Digitizing the Past to Empower 21st Century Research

magic.lib.uconn.edu
MAGIC Transforms into MAGIC 2.0

In a span of just twelve months, a significant transformation has occurred as maps and geographic data have been transformed into an interactive, searchable, and dynamic user experience, known as MAGIC 2.0. At the very heart of this transformation were the users of MAGIC as we explored website statistics, user feedback and other online map collections for inspiration. A series of themes began to emerge with users preferring easy-to-use tools which do not require special software or plug-ins, the importance of previewing maps and data before downloading, and the ability to search for maps in a Google-like search interface. Throughout 2009, each of these user requested features were incorporated into a redesigned MAGIC website, known as MAGIC 2.0.
Improving the ability for users to locate maps and GIS data available from MAGIC involves multiple approaches as we strive to make relevant materials more readily discoverable via search engines, as well as, through our website. To facilitate this discovery process, MAGIC uploaded hundreds of historical maps to Flickr, developed a customized search engine for MAGIC’s website, and two new blogs were developed to showcase new resources and to share relevant information with MAGIC’s users. By increasing the ability to search within our collections, the global community is able to quickly locate maps and GIS datasets for Connecticut. By increasing the discoverability of this information MAGIC is enabling users to expand the role of maps in 21st century research.

Outlined below are a series of milestones from 2009 which range from website enhancements to presentations.

- **JUL**
  - Outside the Neatline Blog

- **AUG**
  - Learning Community on Maps, Mash-ups and Interactive Learning

- **SEP**
  - CT Paper Map Collection Inventory Completed

- **OCT**
  - MAGIC Topo Map Mash-ups

- **NOV**
  - EDUCAUSE 2009 Presentation Denver, CO

- **DEC**
  - Live Chat Toolbar Added to MAGIC Website
Data For Everyone!
Data Access Transformed

At the very heart of the transformation of MAGIC’s Geographic Information Systems (GIS) data pages were the users of MAGIC. With MAGIC serving a diverse range of users, the goal of the redesign of the data pages was to identify areas for improvement that would increase satisfaction from the users perspective. As we prepared for this redesign, we analyzed user feedback, and a series of themes began to emerge:

- Desire for easy-to-use tools which did not require special software or plug-ins
- Ability to preview maps and data before downloading
- Google like search interface
- Ability to add data in Google Earth

Throughout 2009, each of these user requested features were integrated into MAGIC 2.0 via our website and online map viewer. One of the greatest enhancements of the year was the transformation of the Connecticut GIS data page. This page was transformed into a streamlined interface which enables users to download data in 2 commonly used projections, download a KML version for viewing in Google Earth (a Mac and Windows friendly GIS data viewing platform), and the ability to preview datasets in Google Maps. The Google Maps preview also enables users to directly add GIS data to their own customized map via the Google Maps My Maps feature in just one click.

### Featured Data

<table>
<thead>
<tr>
<th>Layer Name</th>
<th>Type Year</th>
<th>Scale</th>
<th>Source</th>
<th>Metadata</th>
<th>Download Shapefile (CT State Plane)</th>
<th>Download Shapefile (WGS 84)</th>
<th>Download KML</th>
<th>Preview in Google Maps</th>
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<tbody>
<tr>
<td>State County Boundaries</td>
<td>2008</td>
<td>var</td>
<td>US Census</td>
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<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
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<tr>
<td>Connecticut Towns</td>
<td>2008</td>
<td>var</td>
<td>US Census</td>
<td></td>
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<td><img src="image6.png" alt="Image" /></td>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
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</table>

For more details about the revised MAGIC data page visit: [magic.lib.uconn.edu/connecticut_data.html](http://magic.lib.uconn.edu/connecticut_data.html)
GeoCommons
Collaborative Learning Space

In July 2009, MAGIC’s Map Reading Room was transformed into the GeoCommons Collaborative Learning Space. The GeoCommons space enables students, faculty, staff, and community members to explore MAGIC’s digitized resources while also enables the development of new scholarship with a geographic emphasis. This collaborative learning workstation includes software which empowers users to create and incorporate maps and geographic data into videos, presentations, documents, websites and more.

During the fall semester, the GeoCommons was utilized by the public to: create maps for incorporation in a PowerPoint presentation, group poster creation, editing video from a presentation, creating and editing images with Adobe’s Photoshop, generating maps, exploring data using Google Earth, and collaborative research. The GeoCommons space is available during all hours the Homer Babbidge Library is open.

