



The University of Georgia®

University Council
Athens, Georgia 30602

September 7, 2011

UNIVERSITY CURRICULUM COMMITTEE – 2011-2012

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Graduate School - Dr. Tracie E. Costantino

Undergraduate Student Representative – Mr. Marshall Moser

Graduate Student Representative – Mr. Zachary Watne

Dear Colleagues:

The attached proposal for a new Center of Virtual History will be an agenda item for the September 14, 2011, Full University Curriculum Committee meeting.

Sincerely,

David E. Shipley, Chair
University Curriculum Committee

cc: Provost Jere W. Morehead
Dr. Laura D. Jolly

Proposal

The Center for Virtual History at the University of Georgia

Narrative Statement of Goals

The much-discussed crisis in the humanities in part has its origin in the fact that humanists are writing increasingly specialized monographs, read by few and understood by even fewer. The Center for Virtual History at the University of Georgia (CVH) will be founded on the belief that the humanities in the twenty-first century must not only embrace new technologies but also tell accessible and engaging stories with them. To that end, the CVH will be dedicated to creating two-dimensional and three-dimensional visual representations of the past using off-the-shelf technologies such as ArcGIS and Google Earth. By directing, sponsoring, hosting, and partnering in cross-disciplinary crowdsourcing projects, it will help us resurrect a living past that not only captures the imagination but also advances our understanding of who we are and how we got here.

The CVH's major initiative in the first three years will be the Millennium Project, which will use Google Earth to represent a thousand years of change in a single area of the American Deep South, where Atlanta and its suburbs now sit. When it is unveiled in 2014, the Millennium Project will allow users to fly over and around the great prehistoric mound-building societies and move forward in time to see how they shrank and collapsed; walk through an eighteenth-century Creek Indian town and follow a trading path towards colonial Augusta; watch the colonial population spread up Georgia's major rivers and survey the new state's expanding boundaries; and observe the construction of railroads and the rise of the depot of Atlanta. Finally, they will be able to visit Atlanta in 1864, witness the flight of fugitive slaves to Union lines, and watch the destruction of the city by Sherman's troops.

With a Digital Humanities Start-up Grant, the CVH will host two conferences in fall and spring 2011-12. The first, "Virtualizing the Native South," will bring together scholars from multiple disciplines (bioarchaeology, archaeology, anthropology, and history) to discuss ways of representing the prehistory of the Deep South visually. What can we know? How much do we have to know before we dare to represent it visually? What social, political, demographic, and other factors should we represent? The second conference, "Virtualizing the American Civil War," will have a similar purpose but be dedicated to discussing the representation of antebellum and Civil War Atlanta and the surrounding area. How can we bring to life the world of slaves, their masters, and yeoman farmers within the limitations of Google Earth? Are there particular plantations more suitable for visual representation than others? How can we show warfare as more than the movement of troops? At the conclusion of each conference, the CVH will produce a summary statement. The statements will include abstracts of the participants' presentations and will encapsulate group discussions by outlining the promise and peril of virtually representing the past. Is the potential to mislead greater than it is for textual representations? Can we surmount the lack of written and pictorial data from the prehistoric era? Reflecting group discussions, the statements will also identify which facets of the past the Millennium Project should represent virtually and how it should do so. The statements will thus create a to-do list of goals for the CVH to achieve in the subsequent year.

In addition to the Millennium Project, the CVH will build on two works in progress. One uses Google Earth to illustrate the movement of smallpox during the great epidemic of 1775-81 and uses crowd-sourcing to collect additional data about the location of the virus. A second project vectorized a series of ten maps showing the expansion of the colonial population between 1625 and 1790. It is now focused on plotting the continent's Indian population during the same time period. The CVH is also planning a project entitled "CSI Dixie." It will use coroners' reports to create a "death map" for South Carolina between 1840 and 1880. Longer term, the CVH will use the same techniques and technologies that animate "Sherman's Atlanta" to

take users on guided tours of “Lincoln’s Washington” and “Poe’s New York.”

