# Walking Through History with *Encyclopedia Virginia*Nomination for the 2015 Helen and Martin Schwartz Prize Virginia Foundation for the Humanities

The Virginia Foundation for the Humanities (VFH) is proud to nominate <u>Encyclopedia</u> <u>Virginia</u>'s (<a href="http://www.EncyclopediaVirginia.org">http://www.EncyclopediaVirginia.org</a>) work to create 360-degree virtual tours of Virginia historic sites for the 2015 Helen and Martin Schwartz Prize. Springing from a partnership with Google, this endeavor is a powerful example of how a public-private partnership provides tangible benefits to the humanities and the public we serve.

#### Overview

An ongoing publication of the Virginia Foundation for the Humanities (VFH), Encyclopedia Virginia (EV) is a free, online, and interactive reference work that focuses on Virginia's history and culture. As a continually updated and evolving resource for educators and students of all ages, EVs mission is to make historical content engaging and accessible and to provide content that can inform our thoughts and discussions about current events and what directions we might go in the future. Currently, EV features nearly 1,000 authoritative, peerreviewed entries on Virginia subjects—from the earliest human habitations at Cactus Hill to the great civil rights attorney Oliver W. Hill, from the importance of gift exchange in early Virginia Indian society to an entry about the state's modern environmental history. Accompanying this ever-expanding set of entries are more than 550 primary-source documents. A mention of Thomas Jefferson's bill for establishing religious freedom, for example, leads readers to a fully transcribed copy and broadside image of that document. An entry on indentured servants contains links to laws relating to servitude, examples of indenture <u>contracts</u>, and <u>court cases</u> involving servants. Users can also explore history through an ever-growing number of images and audio and video clips, including rare photographs, excerpts from radio interviews, and documentary footage. EV is a reference work, a museum, and a library archive all in one.

By itself, providing access to such rich content and scholarship about historical and cultural topics would make EV a valuable resource. But what makes EV unique is our desire to leverage technology and partnerships to creatively expand the project's boundaries. Our partnership with Google serves as an excellent example of such an effort.

#### Background

In 2012, Google Earth Outreach held their first annual Geo for Good Summit at Google headquarters in Mountain View, California. Google Earth Outreach is a division of the

company that provides information and resources to nonprofits and public-benefit organizations so that they can better achieve their missions and tell their stories using Google Earth and Google Maps. The Geo for Good Summit is a workshop where participants get hands-on experience working with these tools to tell stories and promote their cause. Amongst a crowd of 100 participants from mostly environmental organizations such as "Save the Elephants" and the "Jane Goodall Institute," VFH was the *only* representative from a United States humanities organization.

Because history happens in time and space, creating a dynamic way for users to map historical events has always been an important focus for *EV*. When Peter Hedlund—who has been employed at VFH as EV's web developer since 2008—heard about Geo for Good, he knew it would be a great opportunity to investigate and learn about ways we could make the *Encyclopedia*'s mapping platform more scalable. When Peter came back to Virginia after the four-day summit, however, he brought something with him beyond mapping that would enhance *EV*'s work in ways we did not anticipate. During the summit, Earth Outreach introduced new developments with "Street View" technology. (Most of us have probably seen or used Google Street View: the ability to use Google Maps to virtually travel down a street clicking through a series of linked 360-degree panoramic imagery of a particular place.) At the Geo for Good Summit, Earth Outreach staff demonstrated how "Street View" was being used to explore places that cars could never go: the Galapagos Islands, for instance, or even underwater at the Great Barrier Reef.

When Peter returned from the summit, EV staff brainstormed ways to take advantage of this technology and tried to determine the types of applications "Street View" could provide for the humanities and EV's audience. Because we are always seeking new ways to enhance our users' engagement with history, one way we knew we might use this technology was to create and embed virtual tours of historical sites and structures in the relevant context of EV content. We began to make a list of published entries to which a virtual tour of a historical house or structure could be paired that might enrich a user's experience and understanding of a particular topic and place. We then approached Earth Outreach with the list and discussed our ideas and they suggested we become part of their year-long Google camera and tripod lending program. Under the program, Google lends equipment and provides training (both for free) to help their partners collect new imagery.