Included below are just a few of the opportunities the GeoCommons enables along with the relevant software available for each project:

Audio Editing & Podcasts
- Adobe Soundbooth
- Audacity

Data Manipulation
- Microsoft Access
- Microsoft Excel

Image Creation & Editing
- Adobe Fireworks
- Adobe Illustrator
- Adobe Photoshop

Map Creation
- ArcGIS 9.3
- Google Earth
- Google Sketchup

Presentation & Publications
- Adobe Acrobat Pro
- Adobe In Design
- Adobe Photoshop
- Microsoft PowerPoint
- Microsoft Publisher
- Microsoft Word

Video Editing & Podcasts
- Adobe Premiere Pro
- Adobe After Effects

Web Development
- Adobe Dreamweaver
- Adobe Flash

For more details about the GeoCommons and future development visit: magic.lib.uconn.edu/geocommons.html
The Year in Review
2009 by the Numbers

During 2009, MAGIC focused on collecting data in order to determine usage of digitized collections and to focus on expanding content based on user driven data. Outlined below are a few highlights from the year 2009.

Keywords
Included below are the most frequent keyword searches and keywords leading to MAGIC from a search engine.

<table>
<thead>
<tr>
<th>MAGIC Website Keywords</th>
<th>Search Engine Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>Search Terms</td>
</tr>
<tr>
<td>1</td>
<td>Connecticut</td>
</tr>
<tr>
<td>2</td>
<td>Hartford</td>
</tr>
<tr>
<td>3</td>
<td>Tolland</td>
</tr>
<tr>
<td>4</td>
<td>Waterbury</td>
</tr>
<tr>
<td>5</td>
<td>New Haven</td>
</tr>
<tr>
<td>6</td>
<td>Stonington</td>
</tr>
<tr>
<td>7</td>
<td>Mansfield</td>
</tr>
<tr>
<td>8</td>
<td>Middletown</td>
</tr>
<tr>
<td>9</td>
<td>New London</td>
</tr>
<tr>
<td>10</td>
<td>Granby</td>
</tr>
</tbody>
</table>

MAGIC Website Quick Stats
- Time on MAGIC’s Website: 3:31 minutes
- Number of Visits: 139,319
- Number of Page Views: 215,312
- Number of Average Page Views: 3.5
- Number of Countries: 149
- MAGIC 2.0 Online Maps Visits: 20,622

MAGIC’s Blogs
- Outside the Neatline Visits: 2,115
- MAGIC News & Updates Visits: 1,158

MAGIC Website Traffic Sources

<table>
<thead>
<tr>
<th>Traffic Source</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search Engines</td>
<td>24,574.00 (39.91%)</td>
</tr>
<tr>
<td>Referring Sites</td>
<td>24,095.00 (39.13%)</td>
</tr>
<tr>
<td>Direct Traffic</td>
<td>12,900.00 (20.95%)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (&lt; 0.00%)</td>
</tr>
</tbody>
</table>

Most Frequently Visited Pages

<table>
<thead>
<tr>
<th>Rank</th>
<th>Page Visited</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAGIC Homepage</td>
</tr>
<tr>
<td>2</td>
<td>Historical Maps</td>
</tr>
<tr>
<td>3</td>
<td>Connecticut Data</td>
</tr>
<tr>
<td>4</td>
<td>SID Help Page</td>
</tr>
<tr>
<td>5</td>
<td>Aerial Photos</td>
</tr>
</tbody>
</table>

New & Returning Users
- New: 40,867 (66.37%)
- Returning: 20,703 (33.63%)

Flickr Historical Maps
- Flickr Map Views: 36,875*
- Most Frequently Viewed Map: 1,868

For more details about MAGIC’s statistics visit:
magic.lib.uconn.edu/about_magic.html
Outside the Neatline
MAGIC’s newest Blog

Outside the Neatline was developed as a result of graduate students at MAGIC looking for an opportunity to showcase maps from our collections and highlight resources of potential interest to the user community. This blog is a collaborative effort between Jeffrey Dunn and Brandon Cramer initially started as an experiment that quickly grew, thanks largely to the promotion of this new blog via Facebook, a social networking site. As this blog continues to evolve, our goal is to provide the public a better understanding of how maps can be utilized within their own research and in the classroom.

The Outside the Neatline blog is focused on a few key areas:

- **Featured Map of the Week** - Highlights maps selected by the staff from MAGIC’s collections.
- **How in the World?** - Provides insights into how maps are digitized and transformed to enable new research.
- **Did You Know?** - Provides facts, definitions, and highlights new resources related to maps and GIS.
- **And More!** - We’re continuously improving this blog so check often and feel free to suggest additional content for this blog.

Since the first blog entry was published in July of 2009, the blog has received over 2,000 visitors! Featured topics include: 1890s Chicago World’s Fair Map, 1911 Montana Map, 1902 Columbus, Ohio Map, 1909 Sleeping Sickness Distribution Map in Africa, Hartford Connecticut 1640 and 1893 Maps, and the Indian Trails of Connecticut Map. Some of these maps include interactive, searchable map mash-ups to enable users to compare changes over time and demonstrate how maps can enhance your research.

