Digital History and the Encyclopedia of Milwaukee

Margo Anderson and Amanda Seligman
(History Department)
Ching-tzu Chien and Michael Hostad
(UITS)
### Historical Research from Scroll to Screen?

#### THE READING DEVICE: A SHORT HISTORY

<table>
<thead>
<tr>
<th></th>
<th>SIZE</th>
<th>NAVIGATION</th>
<th>SEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCROLL</strong></td>
<td>![Image of Scroll]</td>
<td>![Image of Hand on Scroll]</td>
<td>![Image of Scroll Rewind]</td>
</tr>
<tr>
<td><strong>CODEX</strong></td>
<td>![Image of Codex]</td>
<td>![Image of Hand翻书]</td>
<td>![Image of Codex with Search Bar]</td>
</tr>
<tr>
<td><strong>E-READER</strong></td>
<td>![Image of E-Reader]</td>
<td>![Image of Hand on E-Reader]</td>
<td>![Image of E-Reader Search]</td>
</tr>
</tbody>
</table>
The Project

*The Encyclopedia of Milwaukee (EMKE)*

- Outline of the Presentation:
  - The Challenge
  - What is EMKE?
  - The EMKE-UIITS Collaboration
The Challenge

• Produce a **digital and print** encyclopedia on what is known about Milwaukee’s history...with

• Comprehensive coverage of the four-county area: Milwaukee, Ozaukee, Washington, and Waukesha....and which is...

• Historical in scope....with

• Short specific entries as well as broad thematic essays
What is EMKE?
Other American cities with their own encyclopedias
Special features

• Kinds of entries
  – A to Z entries
  – Reflective essays
  – Periodizing essays

• Underbook
  – Images
  – Citations
  – Understories

• Overbook
  – Public Discussion

• Reflective Essays
  – Peopling of Milwaukee
  – Aging in Milwaukee
  – Lake Michigan
  – Advocating
  – Getting Around

• Periodizing Essays
  – Milwaukee in the Age of Empire
  – Great Depression
  – Wartime Milwaukee
  – The Sixties
Project Scope

• **Big:** 500,000-750,000 words plus images, maps, graphs and charts

• **Complicated:** Substantial staff and research, editorial and administrative work

• **Multiformat:** Print and digital

• **Expensive:** $1.9 million over the life of project

• **Long time frame:** 7 years
What are the steps in creating the EMKE?

• Plan the Table of Contents
• Build the back end content production system
• Build the front end presentation website
• Commission entries and understories
• Edit and fact-check entries
• Copy edit
• Publish to print and online editions in 2016
How does the content for the EMKE get created?

- Rubrics
  - Arts and Culture
  - Business, Industry, Labor, and Agriculture
  - Education
  - Gender and Sexuality
  - Health and Medicine
  - Media and Communications
  - Natural and Built Environment
  - Places: Neighborhoods and Suburbs
  - Politics, law, and government
  - Race and Ethnicity
  - Religion
  - Sports and Leisure
  - Third Sector and Organizations
  - Transportation, Infrastructure, and Public Services
Who is already involved?

• Editorial Board
  – Steve Daily, Milwaukee County Historical Society
  – Michael Doylen, Golda Meir Library, UWM
  – Ellen Engseth, Golda Meir Library, UWM
  – John Gurda
  – Thomas J. Jablonsky, Marquette University
  – Kenneth T. Jackson, Columbia University
  – James Marten, Marquette University

• Project Assistants from UWM Urban Studies and History graduate programs and Marquette University History Department

• UWM University Information and Technology Services
• Program Assistant Joan Baumgart
• UWM Development staff, Ann Marie Santora
• Authors of entries
Table of Contents

• Specific entries of varying lengths
  – Gendered Milwaukee (A)
  – Crytosporidium (C)
  – Hmong (B)
  – Catholics (A)
  – Aaron, Henry (C)
  – Carroll University (C)
  – Gertie the Duck (D)
  – Libraries, public (B)
  – Milwaukee Public Library (B)

• Approximately 750 entries, charts, and maps

1975 aerial photograph of Greendale
American Geographical Society Library, UWM
Who is going to publish the EMKE?

