have no knowledge of the unregulated zone of muddy grounds, vegetable gardens, grazing cattle, or the slave pens that existed before the completion of the Washington and Lincoln Memorials. Thus, the Public Projects division of the Roy Rosenzweig Center for History and New Media, led by Sharon Leon and Sheila Brennan, thought there was an opportunity to build a mobile public history project around and about the complex, contested, yet often invisible history of the National Mall.

Our key strategy for making the history of the National Mall engaging for tourists was to create a website designed for hand-held devices, populated with surprising and compelling stories and primary sources that together build a textured historical context for the space and how it has changed over time. The project began in 2010

with research for a grant proposal to the National Endowment for the Humanities Public Programs Division for an implementation grant that was not funded. We revised and resubmitted in the same program the following year, and learned that we had received funding in April 2012. After two years of researching, planning, and waiting, we were ready to begin the process in earnest.

One of the biggest advantages for RRCHNM designing this project is that the Center is not a cultural institution sitting on the Mall. We relied on our experience as historians to shape the content and research and were not artificially constrained by institutional needs to favor the collections from one library, archive, or museum. We drew freely from resources housed at many cultural institutions, in and outside of Washington, DC.

As a stand-alone project, *Histories* did not need to replicate or reflect content in a physical exhibition. We let the sources and our questions as historians drive the interpretation, as we balanced the coverage of topics and themes across five centuries. We added a layer of rigorous historical interpretation to those sources, synthesizing the most recent public history scholarship, raising provocative questions about the space, its role in national life, and the expressions of American ideals that have taken place there. We also researched with the intention of uncovering sources that made visible the histories of indigenous people, segregation, slavery, unbuilt monuments, demolished structures, children, activists, and laborers. With this flexibility, we were also able to connect visitors on the Mall to the city of Washington, as a residential city with its role as the nation's capital, in ways that are more difficult to see when visiting one of the monuments or museums.

Mobile Public History

Many public history projects are grounded deeply in a place, whether by strict geographical borders or by the cultural construction of place that transcends locality. *Histories of the National Mall* interprets the changing physical space upon which the National Mall has been built, while also tackling the cultural, political, and social meanings that shape the cultural memory of "the Mall" as a local public park, center of civic life in Washington, and as a national place of meaning making.

With little interpretation in the space itself, we believed that to adequately interpret the Mall for visitors walking along its paths, individuals needed a freely-accessible website designed optimally to work with a phone or tablet that visitors carried with them. The number of individuals, worldwide, who rely on cell phones to access the web continues to grow. In the US, the Pew Internet Project finds that 90% of American adults own a cellphone and that 63% of adult cell phone owners go online via their phones.

Our decision to design for the mobile web was based in research begun by Leon and Brennan in 2009 when the Samuel H. Kress Foundation awarded RRCHNM a grant to research and experiment with mobile formats pertinent for art and cultural heritage collections. This research led to the *Mobile for Museums* project and report. We published an overview of how museums were using mobile technology at the time to engage with users, then offered suggestions, based on this research, as best practices for cultural heritage institutions developing with mobile technology. We also developed a prototype for a mobile-optimized cultural heritage website called *Art in the City*, and a set of *Omeka* plugins as a proof-of-concept.

We concluded that because of the rapidly-changing landscape of mobile devices, building for the mobile web is more cost-effective and sustainable, rather than developing native applications for specific platforms. Given the scarcity of resources and staff, we also recommended that mobile content be drawn from a central content management system to let museum staff to more easily re- purpose, update, and serve visitors a variety of information. While the scope of the Kress project was limited to research, it shaped the team's approach for designing and developing *Histories of the National Mall*.

Because we were committed to reaching the largest percentage of potential visitors to the Mall, and committed to building a sustainable project, we designed for the mobile web using the *Omeka* content management system. Most mobile devices come with a mobile web browser that works on cellular and WiFi networks, enabling users to easily find and browse the site anywhere. By designing for the mobile web, rather than developing an app, the site and its development would not be constrained by the quickly evolving world of mobile application development protocols.

Free wireless access on the Mall and inside the Smithsonian museums also made this type of mobile public history project feasible. The signal strength, however, is strained by thousands of people simultaneously using it, making mobile web browsing more reliable than applications (apps) that require more bandwidth to function well. Many mobile apps built by cultural heritage institutions require an individual user to download megabytes worth of content before they can begin their experiences. We did not want to require users to download material, and we wanted all of the content discoverable and accessible through common web browsers. Even when a visitor does not know about mallhistory.org, she will likely find content from the site if she queries the web about the Mall's history.

Audiences

From earliest stages, the project team identified primary and secondary audiences for the public history site, and then committed to measuring the effectiveness for reaching those people at all stages of the design, development, and implementation.



Figure 2: Visitors walking the paths of the National Mall.

We decided that our primary users would be the 25 million tourists who visit the Mall each year. Included among these visitors are individual and groups of tourists who travel to Washington from across the US and the world: large numbers of middle and high school students travel to Washington, DC on school-sponsored field trip; multi-generational family groups; and veterans making pilgrimages to war memorials or commemorative events. We also identified hometown tourists, whether they are interns living in Washington DC for a short period of time, or area residents coming to the Mall to exercise, visit museums, and participate in festivals.

We further identified secondary audiences of off-site users, comprising history enthusiasts, and fellow public historians and cultural heritage professionals interested in the work we were doing. With our audiences identified, we began planning the historical content and user experience.

Project Team

Staff & Years

Co-Director: Sharon M. Leon Co-Director: Sheila A. Brennan

Project Manager: Megan Brett (2014-present) Project Manager: Lee Ann Ghajar (2012-13)

Software Developer: Jim Safley Web Design: Kim Nguyen Project Associates:

Jannelle Legg (2014-present) Spencer Roberts (2014-15) Lindsey Bestebreurtje (2012-14)

Ben Schneider (2014) Anne McDivitt (2014) James Halabuk (2012-13)

Advisers, GMU History Department: Spencer Crew, Michael O'Malley, Zachary Schrag

Project Teams

Content:

Sharon M. Leon
Sheila A. Brennan
Megan Brett
Michael O'Malley
Jannelle Legg (2014-present)
Lindsey Bestebreurtje (2012-14)
Ben Schneider (2014)
Lee Ann Ghajar (2012-13)
James Halabuk (2012-13)

Design and Development:

Sharon M.Leon Sheila A. Brennan Kim Nguyen Jim Safley Spencer Roberts (2014-15)

Outreach:

Sharon M. Leon Sheila A. Brennan Megan Brett Lindsey Bestebreurtje (2012-14) Jannelle Legg (2014-present) Anne McDivitt (2014)

Testing:

Sharon M. Leon Sheila A. Brennan Megan Brett Lee Ann Ghajar (2012-13)

Technical Infrastructure

Histories of the National Mall runs on Omeka.

Technical Specifications

- Software: Omeka | Installation Requirements
- Theme: Custom Mall Theme
- Plugins:
 - o <u>Exhibit Builder</u> + <u>custom extensions</u> for Scavenger Hunts
 - o <u>Geolocation</u> + Custom <u>Mall Map</u>
 - o HTML5 Media
 - Search by Metadata
 - o Simple Contact Form
 - o Simple Pages
 - o Simple Vocab

Omeka supports the fundamental interpretive goals of the project, which include introducing Mall visitors to the history of the space and its development, together with the social, cultural, and political events that transpired there by presenting this material using geospatial and thematic modes of access. *Omeka* <omeka.org> is a leading open source (written for Linux, Apache, MySQL, PHP and released under the GPL) collections-based web publishing platform developed by RRCHNM and the robust open source developer community it supports. *Omeka* is standards-based, grounded in a flexible <u>Dublin Core Metadata Schema</u>. *Omeka* takes a user-centered, access-focused approach to collections, emphasizing approachable, accessible web design.

To offer a mobile website that renders similar results in all major mobile browsers, the web designer built a custom responsive *Omeka* theme that reduces the width and padding of the header, footer, navigation, and columns, and adjusts the font sizes of headings and the body, so that the design fits comfortably within the confines of a smaller mobile browser window.

After testing multiple tools, the web developer built a custom mapping plugin using leaflet.js libraries that works with the existing Omeka Geolocation plugin.

See other sections of the Guide for longer discussions of how the *Histories* team built different parts of the website.

Content Development and Interpretative Approach

The fundamental interpretive approach of *Histories* was to introduce Mall visitors to the most current historical scholarship of the space and its development, together with the social, cultural, and political events that transpired there by presenting this material using geospatial and thematic modes of access. By taking advantage of the web's ability to layer and link different types of content, we designed the site to be easily navigable without overwhelming a user. Importantly, we let users select what interests them most: narrative, maps and places, people, past events, or by a plain keyword search.

Before any design or development work began, the breadth and scope of the content was assessed. The content team comprised the two directors, the project manager, and one to three history doctoral graduate students (project associates). When researching for the grant proposal, we created a large Zotero group library where content team members compiled, tracked, and organized sources by theme and time period. We approached this project like other historical research: we started with the library catalog, existing secondary readings, and expanded from there. Kirk Savage's Monument Wars: Washington, D.C., the National Mall, and the Transformation of the Memorial Landscape (2009) also offered a logical starting point for identifying secondary sources and relevant local archives. We started digging through the Washington Post archives available through GMU's ProQuest subscription. We also searched through journal databases such as JSTOR and Project Muse, paying close attention to the back issues of Washington History (formerly the Records of the Columbia Historical Society), the journal of the Historical Society of Washington, D.C. Project Associates visited local special collections to uncover undigitized sources and to investigate costs for making these available online. The project relied heavily on open content available in the public domain or with Creative Commons licenses. We prepared a public Zotero library, linked to from the mallhistory.org, for users interested in reading more about the history of the National Mall.