For more details about the Outside the Neatline Blog visit: [outsidetheneatline.blogspot.com](http://outsidetheneatline.blogspot.com)
At the EDUCAUSE 2009 Conference in Denver’s Convention Center on November 5, 2009, MAGIC presented to an audience of approximately 70 people, including online participants via a live broadcast. This presentation titled “Mix, Mash and Share: Empowering 21st Century Research with Maps” highlighted the steps that MAGIC has taken to transform the map collection into an online, interactive environment which enables users, regardless of the experience, to explore our collections.

The presentation at EDUCAUSE 2009 highlighted multiple ways that institutions small and large can enable the development of “geo” resources regardless of budget and empower users to integrate maps within their research in new and exciting ways. Participants in this presentation session stated:

“These two were infectious in their enthusiasm, and inspiring in terms of what they saw as their goals and how they put in place tools that could get them, and their faculty and students, to that place."

“This presentation provided clear evidence of how the Horizon Report can not only inform one’s thinking but also create a new energy which enhances the users experience."

MAGIC’s recent developments have been influenced by the 2009 Horizon Report, co-authored by EDUCAUSE Learning Initiative and the New Media Consortium. This report highlights the emerging need for “Geo-Everything” within higher education over the next few years and MAGIC looks forward to implementing more services and resources which build upon the Horizon Report in the coming years!

For more details about MAGIC’s EDUCAUSE 2009 presentation visit:
magic.lib.uconn.edu/about_magic.html
Driving the innovative spirit of MAGIC are the staff that continuously explore ways to improve the user experience with locating and using maps and GIS data. One of our staff innovators, Benjamin Spaulding, departed MAGIC in August 2009 to begin a new job at Progeos, a company which focuses on developing online mapping interfaces. This innovative mindset continues on with all the staff at MAGIC. The staff look forward to providing our users with more innovations and enhancements in the years to come. Included below are all the staff that helped make 2009 a MAGICal year.

Thomas Bachant  
Specialty: Mobile Applications

Jacqui Boothroyd  
Specialty: Data Migration & Management

Brienne Boss  
Specialty: Aerial Photo Digitization

Joel Cinteron  
Specialty: Scanning & Collections Management

Brandon Cramer  
Specialty: Scanning & Collections Management

Diana Deng  
Specialty: Aerial Photo Digitization

Steven Daniels  
Specialty: Scanning & Collections Management

Jeffrey Dunn  
Specialty: Aerial Imagery & Dataset Creation

Tia Hogan  
Specialty: Mobile Applications

Michael Howser  
Specialty: Web Development & GIS Data Research

Anna Kuziara  
Specialty: Data Migration & Management

Cary Lynch  
Specialty: Georeferencing Maps

Kate Miller  
Specialty: Scanning & Collections Management

William (Bill) Miller  
Specialty: Cataloging & Historical Research

Devin Paige  
Specialty: Scanning & Collections Management

Doug Sands  
Specialty: Metadata Creation & Quality Control

Benjamin Spaulding  
Specialty: Web Development & Data Creation
Presentations

Dunn, Jeffrey J. “MAGIC 2.0 Overview” on November 18, 2009 at Connecticut GIS Day 2009 (Hartford, CT).

Howser, Michael & Miller, Bill. “Mix, Mash, and Share: Empowering 21st-Century Research with Maps” on November 5, 2009 at EDUCAUSE 2009 (Denver, CO).


Howser, Michael. “MAGIC 2.0: Discovering Research Resources in New and Exciting Ways” on April 24, 2009 at the University of Connecticut Geography Department (Storrs, CT).

Howser, Michael. “MAGIC 2.0: Maps and Geographic Data meet Interactivity” on April 17, 2009 at the Educational Technology Meeting (Storrs, CT).


For more details about MAGIC’s presentations visit:
magic.lib.uconn.edu/about_magic.html
Awards & Grants

Howser, Michael & Miller, Bill. “Office of Long Island Sound Projects (OLISP) Digital Aerial Photo Compression and Indexing” funded by the Connecticut Department of Environmental Protection for May 1, 2009 to May 1, 2011.

Dougherty, Jack (Trinity College), Howser, Michael & Miller, Bill. “Integrating Spatial Mapping with Civil Rights History in Metropolitan Connecticut” pending approval from the National Endowment for the Humanities (NEH) for June 1, 2010 to May 31, 2011.

Dougherty, Jack (Trinity College), Howser, Michael, & Miller, Bill. “Living and Learning on the Line: Integrating Spatial Mapping with Northern U.S. Civil Rights History” pending approval from the American Council of Learned Societies (ACLS) for June 1, 2010 to May 31, 2011.

Dougherty, Jack (Trinity College), Howser, Michael, & Miller, Bill. “Living and Learning on the Line: Integrating Spatial Mapping and Simulations with Civil Rights History” pending approval from the National Endowment for the Humanities (NEH) for June 1, 2010 to May 31, 2011.


Publications


If you are interested in collaborating with MAGIC on grants and/or publications contact us at: magic@uconn.edu