Visual Thinking with Spatial Data:
Using Spatial Organization to Access Library Information
MHS: Who we are

Established 1846

Broad Collections Focus

Library and Exhibits

Statewide Network of Historic Sites

State Archives

Preservation Outreach-SHPO
Digital Collections at MHS

Birth and Death Records

Photographs

State Census Records

Maps

Newspapers

Veterans Grave Index
Challenges and Opportunities

- Declining visitation and revenue
- Increasing competition for leisure dollars
- Difficulty in securing state funding

- Internet lets us extend our reach
- New ways of delivering collections materials
- New partnerships
- New museum experiences
Examples

*Employing geospatial data for:*

- Research
- Organization
- Presentation
- Virtual Experiences and Programming
Research

GIS Census Interface

Historic IMPUMS data recently released, provides micro-level census data in spreadsheet format. Perfect for manipulation, searching and accessing.
For example, great, great uncle Halloran...
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Occupation</th>
<th>Location</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas Halloran</td>
<td>52</td>
<td>Farmer</td>
<td>Minnesota</td>
<td>Head of Household</td>
</tr>
<tr>
<td>John M. Halloran</td>
<td>12</td>
<td>Student</td>
<td>Minnesota</td>
<td>Son</td>
</tr>
<tr>
<td>Mary Halloran</td>
<td>10</td>
<td>Student</td>
<td>Minnesota</td>
<td>Daughter</td>
</tr>
<tr>
<td>John J. Halloran</td>
<td>25</td>
<td>Laborer</td>
<td>Minnesota</td>
<td>Son</td>
</tr>
<tr>
<td>Emily Halloran</td>
<td>18</td>
<td>Student</td>
<td>Minnesota</td>
<td>Daughter</td>
</tr>
<tr>
<td>Robert M. Halloran</td>
<td>30</td>
<td>Business Owner</td>
<td>Minnesota</td>
<td>Son</td>
</tr>
</tbody>
</table>
Items with Addresses and Street Cross sections allow for geocoding by lat/long
Organization

True North Website

Cull and organize maps, photographs, library resources and helpful web tools
Cull Minnesota’s Digital Resources

- Topographic Maps
- Aerial Photos
- Photographs
- GIS Data
- Historic Images
- Archival Maps
Layer them Together

LAND USE MAPS
Dept. of Natural Resources

ROAD MAPS: Minn. Dept of Transportation

ETHNICITY MAPS
www.census.gov

PEOPLE MAPS
MSP Public Library, MHS

BACKGROUND MAPS
Land Management Information Center

HISTORY MAPS
MN Historical Society
And link each map to relevant archival history

Railroads 1880

Chicago & North Western Railway tracks during "big snow" of 1880.
Photograph Collection 1880
Location no. HE6.43 r25
Negative no. 76
Example: Public Land Survey History
## Spatial Metadata

Display items in their original format...when possible

### FGDC/Dublin Core/US MARC metadata crosswalk

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<th>MARC21 Fields</th>
<th>Field Names</th>
<th>Dublin Core Elements</th>
<th>Dublin Core Qualifiers</th>
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<td>M 3.4.4</td>
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<td>342 c</td>
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<td>342 e</td>
<td>Standard parallel or...</td>
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Presentation

**Google Earth Historic Maps**
Displaying archival maps in a familiar interface

**Omeka**
Presenting information in an exhibit interface with Geo-location

**Google Maps Historic Walking Tours**
Connecting to Information on a ‘street level’
Displaying Historic Maps in Google Earth using Web Mapping Service
Omeka

Presenting information in an exhibit interface with Geo-location tool

Map of Red Lake Indian Reservation, 1911

Title
Map of Red Lake Indian Reservation, 1911

Description
This map is featured in a Minnesota Alliance for Geographic Education (MAGE) curriculum podcast.

Creator
Albert Henderson, United States Office of Indian Affairs

Publisher

Date
1911

Format
1 map ; 38 x 51 cm

Identifier
Minnesota Historical Society
Map 2F G 4142 .R435 1911 U5
Chippewa woman and girls in birchbark canoe, Red Lake.

Files

![Image of Chippewa woman and girls in birchbark canoe, Red Lake.](image)

**Item information**

**Title**
Chippewa woman and girls in birchbark canoe, Red Lake.

**Subject**
Ojibwe

**Description**
**What is it?** A photograph of several women in a birch bark canoe. The canoe is light weight, built out of materials easily found in northern Minnesota, and is very maneuverable on the lakes and rivers. Both the Ojibwe and Dakota tribes in Minnesota used canoes to move throughout the area.