Savage's work both supported and influenced how the team designed the site. From the earliest planning stages, we knew we wanted to make visible the contested nature of public spaces and the debates that ensued among different groups over the construction and symbols of monuments. On-site interpretation of parks, memorials and monuments, and federal lands often glaze over, or omit, debates, disagreements, and unpleasant histories. How could we both show and invite online visitors to ask questions of landscapes around them, as a historian might, while not making them feel like they were taking a test? Our attempts to tackle this challenge resulted in the design and functionality of mallhistory.org.

The team installed *Omeka* soon after the project began on a development server. To create the geospatial, temporal, and thematic entry points for the project, the content team first needed to build collections of digital items, map those items, link

sources across time periods and themes, and interpret those items by creating short exhibits. The content team was lucky that many primary sources related to the Mall are available in the public domain from public institutions. Even when sources were not available digitally, such as items from the Washingtoniana Collection at the DC Public Library, their librarians and archivists were very accommodating and digitized on demand for the project.

Content was drafted in the *Omeka* administrative interface, or backend, while the development team simultaneously began testing different mapping tools.

Maps

Representing change over space and time were important goals for this project. We began by investigating different mapping and geospatial platforms that would allow users to see the how the Mall's landscape and environment changed through historic maps. First, the team needed to find multiple maps appropriate for layering onto a base map of today's Mall to allow for comparison and contextualization. This was a challenge, because there are many types of maps, architectural drawings, and plans of the space now identified as the National Mall. Many of those "maps" illustrate the Mall, but do not actually represent real proportions, or come close to points of latitude and longitude. The Project Manager spent weeks researching to find historic maps that represented different stages in the Mall's development, existed as high-resolution image files, and could be georectified.

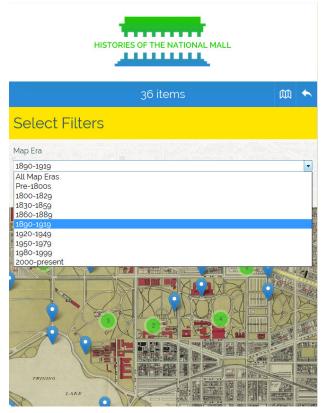


Figure 3: Selecting historical map layers.

We had to balance our commitment to incorporating accurate historical map layers with concerns about the user experience. The mapping experience had to be optimized for our primary audience, visitors on the Mall, meaning we needed a light-weight software solution that would not crash mobile browsers. If the mapping section took multiple minutes to load, users would likely abandon the site in frustration. This critical requirement eliminated many mapping toolkits, even ones built specifically for *Omeka*. This challenge led our lead developer to select the Leaflet.js libraries on which to build a custom mapping plugin, that worked closely with the existing *Omeka* geolocation plugin.

Read more about the mapping experience from developer Jim Safley and how he developed the custom map plugin while working closely with web designer Kim Nguyen.

Developing and Designing the Map

Written by Web Developer Jim Safley, with Web Designer Kim Nguyen

Building a web mapping application presents challenges that are well known to developers. So well known, in fact, that solutions to these challenges are constantly being developed, promoted, unused, and forgotten. Few solutions, such as Google Maps, OpenLayers, and Leaflet, survive and became de facto standards for "putting a map on a website and doing something with it."

For most mapping needs, this is plenty. "Putting a map on a website" has never been easier. A few lines of JavaScript will turn your website into an explorable map. With a few more lines of code you can take the map and "do something with it," like add geolocation markers and define boundaries. Of course, doing something with a map can get exponentially harder than simply adding markers, but mapping libraries provide <u>APIs</u> that generally solve common (and not so common) problems.

In my work with *Histories of the National Mall*, I encountered challenges that weren't so typical outside a historical mapping application. For one, not all historical maps are equal. Some of the more significant maps are hand-drawn and faded and thus not good candidates for layering onto a contemporary map. Others, while bold and well-defined, lacked historical significance for the era we wanted to exemplify. Still others were so small they became pixelated and unuseable at high zoom levels. In the end we found the criteria for a good map image was a) historical significance, b) bold lines and colors, and c) extremely, extremely large.



Figure 5: A pre-1800 map of the District, very dark and hard to read.



Figure 4: The same map, made lighter with digital photo processing tools used on the site.

Another challenge was that old maps are geographically inaccurate or don't follow common map projections. Since our goal was an accurate portrayal of where people, places, and things were in relation to contemporary times, I had to essentially warp old maps so they layer seamlessly onto a contemporary map. This process is calledgeorectification and I used a fantastic web service called Map Warper, which, by the way, hosts thousands of interesting historical maps, so check it out.

To tile the historical map images I used <u>MapTiler</u>. Tiling is the process of copying an image into different sizes (respective to zoom levels) and cutting them into a grid of squares called tiles. This way the browser only has to load the parts of the image that is currently showing, not the entire image, which can be massive and load very slowly. The tiling process takes quite a bit of time given that it generates hundreds of derivative images for one image. I tried MapTiler, because it is free and I could easily use it on my operating system.

To bring all this together I used Leaflet, a relatively new open source JavaScript mapping library. It's small footprint and use of newer technologies (HTML5 and CSS3) makes it a popular choice for mobile mapping applications. I actually chose Leaflet at a party attended by leading members of the geospatial activist community. Attendees recommended a shiny new tool for mapping written by a friend of theirs. Now, Leaflet has grown into a go-to solution for many web mapping projects.

Integrating the application into *Histories of the National Mall* was as simple as writing a plugin for *Omeka* (MallMap) that renders an interactive map, accepts user input, queries the database, and returns a GeoJSON document containing geolocated people, places, and events. With some finessing, Leaflet does the rest by stitching together the historical map tiles and placing markers on the map that users can click or touch for more information. Given the tremendous number of items and features on the page at any given time, I used a Leaflet plugin that clustered markers in a useable way.

Our feature database is made up of *Omeka* items that have been geolocated using *Omeka*'s <u>Geolocation plugin</u>. When the content team creates an item, they tag its location on the plugin's map. Once making the item public, it automatically becomes visible to the MallMap plugin. This workflow made it possible to serve a functional map while we built the digital collections. Even now, after release, we continue to add features with no undue intervention from the content team.

A primary objective for the project was to provide visitors to the National Mall a mobile tool to explore the space around them. Thankfully, Leaflet implements the <u>Geolocation API</u> which hooks into a client device's GPS. When the application detects that a user is physically within the boundaries of downtown Washington, DC, it pans and zooms to the location and places a star, representing the user's location, on the map among the historical markers. The marker follows the user in real-time, providing spatial context to what they learn about on screen.

Of course, a good user experience goes beyond a functional application. Kim Nguyen, our web designer, worked hard to build a attractive design and a usable interface. In her own words:

A lot of the mobile presentation felt straightforward due to the small space—things like place or event descriptions were easy to reduce to a single column layout. The challenges were in orienting the users in how we want them to use the map. In my view, there are two ways to explore DC's sights with our interface: the first is to use Leaflet's features and geolocation to explore items in the immediate area, and the second is to use the map filters to get a better sense of historical contexts.

The first goal was pretty easy, as users have become accustomed to using map interfaces, they know the basic functionality and symbols for panning and zooming. Identifying the map filters was trickier, because we ask users to do something they are less familiar with doing on a map. To ensure that users knew about the map filters, they see a short orientation message during the first visit to the map—the "call to action." Once a user clicks to open the filters menu, I wanted users to be able to learn by doing. Every time someone selects an option from the filter's dropdown menus, the map updates in the background. I made the background of the filters menu slightly transparent so that the text would be legible, while letting the user see that something had changed with their action. It's a simple interaction, but I think it goes a long way to making the map feel toy-like. A user should have fun playing with and exploring the map. Experimenting with an interface and getting immediate feedback is a playful activity, and I think facilitating that goes a long way into hooking the user.

Together, Kim and I, along with the content and testing teams, produced a fun, interactive window into the histories of the National Mall using modern mapping technologies and leveraging the ubiquity of mobile devices. In effect, we put a map on a website and are *letting our audience* do something with it.

People-Places-Past Events

To uncover the variety of actors and activities that have occurred throughout the Mall's history, the content team chose people (famous and little-known), places (existing and past structures), and events (nationally- and locally-important) as visible categories for users to browse, that were geolocated when appropriate, and assigned a time period. The content team created an *Omeka* item for each person, place, and event, and began building a substantial digital collection in the project's first year.

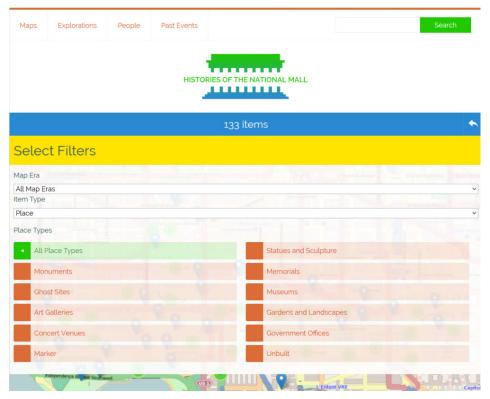


Figure 5: Place types allow users to filter results based on the kinds of places they wish to find on the map.

With many hands involved in the process of researching and creating items, the team developed guidelines for using and interpreting Dublin Core fields to ensure metadata consistency across the entire site. We added custom item types and custom metadata fields. Each item's basic description addressed its place in the Mall's history. Other fields widened the interpretive scope of the item beyond the Mall. Using *Omeka*'s Simple Vocab and Search by Metadata plugins, we implemented controlled vocabularies that allowed the items to be linked via the metadata fields for time periods (coverage), creators, occupation, place types, and event types. The content team discussed and debated terms in each controlled vocabulary list.

For "Places," we added a "type" field for identifying sites and selected one of eleven categories, such as statues and sculpture, monuments, office buildings, or unbuilt structures on the map.

For "People," we categorized individuals with general descriptions of their roles in Mall history through the "occupation" field. We created twenty categories to identify activists, architects, surveyors, or politicians. If a person played multiple roles related to Mall history, a second input was added with a second occupation category.

Similarly, for "Past Events," we categorized each happening by one of ten types, including, marches and rallies, inaugurations, openings and dedications, or cultural gatherings.

