Academic Uses of Google Earth and Google Maps in a Library Setting

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WILU Conference
Grant MacEwan University
May 24, 2012
Google Maps is for finding directions, right?

Google Earth is just for fun, isn’t it?
Google Earth/Google Maps is simply an educational tool to host, share, and display information in a visual format.

It is used in academia and valued by many library staff.
Land supply and demand

An understanding of the distribution of supply of and demand for land is fundamental to examining the impacts of future development on key assets and resources. This atlas presents supply and demand for land parcels in Melbourne's peri-urban region. Information is supplied on an SLA basis (the basic unit of population projection). This atlas demonstrates the geographic disparities between supply and demand (as depicted by projected surplus demand). Evidently, certain localities will be under significant pressure to release land for development.

Also provided is a summary of the methods by which development can be undertaken in certain locations based on the current planning rules. The research considered two approaches to development: development of unoccupied parcels and subdivision of existing occupied parcels.

To understand the capacity to meet demand and the magnitude of that capacity (or lack of capacity), the relationship between supply and demand is presented in this atlas. SLAs are presented in seven categories identifying where development capacity is exceeded or where there is excess land supply.

Map variable: Supply (development capacity) > Parcel count

Comparison Pie Chart

- Supply (development capacity)
- Projected demand (2041)

Golden Plains (S) - North-West

<table>
<thead>
<tr>
<th>Name</th>
<th>A</th>
<th>Indicator</th>
</tr>
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<tbody>
<tr>
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<td>Barwon East (S)</td>
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<td>251</td>
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<td>Barwon South (S)</td>
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<td>Mitchell (S)</td>
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Spatial Vision
Parasite rate
(in units of PPR, 0-100%)
In the 1920s, Franklin Parkers enjoyed picnics and music at the Garden Deluxe. It was located on Chestnut St. and the Soo Line Railroad tracks. Its address was 2900 Commerce St., and phone number was FP 184.
University of Waterloo’s Historical Street Project

http://www.lib.uwaterloo.ca/locations/umd/project/
http://www.lib.uwaterloo.ca/locations/umd/streets/index.html
@University of Toronto Mississauga

- Google Earth has become a geospatial literacy tool, opening up the world of maps and visualization to areas outside of Geography.

- Focus has been on teaching and engaging students with course content to bring it to life.

- Facilitated by the Library, courses now using Google Earth include Classical Studies, French as a Second Language, and a Forensic Science Field Study course (“CSI Mississauga”).
Students in “CLA101: Intro to Classical Studies” use the Rome Reborn Resource to study the role of Ancient Rome in history and culture. This is followed by research and mapping of ancient Pompeii households.
Waterloo and U of T Mississauga were doing a lot with Google Earth

• We asked ourselves, “What are other Libraries’ doing with Google Earth and Google Maps?”

• and were they using it as a teaching tool?

• Working together, we began a research quest…
1. Literature Review

- Has anyone published their experiences of using Google Earth/Maps for Library related work, including Instruction?
  
  • Surprisingly, very little has been published. A couple of papers focused on the use of Google Earth for promoting Library special collections.
  
  • One article explored an option for using it as a OPAC interface, while only one article discussed its potential as a information literacy tool.
2. A Scan of Selected Library Websites

– From looking through a selection of University Library websites, is any creative and innovative project work being highlighted using Google Earth or Google Maps?

• Not surprisingly, we found many libraries using Google Mapping tools for a variety of purposes. These fall into areas such as Finding Aids and Collection Access.
For example:

Our Methodology

3. A Survey of Academic Librarians
   – How were academic librarians using Google Maps and Google Earth in their work?
Survey Description

• Focused on library staff who work with maps, GIS, or Geography, Geology content.

• Questions were concise in numbers and types of questions (only 20 in total).
  – Mostly yes/no, multiple choice. A few fill-in answers

• Questions addressed included:
  • Who is using Google Maps/Earth
  • In what departments or areas of the Library?
  • For what purposes?
  Specifying:
  Instruction/Marketing/Reference/Collection Development & Access/Other
Survey Description

- Distributed over six Library listservs in Canada and United States
- Available between December 2010 & January 2011
- Over 80 responses received
Survey Responses

Where in the Library is Google Maps/Earth being used?

Number of Responses

- Map/GIS Services: 59
- General Reference: 21
- Government Publications: 13
- Technical Services: 9
- Other: 19

Other Responses includes:
Digital Scholarship Centre, Special Collections, Instructional Services, etc.
### Survey Responses

What is their work position title?

<table>
<thead>
<tr>
<th>Frequency of Responses</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Librarian (inc. GIS Librarian, Map Librarian, Reference &amp; Instructional Librarian, Gov Docs Librarian, Science Librarian)</td>
</tr>
<tr>
<td>14</td>
<td>Department Heads, Managers, Coordinators</td>
</tr>
<tr>
<td>9</td>
<td>GIS Specialist</td>
</tr>
<tr>
<td>5</td>
<td>Library Technician</td>
</tr>
<tr>
<td>2</td>
<td>Library Assistant</td>
</tr>
<tr>
<td>5</td>
<td>Other (Graduate Student, Research Analyst, GIS Consultant, etc)</td>
</tr>
<tr>
<td><strong>80</strong></td>
<td><strong>Total</strong> (4 skipped question)</td>
</tr>
</tbody>
</table>
Google Maps/Earth-Frequency of Use for Work

How regularly do you work with Google Mapping Products for work-related projects?

- Blue: A few times a year
- Green: 1-3 times a month
- Orange: 1-2 times a week
- Red: More often than that!
- Brown: Not at all
- Pink: 3-4 times a week
- Yellow: 1-2 times a week
- Not sure: Not sure
Survey Responses

For what purposes is Google Maps/Google Earth being used by your Library?

Number of Responses

- Instruction: 40
- Promotion/Marketing: 19
- Creating Collection Indexes: 43
- Other: 14

Other responses include “website development”, “special projects”, “digitization”.
If you are using Google Mapping products for Instruction, what level or year of university course(s) are you using it in, and in how many courses:

- 1st year (100 level): Orange bars indicate most use.
- 2nd year (200 level): Blue bars indicate use.
- 3rd year (300 level): Blue bars indicate use.
- 4th year (400 level): Blue and purple bars indicate use.
- Graduate level: Blue, purple, and green bars indicate use.

Heavy instruction use in more advanced years and in Graduate level programs.
Description of some of the Instruction activities

“First Year Geography course: Researching environmental issues (Global Awareness); Third Year Tourism - beach resort planning and analysis”

“arctic community class where the students can see their places”

“Work with graduate student on poverty mapping, work with 1st year students on local mapping”

“Mapping events from James Joyce's Ulysses; Collaborative mapping of 10th Century public art & architecture in London; Distribution of Sanborn Fire Insurance Maps”

“Created a tutorial for medical students doing practicums in rural Kansas communities for using Google Earth to map healthy lifestyle resources in their areas such as grocery stores, parks, gyms, walking/biking/hiking paths and trails, etc.”
In Summary

• Google Earth/Maps are popular tools for performing a variety of Library related activities.
• Google Earth/Maps have helped with the teaching of spatial literacy skills to students.
• Google Earth/Maps have also helped revitalize Collections and is a great resource for answering reference queries.
Conclusion

• More librarians and library staff should explore and utilize Google Mapping tools in their work.

• Future research areas could look at what the wider library community is doing with Google Earth/Maps if anything. (Public Libraries, Special/Business Libraries, etc.)
Questions???