**Where is it?** Red Lake, in northern Minnesota.

**When?** The photograph was taken in 1898.

**Who created it?** The photographer in unknown.

**Why was it created?** The reason the photograph was taken is unknown.

**Source**
Visual Resource Database
Google Maps Historic Walking Tours
Connecting to Information on a ‘street level’


People often ask me, “Where’s F. Scott Fitzgerald’s house?” Well, as you know, the truth is there isn’t just one house – but frequently, this one is the one people are looking for. 599 Summit Avenue is one of two Fitzgerald residences that have a plaque commemorating the author – the other is at his birthplace, a few blocks north of here, at 463 Laurel Avenue.

I’ve already mentioned how frequently the Fitzgeralds moved when Scott was a boy – particularly when they returned to St. Paul from Buffalo, New York, in 1908, when young Scott was 12 years old. Those moves were all in apartments and houses in the blocks just north of where we’re standing at the moment. Now fast forward about ten years, and Fitzgerald is a struggling author, trying to make his way in New York City. His fiancée, Zelda, has broken off their engagement, partially because she doesn’t think he can support them with his writing. So F. Scott Fitzgerald, sad and dejected, returned to St. Paul to make one last attempt to revise his manuscript and get it published. By this time his parents were living here, at 599 Summit, and although they didn’t approve of his choice of profession, they allowed him to live on the third floor while trying to finish his book. That fall, Scribner’s accepted the manuscript, and in the spring of 1920, Scott and Zelda were married and This Side of Paradise was published, launching F. Scott Fitzgerald to instant fame.

In case you’re wondering about the house, it’s not quite an apartment and it’s not quite a house – it’s actually a row house, with each three-storey having its own door.

Our next stop is a bit different once again – this time, it’s a garden. I’ll see you up the street at the garden gates just past 593 Summit.
Virtual Experiences and Programming
The Douglass: A Digital Reconstruction of an 18th Century Theatre
Welcome to the Monticello Explorer

EXPLORE

Explore the Plantation
See how Monticello Mountain changed during Jefferson's life with this interactive map of the center of his 5,000-acre plantation in Albemarle County, Virginia.

Explore the House
Navigate a 3D recreation of Jefferson's architectural masterpiece and discover the objects, people, stories, and details of Monticello.

TOUR

General House Tour
Journey with Curator Susan R. Stein as she reveals Jefferson through Monticello's rooms, furnishings, and stories.

Domestic Life at Monticello
Discover what life was like for Jefferson, his family, and his enslaved domestic workers with Monticello's Shannon Senior Historian Lucia Stanton.

Gardens and Grounds
Join Monticello's Director of Gardens and Grounds Peter Hatch for an in-depth look at the unique horticultural world Jefferson created on his beloved mountaintop.

“I am as happy no where else and in no other society, and all my wishes end, where I hope my days will end, at Monticello.”

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Welcome to the FORT SNELLING EXPLORER

Come visit your place in history.

EXPLORE

Explore the Objects
See how Fort Snelling and its land changed between 1820 and today with this interactive map of the area.

Navigate the Fort
Navigate a 3-D recreation of Historic Fort Snelling, and discover the objects, people, stories and details of the historic fort.

LEARN

Listen to a Podcast
Journey with Curator Brian Szott as he discusses how Seth Eastman paintings help recreate a historic topography for the Fort.

The American Indian Story
Discover what life was like for Native Americans, whose history is inseparable from the history of the Fort.

Share YOUR Story
How do you feel about Fort Snelling? What is your family’s history with this land? Do you have a personal memory or story to share? Add to our WIKI!
History isn't set in stone, a fact proven by the Minnesota Historical Society's recent acquisition of an important 1835 map of the Officer’s Quarters. Evidence from the map fills in gaps that frustrated archaeologists and scholars involved in the 1970s reconstruction of the fort, now a living-history site.

This map shows details such as where individual officers slept, and how they spent their leisure time.
Between 1861 and 1865 Minnesota expanded the fort as a training center for thousands of volunteers who joined the Union Army. After the war, the regular Army returned. Fort Snelling became headquarters and supply base for the military Department of Dakota, which extended from the Mississippi River to the Rocky Mountains. Regulars from Fort Snelling served in the Indian campaigns and in the Spanish-American War of 1898. Officers living at Fort Snelling during the Civil war were prolific in their writings home. The Minnesota Historical Society’s manuscript collections includes officers letters.