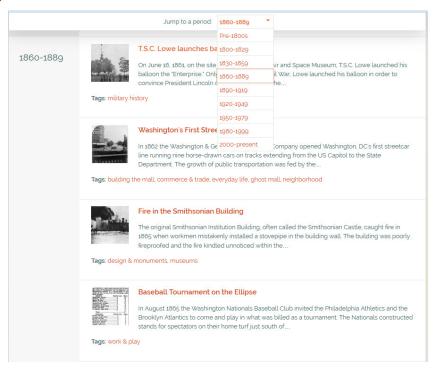


Figure 6: The Events page offers options for chronological browsing or for jumping time periods.

To show change over time, we made use of the Dublin Core coverage field. Each item was assigned an era in the coverage field, and when available, we also added a date in the Dublin Core date field. Starting with Pre-1800s, we created nine eras defined in 30-year chunks, that continued to the present. In some cases, to accurately represent a long process such as the construction of a monument, we selected more than one era. We created this controlled vocabulary in the coverage field, which then allowed for temporal linkages across the entire collection of items. The Search by Metadata plugin made these connections possible, by allowing a user to browse all of the items from those specific time periods.

When testing an early version of the site, the content team noticed that when viewing the list of events by eras, the individual events were not sorted in chronological order. To make a more accurate version of a timeline, the team added another metadata field for the Event item type: "sort date." This new field required dates to be entered a second time in a machine-readable format (YYYY/MM/DD) that the web designer used to create a list of events in chronological order. Importantly, this field remained visible only in the admin side.

Tracking the progress and development of items was the job of the Project Manager. Drawing upon the team's secondary and primary research, and discussions in project meetings, she created and updated lists of possible people, places, and events

| Dublin Core | | | | | |
|-----------------|--|--|--|--|--|
| Title | Assassination of President James A. Garfield | | | | |
| Description | On July 2, 1881, a deranged Charles Guiteau shot President James A. Garfield at the Baltimore and Potomac Railway Station. Guiteau was an unsuccessful lawyer, evangelist, and insurance salesman, who thought that the President owed him a government job. Garfield died from complications from the | | | | |
| | wound on September 19. Pennsylvania Railroad Company placed a plaque and a star on the location of the assassination. | | | | |
| | However the public often complained that they disliked the | | | | |
| | reminder of the crime every time they entered the waiting room and the company removed the commemorative tablet and star in 1897. Today. Garfield's is the only unmarked presidential assassination. | | | | |
| Source | Library of Congress Prints and Photographs Division. View original. | | | | |
| Date | 7/2/1881 | | | | |
| Coverage | 1860-1889 | | | | |
| Event Item Ty | pe Metadata | | | | |
| Event Type | D.C. History | | | | |
| Event Sort Date | 18810702 | | | | |
| | | | | | |

Figure 7: Admin view of a Past Event that includes Coverage field, Date, and Event Sort Date to accurately show chronological order.

using virtual whiteboards in the Basecamp project management site. Items were assigned to team members, who drafted the text and selected a representative image. Each item was reviewed multiple times by other content team members and one director before publishing the item.

At the end of its first year, *Histories* contained nearly 280 items. People, places, and past events comprised most of the collection, while other items represented primary sources that helped answer questions posed in the Explorations section.

Explorations

One of our major project goals was to pique interest of users through the hook of an inquiry question. These questions became the <u>Explorations</u> section.

We crafted leading questions to draw the attention of tourists to issues they may not have thought to inquire about without prompts from interpretative signage on the Mall. We varied the themes and time periods covered, as well as the question structure to appeal to different users. Like the game show Jeopardy, the content team often started with an answer, or an episode we wanted to expose, and then struggled to come up with a well-phrased question. Each question added a layer of historical interpretation to primary sources by raising provocative issues relating to the Mall's development as a

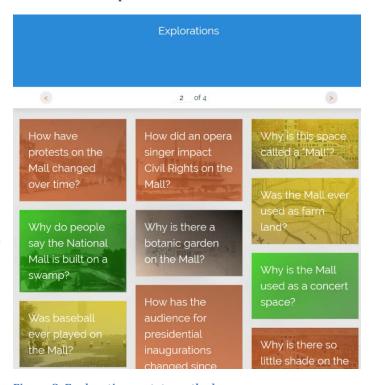


Figure 8: Explorations rotate on the browse page.

place of commerce and trade, politics and protest, work and play, and of remembrance, as well as its changing design. Some examples include: How have protested on the Mall changed over time?; Why is this space called a "Mall?"; Why did Congress almost leave Washington in 1814?; Were slaves bought and sold on the Mall?; Were people ever allowed to swim in the Tidal Basin?; Why is the Washington monument two different colors? Each question was then answered with five primary sources. Each primary source was added as an *Omeka* item.

The content team crafted questions in project meetings, and then also consulted with GMU history faculty who served as advisers for the projects. Some questions formed from discussions we had in our team meetings, particularly when we did not know the answer ourselves, such as <u>was the Mall ever segregated</u>? Once we agreed on questions, or a specific topic to be explored, one team member took the lead on researching and composing a draft of the answer and selecting at least five possible primary sources. Each source addressed one piece of the answer, and sometimes offered conflicting interpretations of an event. By offering multiple primary sources, we wanted to demonstrate that most historical questions do not have simple answers.



Figure 9: Building the Explorations in the Exhibit Builder.

To construct the Explorations in *Omeka*, we built one-page exhibits using the Exhibit Builder plugin. We titled each Exploration (exhibit) with the question, and provided a 100-word summary answer in the exhibit description field. Then, we created a page containing five content blocks. Each block consisted of an item that was interpreted within the context of the specific question. When creating the primary source items, we described them first as

unique sources using the Dublin Core and item type metadata fields.

After adding the item to a content block for answering an Exploration, the team then interpreted the source within the context of the question. Some sources were used in more than one Exploration, and interpreted differently each time, while the item's core descriptive data remained the same.

To let users browse Explorations by a theme, we added tags to each exhibit. Work and play, commerce and trade, designs and memorials, politics and protest made those themes visible. One of the more popular tags, "ghost mall," signifies content related to sites that no longer exist on the Mall.



Figure 10: File with Text item block selected in an exhibit page, and the Text field includes an interpretation of the item as it relates to the Exploration's answer.

In order to ensure breadth of coverage of themes and time periods, the Project Manager created a spreadsheet of Explorations. She tracked an Exploration's major themes, expressed as tags, and the time periods covered (defined by 30 years spans). Each row represented one Exploration, with columns for the themes and eras. Using the numeral 1, she marked the theme(s) and time period for each exploration. The table's second row calculated the sum of each column, allowing us to quickly gauge where we needed more coverage.

| Question | Work & Play | Politics & Protest | Commerce & Trade | Design & Monuments |
|---|----------------|-----------------------|---------------------|-----------------------|
| | 10 | 12 | 8 | 16 |
| How did a cancelled civil rights protest change federal law? | | 1 | | |
| How has the audience for presidential inaugurations changed since 1800? | | 1 | | |
| How has the federal government used the Mall during times of war? | 1 | 1 | | |
| How have natural disasters impacted the Mall? | 1 | | | 1 |
| Was baseball ever played on the Mall? | 1 | | | |
| Was that a grizzly bear on the Mall? | 1 | | | |
| Was the Mall ever used as farmland? | | | 1 | 1 |
| Were people ever allowed to swin in the Tidal Basin or Reflecting Pool? | 1 | | | |
| Were slaves bought and sold on the Mall? | | | 1 | |
| Were there other buildings where museums are now? | | | 1 | 1 |
| What happened to George Washington's plan for a market near the Mall? | | | 1 | 1 |

Figure 11: Snapshots of the Explorations table, showing theme counts.

The content team also wanted to offer Explorations crafted specifically for family or school groups to do together. "Scavenger Hunts" are Explorations that invite users to visit one specific landmark on the Mall to engage in an exercise of close looking. Read more about the development of the Scavenger Hunts from Michael O'Malley.

To keep the section from becoming static, the order of Explorations were randomized so that each one rotates through on the browse pages. One Exploration is featured on the homepage, and those rotate as well. This means that if a user visits the landing page early in the day for a quick browse, when she returns later in the afternoon, she will discover a different featured Exploration on the homepage, and on the section's landing page.

Scavenger Hunts

Written by George Mason University History Professor Michael O'Malley who developed the structure, content, and media for four scavenger hunts.

I began from the premise that much of the pleasure and value of history lies in the appreciation of small details, and that history involves an element of detective work. We needed to identify elements of the mall which were not obvious, but relatively easy for tourists to find. We wanted the items identified to add depth to the experience of each site, and we hoped the process of searching would invite closer scrutiny and consideration.

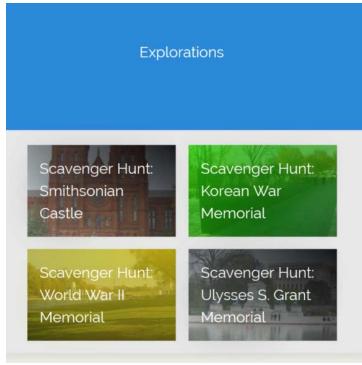


Figure 12: Four scavenger hunts are available in the Explorations section.

Smithsonian onil Museum of Statellite Smithsonian onil Museum of Smithsonian onil Museum of Smithsonian Caste United States Capito of Smithsonian Caste United States Capito of Smithsonian Caste United States Capito of Smithsonian Aut and Space Museum of Smithsonian Aut and Space Museum of Smithsonian Museum

Go to the Ulysses S. Grant Memorial at the east end of the Mall, below the U.S. Capitol

Figure 13: Scavenger Hunt for the Ulysses S. Grant Memorial.

The Grant Memorial offers one example. This powerful piece of public art hides in plain sight: everyone sees it, but few stop to look. In finding the details, the story each group tells becomes more clear. Users are asked to find the snapped harness that plunges a wagon into chaos: they find the abandoned rifle that speaks of fatigue and loss, and a sculpted letter, lying half buried nearby. Finally they locate the face of a fallen rider, modeled on the sculptor, Henry Merwin Schrady. Completing the scavenger hunt conveys the deep detail, narrative complexity, and careful choices that went into this stunning work.