In the fall of 2013, Earth Outreach's Raleigh Seamster met *EV* with some pretty simple Street View equipment—a digital SLR camera, a fisheye lens, a tripod, and a panoramic tripod head—a few miles outside of Lynchburg at Thomas Jefferson's summer home, Poplar Forest. Here she trained us how to create panoramas and connect them into a virtual tour experience so that users could "walk" through the house. And the rest, as they say, is history.

## Current Uses and Impact

With the training provided by Earth Outreach and working with humanities-focused nonprofits across the state, EV has spent the last two years (thanks also to an extension of the camera and tripod loan program) documenting historic sites with Street View technology. The results to date are more than a dozen immersive, 360-degree virtual tours:

- Anne Spencer House and Garden Museum, Lynchburg, Virginia
- Bacon's Castle, Surry, Virginia
- Edgar Allan Poe Museum, Richmond, Virginia
- Francis Lightfoot Lee's Menokin, Warsaw, Virginia
- Historic Christ Church, Lancaster County, Virginia
- <u>James Madison's Montpelier</u>, Orange, Virginia
- <u>James Monroe's Ash Lawn-Highland</u>, Charlottesville, Virginia
- <u>John Marshall House</u>, Richmond, Virginia
- Patrick Henry National Memorial, Brookneal, Virginia
- Patrick Henry's Scotchtown, Beaverdam, Virginia
- Smith's Fort Plantation, Surry, Virginia
- Thomas Jefferson's Poplar Forest, Lynchburg, Virginia
- Woodrow Wilson's Birthplace and Museum, Staunton, Virginia

After publishing these tours to Google Maps, we also embed them in relevant EV entries, providing readers narrative context along with an enriched visual experience of historic places related to those narratives.

The partnership with Google provides many benefits to many organizations. Street View technology provides EV and its users with technological innovation seamlessly integrated into a more traditional encyclopedia context. Because of VFH's relationship with Virginia historic sites that are not as well known as, say, Monticello, EVs Street View work helps those sites get wider recognition and highlights how those places are important in Virginia's and the nation's story. Anne Spencer's unique home, for instance, is in an unassuming middle class African American neighborhood in downtown Lynchburg that would be easy to drive by without much notice. The virtual tour we created allows users to explore the Harlem Renaissance poet's house and see the parlor in her garden where she often played host to important thinkers and artists of this period such as Langston Hughes, James Weldon Johnson, and W. E. B. DuBois.

While we are still investigating ways that these virtual tours might be used as learning objects in the classroom, we know that at the very minimum they can provide a way for students to virtually inhabit historical spaces when they might not be able to physically visit a site. In 2013, EV staff demonstrated some of our tours to attendees of the annual conference of the

Virginia Council for the Social Studies. Teachers raved about the technology and its potential uses in the classroom but the most salient feedback we received came from a fifth grade teacher who said that she no longer had an annual field trip budget. She explained that our virtual tours, while not a replacement for the physical experience, at least offer teachers and students an opportunity to "visit," examine, and discuss places they have learned about in EV and other classroom resources.

Finally, the Google partnership also more broadly benefits the objectives of historic preservation by digitally recording sites at a particular point in time. In July 2014, Nomini Hall—the home of Robert Carter III—burned to the ground. While EV did not photograph Nomini Hall in time, EVs work to digitize and capture other historic structures provides a way for the world to visit places even when they no longer exist or when they are in states of disrepair. This becomes especially important when there is little community money and momentum to preserve structures that might be a particularly painful part of our past.

Over the last year, EV has begun to create content about slavery and the African American experience in Virginia from the first recorded instance of their arrival in 1619 to the beginning of the Civil War. While not well known, there are a number of slave dwellings across the state and archaeological and architectural historians struggle with making the public aware of them so that they can be preserved and the history of slavery can be told within a spatial context. Working with some of these historians, EV has created panoramic tours of several slave dwellings. While we will include them in our own narrative content, the historians are using the tours to draw attention to this past and to their needs for real—not just virtual—preservation.