Few Americans can visualize the deep past of the places in which they live; our historical perspectives are dramatically foreshortened, leaving centuries beyond the horizon of our imaginations. Crowdsourcing, however, can help us aggregate new kinds and new amounts of data; the latest technologies can help us render, represent, and visualize the past in new ways. The lost worlds we recover will be imperfect, but so too were our traditional, written ones, and the virtual past is often more immersive, tactile, and intuitive than the printed page. Where once an instructor might have used a flat map or dragged a sandbox in to class to reenact the Battles of Bunker Hill and the Bulge, now we can use ArcGIS, Sketchup, and Google Earth. With the right kinds of data, we can track a disease, a weather system, or even an idea, as it makes its way around a tenth-century world.

3D is just the beginning of the revolution in digital technology. The fourth dimension—time—could and should be rendered too, because it is only then that we feel the humbling weight of history, the immense smallness of the moment we live within, and the great story that has unfolded over millennia on the ground beneath our feet.

Please see eHistory.org for a model of our prospective website.

1. Operating Procedures and Policies

Housed within the history department, the CVH will report to its chair and dean and be evaluated with the departmental unit. The CVH will, at the outset, have two co-directors, Steve Berry and Claudio Saunt. They will supervise day-to-day operations, such as the posting of data online, the production of KML (the mark-up code for Google Earth), and the analysis of GIS files. They will also interview and hire GIS technicians and computer programmers, when necessary. Major initiatives will be reviewed and approved by a Steering Committee, which will include five members, three from the history department, and two from outside units. At startup, the Steering Committee will consist of the following members:

- Claudio Saunt, Department of History
- Steve Berry, Department of History
- Stephen Mihm, Department of History
- Alex Devine, GIS Technical Coordinator for the Office of University Architects
- Marguerite Madden, Director, Center for Remote Sensing and Mapping Science, Geography Department

All appointments and reappointments to the CVH will be reviewed and approved by the Steering Committee.

2. Projected Budget

At the outset, the CVH will rely on a \$24,000 digital humanities start-up grant from the National Endowment for the Humanities, which begins in August 2010. The subsequent year, the CVH will apply to the same program for a Level II grant for \$50,000. Ultimately, we hope to build a permanent endowment through corporate sponsorships and private gifts. We have already identified potential donors and, with the assistance of Jeff Delk, a Director of Development in Franklin College, plan to give a fundraising presentation in Atlanta in the coming months. The CVH will require no University resources beyond the personal time of its directors, nor will it pursue gifts that would interfere with the University’s own development initiatives.

A detailed budget follows.

2011/12

	Computational Details	Notes	Total
1. Salaries & Wages			
2. Travel			
To Virtualizing the Civil War, Conference in Atlanta, October 2011	Averaging \$350/person	Ten participants arriving from various locations	\$3,500
To Virtualizing the Native Southeast, Conference in Atlanta, April 2012	Averaging \$350/person	Ten participants arriving from various locations	\$3,500
3. Supplies & Materials			
4. Other Costs			
Honoraria for Virtualizing the Civil War Conference	\$500/person	ten participants	\$5,000
Honoraria for Virtualizing the Native Southeast Conference	\$500/person	ten participants	\$5,000
Atlanta hotel rooms for Virtualizing the Civil War Conference	\$132/person (GSA allowance)	two nights for each of ten participants, total 20 nights	\$2,640
Atlanta hotel rooms for Virtualizing the Native Southeast Conference	\$132/person (GSA allowance)	two nights for each of ten participants, total 20 nights	\$2,640
Meals for Virtualizing the Civil War Conference	\$56/day + \$42 for first/last day of travel (GSA allowance)	ten participants, \$98/participant	\$980
Meals for Virtualizing the Native Southeast Conference	\$56/day + \$42 for first/last day of travel (GSA allowance)	ten participants, \$98/participant	\$980
5. Total Costs			\$24,240