A second scavenger hunt centered on the <u>Korean War Memorial</u>. We ask users to locate the face of an African American. They then learn about Truman's 1948 order desegregating the armed forces. Discovering the field radio in another statue's hand, prompts a discussion of the difficulties of communication in an age before cell phones and satellites.

When they find the stone listing the number of Americans killed in the war, they are gently reminded of the dramatically high casualties in places other than the US.

I began by scouting memorial sites by walking the Mall with a digital camera, identifying and photographing likely "finds," and in some cases returned on a day with better light. The photos, including multiple overviews and four closeups of the items to be found, were then each given a short 3-5 sentence description, aimed at situating the smaller item in relation to the larger site.

Photos were chosen because they were easy things to overlook, but when noticed, enriched the experience of the site. And ornamental detail of the Castle building, for example, becomes an occasion for discussing the local quarry where slaves labored.

For each scavenger hunt, I composed some simple theme music, roughly appropriate to the period being described. For example, the WWII memorial theme is a short loop of big-band swing. The songs were composed and played via Apple's LogicPro software,



In 1948, President Harry Truman signed an executive order ending segregation in the US armed forces. African Americans had fought in every American war since the revolution, but always as members of segregated units. In Korea, for the first time, American soldiers of all races and colors served together.

Figure 14: Looking closely at the Korean War Memorial brings attention to the segregation of the US Armed Forces.

which includes a large library of sampled instruments and drum beats, all copyright free, which can used easily in many contexts. I used a mix of real instruments and pre-recorded samples. For the WWII gold star image, a more somber and elegiac piece of music was substituted for the big band style theme. Then, I recorded a voiceover to go with each "found" item, beginning with the site's theme and then including an audio narration of the text description.

The four scavenger hunts can get users thinking about a variety of historical subjects: technology, the decorative arts, military technology, the place of women in history, and the choices made in designing memorials themselves. Because of the varied music, each has a different "feel." Users will get a sense that history tells many stories and opens many lines of inquiry, and that the Mall rewards visitors with an eye for detail as well as for grand scale.

Content Testing

We developed a protocol for testing the content and structure of the Explorations with individuals unfamiliar with the Mall's history.

Each user received a list of possible questions, with a short introduction, and was asked to select a topic to explore. The testing team member presented the user with a paper copy of the selection question and then asked the user to comment on their choices through a series of directed questions. After each discussion, users were asked to then select another Exploration they wanted to investigate. Each user reviewed three explorations, and the testing team collected feedback on which topics were most and least popular and some reasons why.

User Questions:

- Why did you choose this investigation?
- Was the information what you expected?
- Did you find out anything you didn't already know?
- Was the question answered? Did you want more information? Less?
- Which primary source appears particularly interesting to you?
- After finding answers to the investigation, would you like to go elsewhere? Are you interested in finding questions around a similar theme?
- Did you want more information about this theme?

Based upon this feedback, we rephrased questions, adjusted related primary sources, and refined accompanying narratives as needed. Testing confirmed that structuring the Explorations as questions with primary source answers appealed to users. Well-phrased questions with answers that specifically addressed those prompts encouraged further user exploration of the site. These findings guided the development and refinement of the Explorations section, and also guided the content team on where to focus research and writing time.

Composing for the Mobile Web

Testing the Explorations reinforced the need for the content team to write in small, concise chunks, readable on small screens. Our approach drew heavily from museum exhibit label writing practices, and the team's personal experiences with mobile history sites that overwhelmed users with too much text.

To make reading the content of *Histories* easier on a mobile device, and to ensure consistency, the content team created a style guide. The goal was to make the best use of words. We set a 100-word maximum for item descriptions and Exploration answers. We worked to eliminate esoteric and academic vocabulary, and to write in plain, descriptive prose. We used numerals when discussing numbers, and we wrote 1900s, rather than 20th Century, to eliminate user confusion over what years actually comprised specific centuries. Writing in concise and descriptive language was a big challenge for the entire team and demanded a multi-step revision process.

Every piece of content on the site was reviewed by at least three team members. After researching and working through a first draft of text in an external text editor, a team member built out an item in the *Omeka* admin of *Histories*, keeping the item private. Then another team member reviewed the item. Reviewing an item involved checking that all required fields were filled and interpreted appropriately, and that the information was accurate and relevant to the history of the National Mall. Then, the same item was reviewed for spelling, grammar, style consistency, and clarity of the language. The editor and item creator worked together to revise the item until they felt it was ready for a final review. Then, the Project Manager or a Director reviewed the item, and either pushed it back to the creator for revision, or published the item.

Selecting images to accompany an item that were appropriate for viewing on a small screen presented a research challenge. Images had to be readable on a phone. Some digitized photographs from the nineteenth century represented an event or place, but the perspective or composition was too difficult to decipher on a phone. When faced with few visual options, the content team annotated a digital image with an arrow to draw the user's eye to the area representing that item.



Figure 15: The red arrow alerts the user to the location of the Washington Gas Works.

<u>Explorations</u> were longer and required writing in a shared space to allow for collaboration, discussion, and revision. The team drafted primarily in Google Docs, starting with a question and possible primary source answers. As with item creation, one content team member took the lead on researching and drafting an Exploration, and then asked one other peer to collaborate. One of the Directors reviewed the final draft in Google docs, and then the Exploration's lead built the short exhibit in *Omeka*. If the primary sources had not already been added as items to the website, new items had to be created, and followed the process stated above. Composing a complete Exploration required many weeks, in some cases months, of research, writing, revising, and editing.

User Experience and Design

Content development and the web development processes occurred simultaneously.

In the early weeks of the project, the content team researched the Mall's history and mapped out different ways of organizing and presenting the content in the *Omeka* site. We understood that users would approach and interact with the site differently based on the options available and their needs. Some would seek the answer to a quick question, while others would want guided paths to help them explore the Mall's histories. To think through our options, we sketched out possible user paths and page content on whiteboards at the RRCHNM. We started with the design mock-ups created for the grant proposal, and modified from there.



Figure 16: Design mock-up from the 2011 grant proposal.

Beginning with the homepage, we identified major entry points to the content sections. Next, we outlined the pages where a user landed when clicking on one of those entry points. Using arrows, we created pathways.

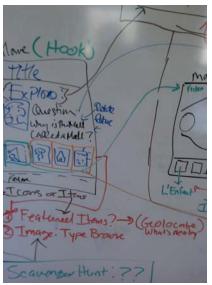


Figure 17: Sketching out a homepage and possible user paths.

Drafting on whiteboards helped the team make decisions about the site's content structure before building any part of the website.

Next, we prototyped the site on paper, and sketched out where content would be placed on the homepage and on specific pages. With those in-hand we tested our assumptions about user behavior with our potential audiences.

Design and Testing

The content and testing teams worked with small groups of users before finalizing the site architecture and developing the web design. Our user testing regime was not expensive, but required a concerted effort from the testing team to engage users at each stage of development, for content and user experience. We followed the principles outlined in Steve Krug's *Don't Make Me Think: a Common Sense Approach to Web Usability*.

We developed a user testing protocol (PDF) to evaluate the site flow using a paper prototype. Team members interviewed individuals unfamiliar with the Mall project by asking guided questions, taking notes, and encouraging testers to think out loud as they forged their own paths through the prototype. View the entire paper prototype (PDF).

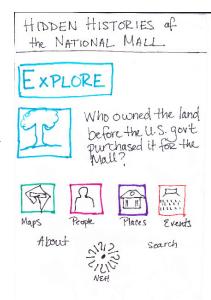


Figure 18: Prototyped homepage drawn on paper for user testing.

Through this process, we identified strengths and weaknesses in the proposed navigational structure and better understood user expectations about site functionality, section names, navigational cues, and content. For example, the section titled "Events" in the prototype led most testers to think they would find a calendar of concerts, lectures, or other public programming scheduled for that day on the Mall. We revised the heading to "Past Events." Re-testing confirmed that the revision clarified user expectations.

The content team began working closely with the web designer, as we followed an agile process of drafting, responding, and re-drafting until the designer and the rest of the project team were satisfied with the results. Following the feedback from initial rounds of user testing, the content team drafted a site map to help guide the designer who then built wireframes. Wireframes visualized the basic structure and hierarchy of the site and the navigational interface among site components.

Before moving to the next design phase, content team members were asked to describe in a few short phrases the feelings they wanted the site to evoke, and to describe the site's desired look and feel with adjectives and short phrases. The project team wanted the site to be seen as trustworthy, reliable, friendly, slick, and savvy. These responses shaped the creation of mood boards that offered different options for the site aesthetic, including a color palette, layout, logo, and navigation styles for the site.

The web designer created a series of four mood boards, each establishing a different look and feel for the site. The mood boards integrated the qualities team members considered important. In selecting a look and feel, the team paid close attention to the colors. graphic elements, design clarity and simplicity, and navigation appropriate for presenting the history of the National Mall. Once the team selected a mood board. the web designer moved ahead by drafting the theme in HTML, CSS, and PHP. As she designed the theme, the web designer also experimented with different styles and icons for a site logo.



Figure 19: One of four mood boards created by the web designer.

Meanwhile, the content team focused on refining heading names for navigational elements through a series of quick A/B testing. The content team fluctuated on whether the main navigational elements should be action verbs or nouns. The section now known as "Explorations," had many different names, including "Investigations," "Discover," "Explore," before we finalized that term.

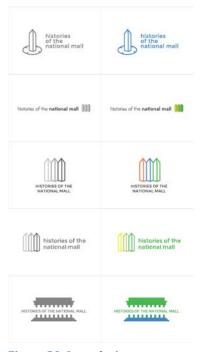


Figure 20: Logo designs.