This partnership also benefits Google. Even a company as large as Google lacks the resources and relationships to document every historic site in America. The partnership they have forged with us leverages our connections with the state community and expands the reach of Google's Street View project by adding more data to Google's base maps.

#### Future Development

Currently EV is investigating ways to curate virtual tours with sound and annotation. For example, as users "walk" through the basement of Patrick Henry's Scotchtown, they might move their mouse over a manikin dressed in a strait-dress and learn that Henry's wife Sarah was forced to wear this when, after the birth of her sixth child, she fell into a deep and at times violent depression. To date we have experimented with adding audio to two panoramic tours: one in which historic preservationist Dennis Pogue explains the challenges of keeping a slave dwelling in Stafford County from falling apart and another with the rigger explaining his role on Lafayette's war ship L'Hermione. With audio layers, virtual tours can become a

narrated experience, and what is now just a visual tour can become a multimedia educational experience.

EV has also been exploring virtual reality (VR) technology to make these tours into truly immersive experiences. In the autumn of 2014 EV began experimenting with the Google Cardboard VR headset that makes use of your smartphone to achieve the VR experience. Like a twenty-first-century ViewMaster, Google Cardboard is an inexpensive proof of concept that can provide teachers and their students an accessible means by which to explore the virtual historical spaces EV creates. For about \$20, students can assemble their own kit, and thanks to the tours EV has produced, "walk" through Montpelier or Bacon's Castle without spending any money—aside from the \$20—from the school's field trip budget. With significantly more handheld devices being used in Virginia schools, EV also envisions developing instructional workshops to provide educators the tools and knowledge they need to build, with their students, their own virtual tours.

Finally, as a way to spread this knowledge and help other humanities nonprofit organizations tell their story and promote their mission, VFH is hosting its own version of Geo for Good this August in Charlottesville, Virginia. Called "Mapping the Humanities," EV and Earth Outreach's Raleigh Seamster are leading a day and a half long workshop that will introduce participants to how they can use Google maps and create their own 360-degree panoramic tours for advocacy. Along with representatives from Virginia organizations, we are also expanding our participant reach to include individuals from the neighboring humanities councils in the District of Columbia and Maryland. Our hope is that "Mapping the Humanities" will be an annual endeavor and that the work we continue to do with creating virtual tours of historic sites will not be a unique feature of Virginia's humanities council but an activity that will spread to others within and without the Commonwealth.

Submitted by: Robert C. Vaughan, President Matthew Gibson, Director of Digital Initiatives Virginia Foundation for the Humanities 145 Ednam Drive Charlottesville, Virginia 22903

## **Appendices**

Appendix A: Encyclopedia Virginia Homepage

Appendix B: Encyclopedia Virginia Mapping Interface

Appendix C: Images of Street View Creation

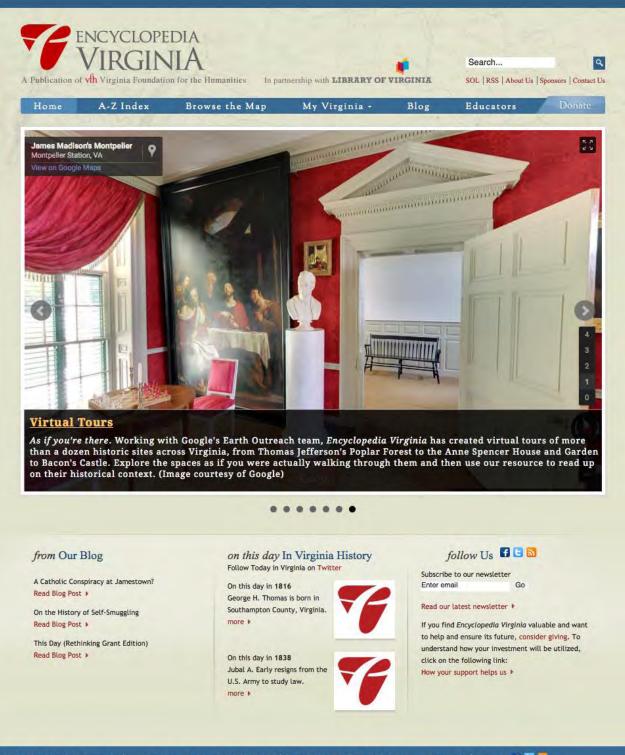
Appendix D: Sample Street Views in Process and Slated for Future Capture