6. Funding			
a. Requested from NEH Digital Humanities Startup Grant			\$24,240

2012/13

	Computational Details	Notes	Total
1. Salaries & Wages			
Computer programmer		Google AppEngine crowd-sourcing software, using Fusion tables	\$6,000
ArcGIS Technician		To set up and manage ArcGIS Server	\$6,000
2. Travel			
3. Supplies & Materials			
ArcGIS Server software and licenses			\$200
4. Other Costs			
Graduate assistantship (academic year)			\$34,612
5. Total Costs			\$46,812
6. Funding			
a. NEH Level II Digital Humanities Grant (CFDA 45.169)			\$46,812
b. Watson-Brown, Russell Foundation, private donors*			

*Additional funds can be used to hire graduate students to collect and analyze historical data

2013/14

	Computational Details	Notes	Project Total
1. Salaries & Wages			
ArcGIS Technician		Manage ArcGIS Server	\$6,000
2. Travel			
3. Supplies & Materials			
ArcGIS Server licenses			\$75
4. Other Costs			
Graduate assistantship (academic year)			\$34,612
5. Total Costs			\$40,687
6. Funding			
a. NEA America's Historical and Cultural Organizations grant (CFDA 45.164)^			\$40,687
b. Watson-Brown, Russell Foundation, private donors*			

^The grant amount can be increased significantly, depending on the scale of CVH projects

*Additional funds can be used to hire graduate students to collect and analyze historical data

3. Staff

The CVH grows out of the interests of co-directors Claudio Saunt and Stephen Berry. Dr. Saunt, the Richard B. Russell Professor in American History, has been working with ArcGIS for several years and published a related article in *The William and Mary Quarterly*, the leading journal in his field, in 2008. Dr. Berry, an Associate Professor of History, has extensive experience with HTML and KML and is a former system administrator for the Odum Institute for Research in Social Science at the University of North Carolina, Chapel Hill. Both directors are interested in the potential of new technologies to tell new stories in new ways, particularly to their students and to a wider public.

Technical advice will be provided by Alexander Devine, the GIS Technical Coordinator for the Office of University Architects at the University of Georgia, and Jason Rosenberg and Freeland Abbott, both members of the Technical Staff at Google. Mr. Devine has over ten years of experience in Spatial Information Science, including the development and management of enterprise GIS and Building Information Systems and Building Information Model Systems. He is currently involved in research in digital geovisualization of 3D landform and structure models and utilization of Laser Imaging Detection and Ranging (LIDAR) survey techniques for the generation of visualizations and models.

Mr. Rosenberg works on Google Web Toolkit and developer tools. Previous to his employment at Google, he was a senior developer for 3D and 2D graphics applications at Erdas, which focuses on satellite image processing and produces georectified imagery for Google Earth and Google Maps. He currently is interested in developing stereoscopic imagery for use with Google Earth. Mr. Abbott is a software engineer at Google. Previously, he was director of engineering at Inktomi and a research scientist at the Georgia Tech Research Institute. He is a specialist in software architecture and design and has fifteen years experience in C, C++, and Java

4. Physical resources

The CVH will occupy an office in the history department.

5. Participating Faculty

The faculty below will be evaluated through the history department, as they are currently.

- Stephen Berry, Associate Professor of History, co-director of the CVH
- Claudio Saunt, Richard B. Russell Professor in American History, co-director of the CVH

6. Degree Program

We do not have plans to offer a degree program at this time, but we intend to explore opportunities to collaborate with other units that offer GIScience certificates and degrees, such as the Geography Department.

7. Letters of support

Please see attached letters from John Morrow, chair of the history department, and Marguerite Madden, director, Center for Remote Sensing and Mapping Science in the Geography Department.



The University of Georgia

Franklin College of Arts and Sciences
Department of History

February 18, 2011

Garnett S. Stokes
 Dean
 Franklin College of Arts and Sciences
 The University of Georgia

Dear Garnett:

I am pleased to offer my strongest support for the accompanying proposal for a Center for Virtual History at the University of Georgia. I would expect no less than this innovative and forward looking enterprise from two of History's most outstanding, productive, and creative scholars, Russell Professor Claudio Saunt and senior Associate Professor Stephen Berry. As you can see, the project's first major initiatives focus on the Native American South and the Civil War, two fields in which Saunt and Berry respectively are among the best scholars in the nation. Their attempt to resurrect and recreate vividly the past looks to the future by using the most advanced new technologies available to historians and other scholars. They complement their expertise by including Associate Professor Stephen Mihm, expert in economic history, and experts in the geographical and technological realms Marguerite Madden and Alex Devine respectively.