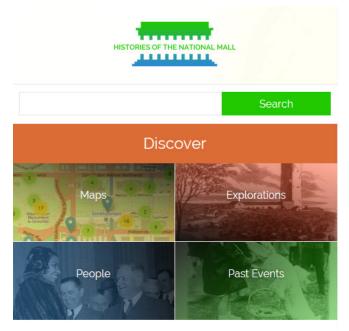
As the site's design coalesced, the content team refined the text and features on the homepage. The content team was asked to provide some guidance telling visitors how to use the site and to explain what a visitor would find on the site. The designer created a button on the homepage that linked to a short page called, <u>Using the Site</u>. We added sharing functionality for users to easily post site items on their favorite social media platform, such as Facebook or Instagram.

The design and development team worked together to refine the mapping responsiveness to marker selection and popup windows while browsing on the Mall. After further rounds of on-the-Mall user testing, we decided the map needed helper text and better icons for indicating that there were settings that could be adjusted by the user. The web designer added a Tool Tip to guide users new to the site through the

map's features and interface, and experimented with different icon styles and symbols. The text of the Tool Tip reads: "This is an interactive map. Click the "filters" button to the right to find **historical map layers** and ways to customize your map."

The final version of website represented more than two years of research, design, and development work from the entire project team. This iterative process let us address major issues and problems at each stage of development, resulting in a clear and usable end product.

When launched in March 2014,mallhistory.org offered users the opportunity to engage in a self-guided exploration of over 400 items, including people, sites, past events, and primary sources, with over 30 inquiry-based explorations. We created four different entry points: geographical (Maps); thematic (Explorations); chronological (Past Events); and biographical (People).



Uncover the Many Histories of the National Mall

Figure 21: Final version of the homepage.

Each section connected the physical space of the Mall with the social, cultural, and political events that have transpired there.

We further refined the site's functionality based on user feedback after the launch to better connect the content across the site. Originally, People, (which are individual items in the site) were not linked to other items through the Dublin Core "creator" field in any way. When a user was reading the Arts and Industries building item and wanted to learn more about the architect Adolf Cluss, she clicked on his name and was directed to a list of other buildings that he designed. These links were made using the Search by Metadata plugin. The biographies of individuals were created as individual items but were not discoverable in that list. Some users expected to find the biography of the person populating the "creator" field. To solve the problem, the content team returned to the "People" items and entered the individual's name in the creator field. The web designer made it possible for the creator field to remain hidden on those public item pages. Now biographies (People items) appear in the same list with items created/built/designed by that individual. This revision more fully integrated the different types of content into the overall site, and is an example of how the entire team worked together after the website launched to improve the user experience.

Outreach and Publicity

We selected a launch date for the beta version in early March 2014, in time for Washington, DC's busiest tourist season. Preparation began months in advance. An active and on-going outreach plan was central to our efforts in attracting visitors to *Histories*. With the <u>audiences identified</u>, we created different ways to reach those audiences through print media, press releases, social media, and in-person outreach activities.

After finalizing the web design and a logo for the site, the team designed and ordered brochures and stickers to have available for the site launch. The project directors worked closely with the web designer to compose text and a design that displayed the site's URL and told visitors the site was mobile accessible.



Figure 22: Rack card size brochure, front.

The flip side of the brochure contained basic information about the site indicating that it as a guide for exploring the Mall. We crafted text to hook visitors with interesting questions: "Did cattle roam the Mall?" "Was Constitution Avenue ever a canal?" To make it clear to readers that the site was mobile-friendly, we included a screenshot image of a phone displaying the site's map, and printed a Quick Response, or QR code. QR codes are readable by smartphone apps that allow a user

to scan the code, which contains an encoded URL. Once scanned, the phone opens its web browser to the specific page linked in the QR code. We used a free QR Code generator to create the image we inserted into the brochure. Finally, to lend credibility to the site, we included the logos of RRCHNM, George Mason University (Mason), and the NEH.



Shortly after the site launch, we targeted a variety of local media with a press release specifically targeted for local audiences. We distributed this release to local news outlets, shared it with the George Mason University newsdesk, and posted it on RRCHNM's website.

Working with the project directors, the outreach team identified locations near the Mall in Washington, DC where the team wanted to place brochures. The group identified DC libraries, archives, and museums where we sourced content, as well as tour group offices and National Park Service visitor centers. A project associate then contacted these sites by phone and email to ask them to display and offer the site's brochures. After confirming acceptance from sites, project associates arranged for brochure deliveries, and visited other sites who had not responded to our inquiry. The following places accepted *Histories* brochures: Historical Society of Washington, DC; Martin Luther King Jr. Memorial Library (central public library for DC); City Segway Tours; Walter E. Washington Convention Center; White House Visitor Center (National Park Service); and Union Station's tourist information desk. Some visitors centers only display materials produced by their organization, such as the US Capitol Visitor Center, and could not take our material. The Smithsonian Institution's information desk in the Castle, on the other hand, agreed to keep brochures behind the desk, but could not place them out on their counters.

To acknowledge the libraries and archives whose sources we incorporated into the site, we created <u>small tri-fold stands</u> (PDF), saying "Find our material in Histories of the National Mall" with a short blurb describing the site, a QR code linking to the home page, and the logos of the site, RRCHNM, Mason, and the NEH.

There were some roadblocks for distributing promotional materials on the Mall and across DC. First, RRCHNM is located on Mason's Fairfax, Virginia campus, 15 miles west of the Mall, and does not have a physical presence on or near the Mall. This made distributing brochures challenging. Second, while there are many organizations and companies serving DC tourists, we lacked a deep list of contacts working in the right places. Placing brochures at federal libraries, galleries, and museums, or at National Park Service sites proved complicated. Most institutions located on the Mall have strict policies limiting the display of brochures to only inhouse materials which prevented them from accepting any material from us, even when we knew people who worked for those organizations. We tried to reach tour bus operators and riders, but since there is no central loading point for these tours other than Union Station-with multiple entrances and exits-distribution was a challenge. Repeated emails and calls to Destination DC, the local tourism bureau, also proved fruitless. One happy discovery was that the Walter E. Washington Convention Center was willing to take as many brochures as we could give them, and has continued to readily accept them for display at their information center near Mount Vernon Place.

Though RRCHNM is not located on the Mall, the *Histories* team works in the DC area making it easy for the team to coordinate with NEH program officers and the Congressional Affairs Office to distribute brochures to Congressional offices. Each Representative and Senator employs staffers who meet with constituents when they visit Washington, DC. *Histories* proved to be an appealing resource for them to distribute to constituents visiting during their DC vacations. And, for short-term

staffers and interns new to the District, they began using the site to learn more about the history of their environs.

One year after the launch, the Project Manager contacted the sites that accepted brochures in the prior year. Most were very happy to receive additional flyers, but organizational changes at some of the sites meant that we were no longer able to reach the correct person with whom to discuss brochure distribution. We also reached out to local history centers in public libraries across the DC area, including Arlington and Fairfax Counties and Falls Church city in Virginia, and Prince George's and Montgomery Counties in Maryland. Every library accepted brochures and some planned to disperse them among their branches.

We also expanded our local reach by contacting national and regional branches of the Boy and Girl Scouts in spring 2015. A project associate researched the current badge requirements for both scouting organizations and created a guide that explained how scouts at different levels might use the resources on *Histories* to achieve badges. The director wrote letters and attached a "badge connections" (PDF) addendum that invited scouting leaders to encourage use of the site by local councils and individual troops.

To reach history enthusiasts and the DC locals, we organized a few in-person events. The Project Manager connected with social media and technology managers at DC libraries, archives, and museums to coordinate small gatherings. In the DC area, we connected with the active Meetup community interested in history, cultural heritage, and technology.

Our first in-person event was in August 2014, when the outreach team hosted an onsite scavenger hunt in front of the Smithsonian Castle. We prepared a short scavenger hunt with mallhistory.org, but were unable to send participants on the Mall due to heavy rain. However, we were able to walk attendees through the site while standing on the Mall and they were impressed with the breadth of content they found while exploring the site. Later that evening, we presented the project, its content, and underlying design philosophy to approximately thirty attendees at the <u>Digital Cultural Heritage DC</u> monthly Meetup. Members of the crowd browsed the site on their phones while we circulated through the crowd discussing our processes and outreach strategies.

The outreach team attended other Meetups, such as Washington DC History & Culture.

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The outreach team attended other Meetups, such as Washington DC History & Culture. The group invited the Project Manager to lead multiple events, including an evening tour based on the "Ghost Mall." These face-to-face events complement an active social media community who follows mallhistory.org on three different platforms.

Social Media Strategy

Written by Project Manager Megan Brett and Project Associate Jannelle Legg

Before the beta launch of *Histories*, the outreach team developed a social media plan that would reach audiences not walking on the Mall, and to encourage use of the project as a historical resource.

First, the team needed to select appropriate platforms for reaching different audiences. Resources from the Pew Research Center, and discussions with social media managers at cultural heritage organizations informed the team's decisions based on the user bases and ease of managing postings to Facebook, Twitter, tumblr, Pinterest, and Instagram. Rather than having a presence on every leading social media platform, which seemed unmanageable, the outreach team decided to limit the outreach efforts to three networks. We wanted to target different demographics through different platforms, and selected Facebook, Twitter, and tumblr.

The average user of Facebook is trending older, and through those users we expected to reach history enthusiasts, retirees, and parents or grandparents organizing family outings to Washington, DC. On Twitter, there is a strong network of scholars, cultural heritage institutions, and students who would be interested in the historical content and the project's development. The smallest of the networks, tumble, attracts a community of millennials interested in many different historical topics and time periods that offered potential for reaching a younger user base than Twitter and Facebook. Pinterest and Instagram are used heavily by cultural heritage institutions for showcasing items in their own collections, but we found it is difficult to share the narrative-driven Explorations on those platforms. Additionally, the interface of Pinterest makes it difficult to preserve original source citations, since the emphasis is with sharing an image and the user's notes. Instagram is growing quickly as a popular mobile-based social network, but content must be uploaded from a mobile phone and cannot be scheduled in advance. Content team members were already familiar with tumblr, Twitter, and Facebook, allowing us to focus our attention on scheduling content, rather than learning new platforms.