• Digital: UWM University Information and Technology Services
  – Available for free online

• Print: Northern Illinois University Press
  – Coffee-table sized book retailing in the $60-$80 range

• The print and digital editions complement one another
Costs

• $1.9 million total
  – Research, including graduate assistants to write entries and honoraria for authors
  – Technology
  – Research materials (permissions for images, creation of maps)
  – Project coordination and logistics
Sources of funding

• Funds spent and committed to date ($802,000)
  – UWM RGI ($149,000)
  – Other UWM support—Provost’s office, Graduate School, College of Letters and Science
  – Marquette University Project Assistant

• Proposals Pending ($350,000)
  – National Endowment for the Humanities

• To be raised in charitable gifts and other grant applications ($735,000)
  – From individuals, foundations, and businesses
# Production Timeline

<table>
<thead>
<tr>
<th>Task</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employ Program and Project Assistants</td>
<td>2010 - 2016</td>
</tr>
<tr>
<td>Planning content</td>
<td>2010 - 2011</td>
</tr>
<tr>
<td>Write NEH application</td>
<td>2011</td>
</tr>
<tr>
<td>Obtain contract for print volume</td>
<td>2011</td>
</tr>
<tr>
<td>Private fundraising</td>
<td>2011 - 2016</td>
</tr>
<tr>
<td>Build content management system and website</td>
<td>2011 - 2016</td>
</tr>
<tr>
<td>Solicit and edit entries and Underbook content</td>
<td>2012 - 2016</td>
</tr>
<tr>
<td>Employ Project Director</td>
<td>2012 - 2016</td>
</tr>
<tr>
<td>Launch Print Volume and Website</td>
<td>2016</td>
</tr>
</tbody>
</table>
The Collaboration

• Fall 2010: Anderson and Seligman approached UITS for technical guidance in planning the project and technical documentation for application to the NEH Humanities Collections and Research Resources Program

• January 2011: UITS proposes a formal Requirements Management Process

• January – May 2011: Ching-tzu Chien oversees Requirements Management contract and prepares report for NEH application.
Requirements Management Process

• Business requirements document: specifies what the end users can expect once the project is completed

Requirements Focus

- How
- What
- Where
- When
- Why
- Who
Requirements Management Process

- Elicitation
- Analysis
- Representation
- Validation

- Correct and Resolve Issues
- Re-evaluate
- Clarify
- Rewrite
- Revised Baseline
- Current Baseline
- Change Control
## Requirements Management Process

<table>
<thead>
<tr>
<th>Elicitation</th>
<th>Analysis</th>
<th>Presentation</th>
<th>Validation</th>
<th>Change Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify stakeholders</td>
<td>• Document assumptions</td>
<td>• Create graphical models and prototypes</td>
<td>• Identify characteristics of quality</td>
<td>• Baseline accepted requirements</td>
</tr>
<tr>
<td>• Identify requirements sources</td>
<td>• Identify conflicts and dependencies</td>
<td>• Create textual documents</td>
<td>• Eliminate ambiguities</td>
<td>• Follow change control process</td>
</tr>
<tr>
<td>• Elicit requirements</td>
<td>• Identify constraints and risks</td>
<td></td>
<td>• Trace the requirements</td>
<td>• Maintain requirements</td>
</tr>
<tr>
<td></td>
<td>• Prioritize requirements</td>
<td></td>
<td>• Conduct requirements reviews</td>
<td></td>
</tr>
</tbody>
</table>
Requirements Management

Recommendations

- Lamp Stack or Lamp Environment
- Three Stage Production Process
  - Data Mapping (Summer 2011)
  - Building the Back End Production System (2011-12)
  - Building the Presentation Website (2012-14)
The Collaboration (cont.)

- March 2011: Seligman and Anderson and UITS apply for and receive Digital Futures grant
- Summer 2011:
  - Seligman and Anderson submit NEH grant application.
  - UITS and EMKE staff conduct data mapping
  - EMKE Project Asst researches related digital projects for preparation of a white paper on Humanities-UITS collaboration.
Requirements Management

Recommendations

• Lamp Stack or Lamp Environment?

• Did I hear a stack of lambs?
Requirements Management

Recommendations

• Lamp Environment?  Campus acquisition in Fall 2011
  – Linux (operating system)
  – Apache HTTP Server
  – MySQL (database software)
  – PHP scripting language
Requirements Management

Recommendations

• Three Stage Production Process
  – Data Mapping (Summer 2011)
The Collaboration (cont.)

• 2011-2012: Lamp environment established and staffed
• 2011-2012: Back end production system developed.
• 2012-2014: Front end website development
Questions, Comments, and Feedback

– Margo Anderson: margo@uwm.edu
– Ching-tzu Chien: chingtzu@uwm.edu
– Amanda Seligman: seligman@uwm.edu