Appendix E: Current Staff and Section Editors

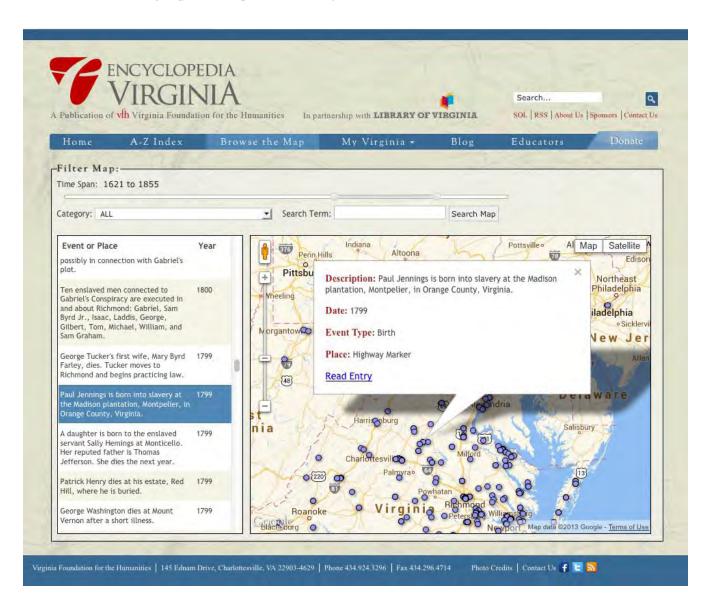
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## Appendix A: Encyclopedia Virginia Homepage



## Appendix B: Encyclopedia Virginia Mapping Interface



## Appendix C: Images of Street View Creation



Google Earth Outreach representative Raleigh Seamster trains Brendan Wolfe and Matthew Gibson in Street View capture at Poplar Forest outside of Lynchburg, Virginia. Photo by Peter Hedlund.



Looking through the tripod setup's fisheye lens at the Anne Spencer House and Garden Museum. Photo by Peter Hedlund.



Flattened 360-degree view of Matthew Gibson creating a panorama in Anne Spencer's living room. Photo by Peter Hedlund.



Peter Hedlund creating a panorama at Menokin in Warsaw, Virginia. The home of Francis Lightfoot Lee, the public cannot currently explore Menokin (in person) due to its dangerous state of disrepair. Photo by Matthew Gibson.



Matthew Gibson stands in front of a slave dwelling in Fredericksburg that will not be around (at least physically) much longer. Photo by Peter Hedlund.



A Google Cardboard viewer stands amazed as she looks around the dining room at Ash Lawn-Highland. Photo by Peter Hedlund.



Peter Hedlund stands in front of Francis Lightfoot Lee's Menokin in Warsaw, Virginia. Photo by Matthew Gibson.

## Appendix D: Sample Street Views in Process and Slated for Future Capture

- State Capitol Building (funded by Commonwealth of Virginia)
- Governor's Mansion (funded by Commonwealth of Virginia)
- St. John's Church, Richmond, Va.
- Various Slave Dwellings across the state
- Cape Henry Lighthouse, Bay Island, Va.
- Gunston Hall (home of George Mason), Lorton, Va.
- Maggie Lena Walker House, Richmond, Va.
- Bruin's Slave Jail, Alexandria, Va.
- Arlington House, Arlington, Va.
- Arcola Slave Quarters, Loudon County, Va.