Prior to launching the social media campaign, the outreach team created accounts and handles on each platform. Rather than using the full project title, "Histories of the National Mall," as the username or handle, we settled on the condensed "mallhistories" for each network: Twitter (@MallHistories); Facebook (https://www.facebook.com/mallhistories); and tumblr (http://mallhistories.tumblr.com/). Once the accounts were created, we posted one item on each social media network everyday, from March 2014 through the end of the official grant period on August 31, 2015.

We decided to post on these platforms daily, which is a demanding schedule for a small team. Since we had more than enough content to sustain daily postings for over a year, we thought this effort was worthwhile. Moreover, such a schedule would allow us to achieve a certain amount of visibility in algorithm-driven Facebook feeds or the timelines of tumblr users. Posting daily gave us a better chance of being noticed by users than a weekly post, which may have been hidden or buried in these platforms. Plus, daily posts allowed the team to circulate and highlight all of the site's content, at least once, over the course of the grant. The team responsible for posting and tracking social media interactions included two project associates who shared these responsibilities.

Social Media Management

We quickly found that organization was a key component to managing daily posts on social media. We were dealing with a sizable collection of items on the site and recognized that we needed to develop a system for looking across potential content quickly and efficiently to identify what to feature on Facebook, Twitter and tumblr. We were also sharing these responsibilities between project associates and needed to work in a collaborative space. To satisfy these concerns we determined that a shared Google Sheets worksheet was the best solution.

We developed a document that contained multiple sheets: one sheet tracked item types, another tracked all public items in the site, and a third sheet tracked our social media activities.



This organization provided the space for us to track what and when we would be posting on social media. It encouraged us to be thoughtful about each post and allowed us to develop balanced and timely posts that represented the breadth and depth of the *Histories* project. This structure also ensured that new items could be added easily as the project content expanded over time.

| Item name | Item number | Item Type | Potential Dates | 2015 Date Used | 2014 Date Used |
|---|----------------|--------------|-----------------|----------------|------------------------|
| "Facts About the Monument" | 282 | Document | 02-22 | 2/22/2015 | |
| "I Have a Dream" Inscription | 35 | Place | 08-22 | | 8/22/2014 |
| "No More of those Hideous Monuments!" | 288 | Still Image | 08-19 | 8/19/2015 | 4/1/2014, 8/19/2014 |
| "The Grand Review" - Abraham Lincoln's Second Inaugural Parade | 335 | Still Image | 03-04 | 3/2/2015 | |
| \$1,795,847 District Deficiency Measure is Now Up To Senate | 174 | Document | 06-05 | | 6/5/2014 |
| 1963 March on Washington for Jobs and Freedom | 190 | Event | 08-28 | | 8/28/2014 |
| 2011 Earthquake in the Washington Monument | 265 | Moving Image | 08-23 | | 8/23/2014 |
| A Great Park System | 179 | Document | 03-23 | 3/23/2015 | |
| A Guide to Smithsonian Architecture | 180 | Document | none | 8/18/2015 | 7/10/2014 |
| A Picnic on the White House Lawn | 504 | Still Image | none | | 7/17/2014 |
| A view of the Lockkeeper's House | 257 | Still Image | none | 2/12/2015 | |
| A View of the Mall in St James's Park | 400 | Still Image | none | 7/22/2015 | |
| A. Philip Randolph | 97 | People | 04-15, 05-16 | 4/15/2015 | |

Figure 25: Excerpt from the master sheet of the social media worksheets. Note that each row includes the title and number for an item as well as potential dates.

We developed systems for highlighting certain features across these sheets. Using field highlighting and italics, for instance, we were able to communicate between schedulers about possible upcoming posts and draw attention to items that had not been used. Using the sort and find functions of Google Sheets also made it possible to navigate and locate content matching a specific criteria. This practice made it possible to look across the entire site, to evaluate multiple items, and be thoughtful about when we should post them.

| Item | Туре | posted Tumbir | posted Facebook | Likes (f) | Comments (f) | Shares (f) | Post Clicks (f) | Reblogs (t) | Likes (t) | RT (tw) | Fav (tw) |
|---|-------------|---------------|-----------------|--------------|-----------------|------------|-----------------|-------------|-----------|---------|----------|
| Constitution Gardens (15) | place | 1/9/2015 | 1/9/2015 | | | | 1 | 2 | 3 | | |
| Protesting tree destruction, 1934 (doc, 364) | document | 1/10/2015 | 1/10/2015 | | | | | 1 | 2 | 1 | |
| Alice Paul born, 1885 (ppl, 79) | people | 1/11/2015 | 1/11/2015 | 2 | | | 1 | 2 | 2 | | |
| James L. Farmer born, 1920 (ppl, 149) | people | 1/12/2015 | 1/12/2015 | 1 | | | | 1 | 3 | 1 | |
| Captain John Smith's Map of Virginia (excerpt) (236) | still image | 1/13/2015 | 1/13/2015 | 1 | | | 3 | 1 | 3 | | |
| Alice Pike Barney born, 1857 (ppl, 100) | people | 1/14/2015 | 1/14/2015 | 5 | | 1 | 1 | 85 | 134 | 2 | |
| Martin Luther King, Jr. born, 1929 (ppl, 90); | people | 1/15/2015 | 1/15/2015 | | | | | 3 | 8 | | |
| Capitol Reflecting Pool (25) | place | 1/16/2015 | 1/16/2015 | 3 | | | 1 | 15 | 19 | | |

Figure 26: Excerpt from the scheduling sheet with notes regarding engagement.

Our scheduling sheet also provided a space to evaluate and track the social media responses. Using additional columns, we differentiated between platforms and types of engagement, and made note of particularly effective posts.

Content Strategy

The differences between social media platforms encouraged us to be thoughtful about how to best represent content from *Histories*. Each platform handles content differently and we needed to develop a standardized way of producing posts. Our priority was to drive visitors to the *Histories* site, so it was essential that the posts linked back to the site. We also wanted to avoid passively circulating content, and instead chose to incorporate framing text that would make social media posts relevant and interesting.

Each post followed the same basic template, which included a lead, photo, and the shared item's description. These posts appeared differently across the social media platforms. Rather than create three different posts per day, we opted for continuity, and worked within the constraints of the various platforms.

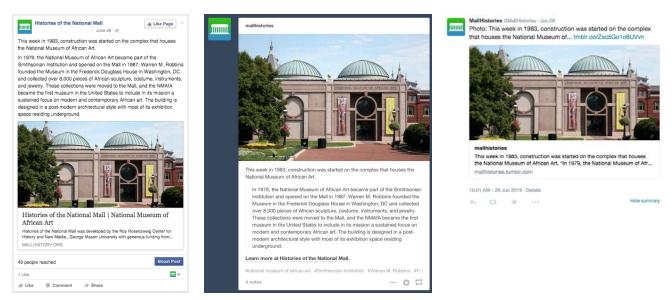


Figure 27: Example of differences across platforms; Facebook, tumblr, and Twitter posts with the same content.

For instance, as you can see in the above image, on tumblr (center) we took advantage of the hyperlinking function and linked readers to both the item and the site, using the phrase "Learn more at Histories of the National Mall." ("Learn more" was linked to the specific item, while "Histories of the National Mall" was linked to the homepage.) On Facebook (left) posts were automatically linked to the item, but we were unable to link to other content on the site as Facebook's posts do not allow hyperlinked content from text.

The character limit imposed by Twitter meant that we could not provide the same meta-commentary that was possible with Facebook and tumblr. Rather than linking straight to the site, we opted to push posts from tumblr to twitter. Clicking the link in the tweet took users to the tumblr posts, allowing our readers to learn more and provide them with some of the longer form context available without a character limit.

Tumblr also makes use of tags to organize and connect content. While Twitter exposes visitors to new content in chronological order and Facebook uses a proprietary algorithm, visibility on tumblr required a concerted effort by the social media team to tag names, events, places and other relevant information to link our content to discussions. We also incorporated popular tags like, "On this day in history" or "history" to tap into users already following those specific tags. By linking to and tagging other institutions in posts, mallhistory.org connected with social media teams at Smithsonian Institutional Archives and DC Public Library.

This meta-commentary was an important component of our media strategy. We crafted lead-ins with a conversational tone, using friendly wording and humor to highlight the importance of each day's post. Our aim was not to hide content behind attractive headlines, but rather to draw out interesting details and to demonstrate

how the history described in that item was meaningful or relevant. We introduced the item in one or two sentences in the following ways:

- *Highlighting the connection*: We tried to consistently identify why each item was posted. For example: "For the opening day of Major League Baseball, check out this great picture of Senator Pepper playing baseball with Congressional pages in 1924!"
- *Making it personal*: We attempted to pull readers into our content by asking questions. Frequently the lead-ins included phrases like, "did you know...?," "would you like...?," "have you seen..?," or "can you imagine...?"
- *Emphasizing the timing*: Posts were often relevant because they highlighted an anniversary of a significant event or birthday of a Mall-related personality. We made these connections explicit by adding contextualizing text like; "today," "this week," "this month," "x years ago."
- *Highlighting the weird*: We often introduced content by highlighting something surprising about the person, place, or past event. We tried to highlight a feature that someone might have overlooked, as with this example: "Did you know that on March 31, 1833, arsonists destroyed the Treasury Department?"

The pressure of a daily posting schedule posed a consistent challenge to our efforts to produce timely content. We were constantly seeking out opportunities to connect the content on mallhistory.org with current events, local holidays, celebrations, and activities. For example, the reintroduction of American bison to the National Zoo had not been widely announced, but because the news broke early in the day, we were able to swap out the scheduled posts for the "Bison Behind the Smithsonian Building" item. This post was very popular that day and circulated widely during the following week.

Occasionally, current events prompted the creation of new content in the site as well. For example, when a gyrocopter landed on the US Capitol lawn on April 15, 2015, the content and outreach team returned to the project's research collections to feature other landings on the Mall, and discovered evidence of autogiro landings on the Mall in 1928 and in 1931. By May 1, the content team had drafted two new Past Event items, and featured one of them on social media in the same month.