The obvious possibilities of extension to other historical fields and the prospects of attracting a twenty-first century audience excite the imagination of even a book bound old fogey like myself, who is likely to reply to students' requests for visuals with the retort, "use your imagination." This project promises, however, to enable historians and others to move a far step beyond visualization in its ability to recreate in incredibly analytical fashion a past that will be increasingly difficult to fathom in the future. Change already occurs so rapidly that our present students have difficulty understanding that a mere thirty or forty years ago we had practically none of today's means of rapid and cheap communication.

I consequently endorse Professors Saunt's and Berry's proposal for a Center for Virtual History at the University of Georgia most enthusiastically and without reservation.

Sincerely yours,

John H. Morrow, Jr
 Franklin Professor and Department Head

Center for Remote Sensing and Mapping Science (CRMS)

Marguerite Madden, Ph.D., Director
Thomas R. Jordan, Ph.D., Associate Director



The University of Georgia

February 18, 2011

Drs. Claudio Saunt and Stephen Berry
Department of History
LeConte Hall
University of Georgia
Athens, Georgia 30602-1602

Dear Drs. Saunt and Berry,

As Director and Associate Director of the University of Georgia's Center for Remote Sensing and Mapping Science (CRMS) within the Department of Geography, we would like to express our support for your proposal to create a Center for Virtual History (CVH) at UGA. Our research involves the use of geospatial techniques and analysis for applications in many fields including landscape analysis, historical reconstruction, migration route analysis, human-environment interactions, environmental history and landuse legacies – all topics for potential collaboration with research and outreach activities of CVH. We specialize in the development and integration of a variety of geospatial data such as spaceborne/airborne imagery, geographic information systems (GIS) databases, field survey data, Global Positioning System (GPS) data and Light Detection And Ranging (LiDAR). We also focus on mapping and geovisualization of geospatial data in 2D, 3D and 4D (animations), web-based data distribution and display. Our faculty and students are proficient in many of the software packages used to create geographically explicit visualizations and virtual environments such as ESRI ArcGIS, ERDAS Imagine, 3D Nature Visual Nature Studio, Definiens eCognition, Google Earth and Google SketchUp. For further information on our work conducting numerous national and international geospatial projects since our creation in 1984, please refer to our website: www.crms.uga.edu.

We believe our experience and association with other groups on campus such as the College of Environment and Design, Anthropology Department and Center for Integrative Conservation and Research, to name a few, along with our affiliations with organizations such as the Wormsloe Institute for Environmental History and the National Park Service will compliment the planned activities of the CVH. We are extremely interested in participating in the Millennium Project and the Virtualizing the Native South Conference. We also have students who are interested in developing interdisciplinary thesis and dissertation research topics combining geography and history. For example, I am Mr. Alexander Devine's major advisor in his pursuit of a Master's Degree in Geography and I noted he will be providing you with technical advice. I also have encouraged Mr. Patrick Lines (UGA 2007 History undergraduate and current Geography Master's graduate student) to contact you concerning possible involvement in CVH as he develops his thesis research. I would also like to explore the potential for our Geography students to conduct internships with CVH towards their Certificate in GIScience.

In summary, we certainly look forward to working with you in the future.

Sincerely,

Marguerite Madden, Ph.D.
Professor and Director

Thomas Jordan, Ph.D.
Associate Director

Department of Geography Athens, Georgia 30602-2503 (706) 542-2379 Fax: 706-542-2388 www.crms.uga.edu

8. Responsibilities of participating units

The CVH will not demand any resources from the History Department, aside from an office.

9. Recommendations for creation of courses

Claudio Saunt is offering a graduate course in GIS and History in fall 2011. The course will train students to use Geographical Information Systems for historical analysis. It will give students a valuable skill in a growing field and introduce them to interdisciplinary work in history and science. Students who pursue the course will have the opportunity to share their projects with the public on the CVH website.