## Appendix E: Current Staff

**Matthew Gibson**, VFH Director of Digital Programs and Editor of *EV*, leads the development of *EV*. He supervises *EV* staff and workflow process, develops and oversees technical specifications and functionality, and ensures that benchmarks and deadlines are met. Having managed aspects of the University of Virginia Library's Electronic Text Center from 1998 to 2005, he came to *EV* with almost a decade of humanities computing and digital library experience. He has taught XML workshops for the Association of Research Libraries since 2001. In 2005, he earned his Ph.D. in English from the University of Virginia.

Peter Hedlund, EV Web Programmer, enhances and maintains the existing EV codebase for current and future features to deliver content. He improves data storage architecture, is responsible for database development and normalization, and is responsible for integrating data with new visualization tools and user interfaces. Before coming to VFH, he worked with the Instructional Technology Group at the Darden School of Business. He earned an M.A. in Russian literature from the University of Virginia in 1998.

**Donna Lucey**, *EV* Media Editor, oversees the acquisition, creation, and delivery of audiovisual materials for *EV*, while seeking out and enforcing appropriate media standards and formats. This process includes searching for relevant, compelling, and illustrative media objects in a variety of institutional archives, building relationships with media partners, and implementing appropriate standards for offline storage and online delivery. Before coming to VFH, she was a photo editor at *LOOK* magazine and Time-Life Books.

Laura Baker, EV Associate Editor, ensures stylistic consistency of entry content; works with Managing Editor in developmental editing of content; and maintains the tracking database of encyclopedia entry workflows, author contracts, and correspondence with works-for-hire (including section editors, copyeditors, contributors, and fact checkers). Before coming to VFH, she worked as an assistant editor for Documents Compass's Founding Fathers Online project. In 2003, Laura earned her Ph.D. in English from the University of North Carolina at Greensboro.

Brendan Wolfe, EV Managing Editor, has primary responsibility for developing entry content, which includes communicating with section editors, writers, and freelancers when content-related questions arise; editing content prior to fact-checking and copy editing; and reviewing all assignments before publication. He earned a B.A. degree in English and an M.F.A. degree in nonfiction writing, both at the University of Iowa. Prior to joining VFH in 2008, he worked at Buckle Down Publishing, a publishing house specializing in education titles that augment preparation for state-administered standardized tests throughout the United States.

## Appendix F: Members of Editorial and Technical Advisory Boards

#### **Editorial Advisory Board**

Edward L. Ayers President, University of Richmond

Daryl Dance Professor of English, University of Richmond

Mark Saunders Director, University of Virginia Press

Paul A. Levengood President and CEO, Virginia Historical Society

Sandra G. Treadway Librarian of Virginia, Library of Virginia

Robert Vaughan President and CEO, Virginia Foundation for the Humanities

Peter Wallenstein Professor of History, Virginia Tech

Walter R. T. Witschey Director Emeritus, Science Museum of Virginia

### **Technical Advisory Board**

Daniel Pitti Associate Director, Institute for Advanced Technology in the

Humanities, University of Virginia

Christine Ruotolo Digital Services Manager, University of Virginia Library

David Seaman Associate Librarian for Information Management,

Dartmouth College Library

Patrick Yott Associate Dean, Digital Strategies and Services,

Northeastern University Library

## Appendix G: List of Grants and Sources of Funding

Source	Date	Amount
NEH, Preservation and Access	April 2001	50,000
Planning Grant		
Individual Donors	various	475,000
Commonwealth of Virginia	2005–2015	3,695,000
Perry Foundation	2009	50,000
	2014	60,000
Dominion Foundation	May 2007	50,000
	May 2008	50,000
	June 2011	150,000
	March 2014	100,000
NEH, Preservation and Access	2009–2011	279,914
Humanities Collections PW-50312		
NEH, Preservation and Access	2012–2015	200,000
Humanities Collections PW-51071		
Batten Educational Achievement	2009	500,000
Fund		
Alison J. and Ella W. Parsons Fund	2009	100,000
Mary Morton Parsons	May 2010	75,000
Foundation	·	
Cabell Foundation	March 2013	100,000
Barbara Fried (for endowment)	July 2015	1,000,000
Total to date:	•	\$6,934,914