The planning, scheduling, and posting of daily content required a significant time commitment from team members. We organized postings in two week increments, rotating the duty of selecting, preparing, and scheduling posts. Dividing the work into 14-day periods allowed us to include thoughtful commentary. This time frame also permitted our team to monitor the engagement with posts on Facebook, Twitter and tumblr and record it in the sheet, as well as respond to feedback on social media or engage with some of the other cultural heritage institutions which we friended on the sites.

Social Media Sustainability

Following the project's launch, daily sharing on social media drove traffic to mallhistory.org and was an integral part of the outreach strategy to bring content to different audiences. We designed the social media plan to last through the grant's active funding cycle. The person-hours required to share and develop content daily cannot be supported without the grant's funding. We have adjusted and shifted social media responsibility to a project associate who will spend a few hours each semester developing a modest schedule of postings to highlight mallhistory.org's content for select anniversaries and birthdays. We will also share relevant content when significant current events prompt our attention.

Social Media for Visitors Using Mallhistory.org

Histories of the National Mall was developed by the Boy Rosenzweig Center for History and New Media , George Mason University with generous funding from the National Endowment from the Humanities. Content licensed under CC-BY.

Figure 28: mallhistory.org footer displaying icons that link to Twitter, Facebook and tumblr.

While the social media plan is targeted at users not on the Mall, we made it possible for users to connect with the project's social media posts from the footer available on every page.

For tourists, and other users, wishing to share content with their social networks, each page has an AddThis bar available that links to the individual user's social media accounts, or allows her to email something to herself or others to read at another time.

Social Media: Measuring Success

Success in social media can be evaluated by the number of likes, reblogs, shares, and comments that a post receives, and the number of followers for an account. Data that we have collected suggests that we succeeded in creating positive engagement with the site and developed a small but loyal following. On tumblr there was an additional mark of success. Certain tags on tumblr are managed by editors, who nominate the best of the tagged content, and "history" is a managed tag. A number of posts to our tumblr were nominated by editors, at least two of whom followed our blogs. Additionally, anecdotal feedback from friends and family of the project team indicated that even those posts which were not heavily "liked" were well received.

Making an "App"

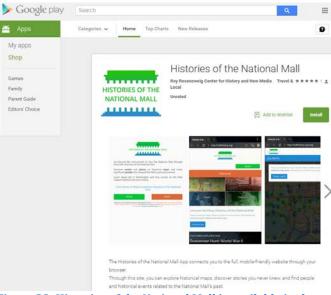


Figure 29: Histories of the National Mall is available in the Google Play/Android app store.

Some smart phone owners look for native applications (apps) first when preparing to travel. To attract users searching for apps first, we decided to create an app placeholder that makes Histories of the National Mall visible in an app store. A project associate used a crossplatform service to wrap the content and design of mallhistory.org into a single-page launchpad to the site and released it as an app for Android users.

We chose Apache Cordova to create an app for different mobile operating systems. Rather than building a separate app with its unique software development kit, Cordova streamlines the process. A major advantage to building with Cordova is that a developer does not need to learn many coding languages (C+, Cocoa, or Java) to produce apps for different platforms. Developing once through a cross-platform system like Cordova saves any team time and resources.

Since we never intended to package the entire site as an app, we created a simple redirection page using HTML and CSS that prompts the user to visit the full site using their web browser. The *Histories of the National Mall* "app" is really a placeholder and means for publicizing the project to users browsing in app stores.

The process of creating the placeholder app was relatively straightforward. (Read more in the next section how to build with Cordova). Submitting and releasing an app, however, was a bigger challenge than we anticipated. Each store requires that the person or organization submitting the app create a developer account. We wanted the Roy Rosenzweig Center for History and New Media to be the organization, rather than any individual developer, because RRCHNM will be responsible for the long-term maintenance of the "app." This was possible in the Android store, but not for Apple, and as a result, our placeholder app was never accepted or available in the Apple store.

The problem we faced is unique to our organization. Apple requires that organizations submit tax ID numbers to verify that an organization is legitimate. RRCHNM is a separate entity within George Mason University, but does not have a

unique tax ID number. Mason has an institutional Apple developer ID, but we wanted to maintain control over its status and maintenance. Individual staff members considered obtaining a developer account, but then she or he needed to submit personal credit card information to pay the annual developer fee, and her or his name would appear as the developer. That person would then be responsible for maintaining the license for the project, even if she or he left RRCHNM. RRCHNM needed to be listed as the developing organization, and so we could only make a placeholder app in the Google Play/Android store.

Cordova Development Guide

Written by Spencer Roberts

In an effort to reach users who go to the app stores first to find content, the team investigated ways to create placeholder apps for multiple mobile platforms in the most cost-effective way. The development team decided to use the <u>Apache</u> <u>Cordova</u> open-source mobile development framework, because we didn't want to expend time and resources developing, and maintaining separate apps for each type of device.

The framework uses common web programming languages (HTML5, CSS3, and JavaScript) rather than languages specific for each operating system, and creates one set of content files using HTML and CSS can be packaged for multiple devices. Cordova contains and uses the software development kits (SDKs) for each brand of device on behalf of its developers.

There are different ways to create an app with Cordova. If a website uses basic HTML and CSS pages, the entire site can be packaged and distributed for users to download and use on their phone without a data or WiFi connection. For database-driven sites that include large image and media files, it is better to create an app with one page that directs users to the full site in their web browser.

The steps below describe a standard procedure for implementing Cordova with simple landing/launching pages that send users from an app to a web-hosted site. Many of the steps follow the <u>Cordova documentation</u>, and when necessary, we modified the procedure for our needs. Cordova can be used for a <u>variety of platforms</u>, we focus here on Android, iOS, Blackberry, Windows Phone, and Windows 8.

1. Install Cordova

The process of installing Cordova can be complicated for users unfamiliar with the command-line used by their operating system. Because we are primarily interested in simple, cross-platform development, we will use only the <u>command-line</u> interface (CLI).

It is best to navigate within the command-line interface (such as Terminal) to a directory close to the root for your OS. For instance, we can use something like: MacintoshHD/Developer/apps

The <u>Cordova documentation</u> explains and points to guides about how to accomplish these first three steps.

- 1. Install Node.js
- 2. Install a git client
- 3. Use npm to install cordova

This is an important section:

- You may need to add the npm directory to your PATH in order to invoke globally installed npm modules.
- On Windows, npm can usually be found at:C:\Users\username\AppData\Roaming\npm
- On OS X and Linux it can usually be found at: /usr/local/share/npm

2. Create the App

Using only one command, Cordova can create a new project and its base files. Follow the instructions in the <u>documentation</u> to understand how the command works and create a new project.

3. Build the HTML pages and CSS stylesheet

Strangely, the Cordova documentation skips over an important step: editing the base files for the new project.

Once you create a new project, Cordova generates a folder called www in which is stored the primary content in files and folders. The main page is index.html and there are folders for img, css, and js.

To customize your app, and remove the default content by Cordova, edit index.html and index.css to suit your style and interface needs. If needed, edit index.js for advanced javascript functions.

If you are building a multi-page site, rather than a simple forwarding page, use index.html as your homepage and include other .html pages in the same directory.

4. Acquire Developer Accounts

Although you will not need to use these accounts until later in the process, it is worthwhile to begin the acquisition process early in order to avoid delays. Identify which accounts you will require to distribute for each platform. Note that most developer accounts will require payment of a one-time or yearly fee.

- Android: \$25 one-time registration
- iOS: \$99 per year subscription
- Windows Phone only: \$19 one-time registration
- Windows 8 and Phone: \$99 one-time registration
- BlackBerry: free

5. Install Software Development Kits

Although Cordova can do much of the work to build for each platform, it requires you to install the SDK for each platform. This can be the most complicated part of the process.

Cordova's <u>Platform Guides</u> provide most of the instruction for installing the different software packages. In this section, we address some of the issues you may encounter.

a. Android

- The Cordova Documentation for Android is here.
- The Android team has recently packaged their SDK into a larger suite of development tools called <u>Eclipse ADT</u>. Cordova does not require Eclipse; it only needs command-line access to the Android SDK. In order to emulate Android devices, you can use the Android SDK to set up a device and testing parameters. In essence, you can download Eclipse along with the SDK, but you probably won't use the other parts of Eclipse.
- Another option is to click "Get the SDK for an Existing IDE" and download the SDK by itself. That will meet the needs of Cordova and emulation without the added hassle of Eclipse. (In this case, Cordova is serving as your Integrated Development Environment (IDE) rather than Eclipse.)
- In order to allow Cordova to access the Android commands, you will need to add android to your path, using the procedure <u>outlined in step 1</u>.
- By default, the Android SDK only downloads the most recent API kit. Unfortunately, Cordova requires version 19. To solve this issue, run android from the command line, and check the boxes next to API version 19 of the kit to download. The Cordova screenshot shows only up to API v17, but 19 should appear as an option.
- Once you have solved the above issues, you should be able to follow the Cordova guide for any further development.

b. iOS

- The <u>Cordova documentation</u> for iOS is the most straightforward of the platforms guides, and you should be able to install the SDK and build for iOS without significant issues.
- c. Windows Phone and Windows 8
 - Cordova documentation for Windows Phone
 - Cordova documentation for Windows 8
 - The primary downside to development for the Windows platforms is that you will need a fairly high-performance PC in order to emulate or test your app. Although it is possible to use a virtual machine on a Mac, performance issues make the job more difficult.
 - In order to emulate Windows Phone apps, your PC will need an Intel processor that supports specific virtualization. Check the <u>requirements</u> to see if your machine can support emulation. Otherwise, you will be able to build the app, but not emulate it.

• Emulation is not the only option for testing, however, because you can still use a Windows Phone to test the app before distribution. If you have fewer resources, and cannot afford an upgraded PC, skip the emulation and go straight to testing on a device.

6. Build for Each Platform

Once you have installed each SDK that you plan to use, Cordova will be able to access the SDKs in order to build a native app for each platform. The Cordova interface is very straightforward.

- 1. Follow the instructions to add each platform you need.
- 2. Follow the <u>instructions for building the app</u>.

7. Emulate the App for Each Platform

For iOS and Android, the process for emulation is very easy, and most hardware should be able to handle the emulation. BlackBerry and Windows are more complicated because they require higher hardware and software capabilities.

- 1. Use the <u>Cordova commands to emulate the app for each platform that your</u> machine can handle.
- 2. If your machine is not capable of emulating for platforms such as BlackBerry and Windows, simply skip emulation and use a device for testing.

8. Test the App on Devices

- The Cordova documentation provides guidance for deploying your app to different devices for testing.
 - Android devices
 - o <u>iOS devices</u>
 - o BlackBerry devices
 - Windows Phone
 - Windows 8 App (Windows 8 apps can only be tested on a PC with Windows 8 installed as an operating system)

9. Sign and Distribute the App

Once you have emulated and tested your app on a device, the final step is to sign (authorize the version for release) and then distribute your app through the appropriate vendor. Each platform has a different procedure for reviewing and approving apps.

- Google Play through Android Developer
- App Store through iOS Developer
- BlackBerry distribution services
- App submission through Windows Dev Center

Secondary Outreach: Peers

The outreach plan included efforts to reach our secondary audience of public historians and cultural heritage professionals. We began by announcing the project launch on network to reach gallery, library, archives, and museums museum professionals (GLAMs) on GLAM-Tech listservs (e.g. Archives & Archivists, DIGLIB, MUSEUM-L, MCN-L), and H-Public. Equally important in the project's earliest days were postings to RRCHNM's institutional blog, the George Mason Newsdesk, and the project team's personal blogs and social media networks.

Throughout the project, the directors and associates presented *Histories* at conferences and authored guest blog posts on professional association websites. A few examples of these efforts are listed below:

- November 2013: Co-Director Sheila Brennan presented at the 41st Annual Museum Computer Network Conference, giving a preview of the site during a case study showcase.
- November 2013: Project Manager Megan Brett and Project Associate Lindsey Bestebreurtje co-presented a paper on "Lesser-known sites of the National Mall" for the 40th Annual Conference on D.C. Studies.
- March 2015: Brennan wrote a guest post for the NCPH blog, History @ Work, and discussed the project's genesis and rationale behind design decisions that shaped the content, navigation, and structure of the site.
- March 2015: Co-Director Sharon Leon <u>wrote a guest post on the American Association of Historians blog</u>, AHA Today, and contextualized the need for historical interpretation on the Mall and explained the choice to build a mobile-first website, rather than a native application.
- July and August 2015: Brett gave two talks at the Smithsonian National Museum of American History for curatorial and archives staff, as well as for information desk volunteers. She described the process of building *Histories*, the decision to be mobile-first rather than build an app, and highlighted the content.

Project members distributed stickers at conferences and presentations, and placed them on their personal laptops to publicize the site. Stickers were popular with colleagues who often grabbed a stack to pass along to their professional and personal networks.



Figure 30: Mallhistory.org stickers.

Challenges

Every digital public history project faces challenges during its development, and we faced a few.

Maps and Mapping

Finding sources to populate the site was not a problem, but we found that mapping those source was one of the hardest puzzles to solve. Layering georectified historical maps is a big challenge, especially when trying to serve a clientele accessing content over weak WiFi on their phones. Finding maps that are not merely illustrations, but that can be connected to real geographic points, is difficult. When writing the grant, we planned to use a certain set of protocols for layering and presenting the historical maps, but changed our minds when we started building the site. The server load was too heavy and response time took too long to work well on mobile devices connecting to the Web with weak WiFi. Prior to the development team's custom plugin solution, the content team considered creating a short video to represent change over time and landscape in a visually-engaging way.

WiFi and Data Coverage

The project team's decisions on design and development related to the realities of the landscape, and the strength and availability of WiFi on the Mall. When writing the grant, we expected the free public WiFi provided by the District of Columbia would strengthen and expand its reach onto the Mall, which did not happen. There are many dead zones between the Washington Monument and Lincoln Memorial. Connectivity near and inside the Smithsonian museums, on the other hand, has improved tremendously.

The Great Outdoors

Through testing the WiFi, we were reminded that walking and reading on a mobile device is challenging, and that tourists are less likely to be glued to their phone as they walk from one site to the next. We specifically did not create walking tours, partially for this reason, but we designed the mapping plugin to follow a user as they traveled along the Mall's path, refreshing the map with new pins highlighting places and events in that area. We like this feature, but also understand that environmental and social factors influence a user's decision to read or follow content while moving across the Mall. The sun may be shining brightly, creating too much glare to read from a device's screen. Or, someone traveling with family or a class must pay attention to the movements and activities of their group members. These conditions are out of our control as designers, but factors to remember when building a mobile public history project.

Publicity

Reaching those visitors walking along the Mall was a our biggest challenge. The advantages we enjoyed by not being one of the Mall's cultural institutions were balanced out by not having a physical space to promote the website once it

launched. The project was supported from historians at the National Park Service (NPS), but the team was unable to place signs or visibly promote mallhistory.org on the Mall itself. Signage is tightly regulated by the NPS, for good reason. Negotiating among NPS's different units proved difficult, as we could never get in touch with the right person to discuss how we could get brochures available in the most popular Park Service visitor centers. Site visitation numbers are in the tens of thousands and growing, which is reasonable, but demonstrate that we are not reaching as many Mall visitors as we would like. We see steady growth in visitation since launching, and we anticipate that usage will continue to grow after the grant ends.

Sustainability

When the grant ends, RRCHNM commits to sustaining the project over the long-term and will also shift to maintenance mode. The project team's directors will oversee the site with assistance from a project associate, who will be a graduate research assistant provided by GMU's history and art history department. Content creation will be minimal, as the project associate will focus on maintaining the social media plan. The social media postings will move to a schedule that highlights anniversaries and birthdays, and reactions to major events, such as the upcoming presidential election in 2016. The site's web domain will be renewed and the digital assets will be maintained on an RRCHNM server for the long-term. A copy of the site and its content will also be deposited in George Mason University's MARS digital repository.

Even when faced with these challenges, the project team devised ways of making the project attractive, usable, useful, and informative.

Measuring Success

First, and most important, the *Histories of the National Mall* team completed all of the deliverables and work promised in our grant proposal. We researched and developed the historical content for the site; created a content strategy and iterated a design; and we engaged in many rounds of user testing of the content and the user experience. We launched Mallhistory.org with 400 items, and currently host nearly 500 items: 90 People, 96 Past Events; 8 historical map layers that highlight 142 Places (and many Past Events); and 46 Explorations (including 4 Scavenger Hunts). We released the custom theme and map plugins as free and open source code in *Omeka* 's GitHub.com repository. We developed and implemented an outreach plan, including a social media strategy, and devised a strategy for sustaining interest in the site when the grant period ends. This guide is the final deliverable.

The team has been very pleased with the positive reactions received from our primary and secondary audiences. We did not set numerical targets for numbers of web users or for social media interactions before the launch. We set the very modest goal of growing online visitation and adoption over the course of the grant period, and we achieved that goal. We wanted to encourage individuals unfamiliar with the history of the National Mall to dive in and learn something new, and we have done that.

Our funder, the National Endowment for the Humanities, selected *Histories* as one of its exemplar public digital humanities projects in 2014. The project directors were asked to participate in an event held at the US Capitol highlighting the NEH's best work.

Our peers in the field of public history have recognized the project as a product of solid historical research and interpretation, that is also accessible to tourists and non-historians. In December 2014, *Histories* was featured in *Slate* as one of the most compelling digital history exhibits of the year. *Slate*'s Rebecca Onion wrote "The site turns the Mall itself into a museum, showing how this public space took on symbolic significance at various points in the past." *Slate.com* sent the most traffic to *Histories* in December 2014, even though the article was published on the 29th.

Notably, the site was reviewed soon after its launch by historian Kirk Savage (author of *Monument Wars*) for the *Journal of American History*. In his December 2014 issue, he described the site as "a pleasure to navigate." He noted that "even a professional historian of the district is likely to find something new here."

In February 2015, the National Council on Public History (NCPH) selected *Histories of the National Mall* as the winner of the 2015 Outstanding Public History Project Award. Sheila Brennan was asked to write a guest post for the NCPH blog, *History @ Work*, that highlighted all of the award-winning projects. And the project's

recognition by NCPH prompted the American Historical Association to invite Sharon Leon to <u>write about *Histories* for their blog</u>, *AHA Today*.

Histories is being incorporated into syllabi and class discussions for undergraduate and graduate courses outside of Mason, including <u>Digital Public History</u> offered at the University of Maryland College Park, and <u>Special Topics in Heritage</u> <u>Preservation: Theory and Practice of Digital History</u> at Georgia State University.

Our decision to build for the mobile web and not a native app was to make the materials in mallhistory.org easy to find when searching topics in DCs history. We are succeeding in this area, and anticipate the reach and pick-up rate will continue to grow. We are reaching beyond the Mall and bringing the research, sources, and interpretation out to the web for researchers, and journalists to discover. Local and national journalists are, in fact, using the site in their research. Materials from mallhistory.org has been liked from *Politico* and *Curbed DC*, as well as from individual bloggers interested in special topics (ie, ice skating in Washington). CBS's *Sunday Morning* program linked to materials in the site for their August 2, 2015 show on Pierre L'Enfant. And *Mental Floss* linked to one of the Explorations asking why people say that Washington, DC was built on a swamp.

The project directors receive multiple inquiries from cultural heritage professionals who like mallhistory.org, and want to know how they might be able to build something similar. These inquiries have reinforced our decision to create this guide. As a result, we have a list of individuals who are interested in using this Guide as soon as it is published. We are pleased that our peers have reacted so positively to this project that has been many years in the making.