Addressing Geospatial Data Needs:

Fashions and Factions in GIS Collection Development

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What are the issues?

- A move from macro-data collections to more micro-oriented collections - needs of users
- What structures are in place to provide discovery and access
- Nature of spatial data
- Policy guiding collection development, infrastructure, and stewardship of spatial data
Where are we coming from?

Established vs. Emerging
Traditional vs. New

UCLA - public
- 28,674 undergraduate
- 13,138 graduate

USC - private
- 18,000 undergraduate
- 22,000 graduate/prof.
Unique Student Needs

- Economics
- Public Policy
- Public Health
- International Relations
- Environmental Sciences
- Urban Studies
- Sociology
- Spatial Sciences, Social Work, Journalism
Examples:

- Improving bike infrastructure in Santa Monica
- Where's the bus? Mapping the UCLA Bruin Bus in (pseudo-)real time
- Bicycle Count Data Clearinghouse [http://www.bikecounts.luskin.ucla.edu/](http://www.bikecounts.luskin.ucla.edu/)
- Gentrification in Los Angeles Neighborhoods
- Access to health services
- Local mapping of places and events (historical and current)
Site Suitability Analysis: Santa Monica On-Street Bike Infrastructure Improvements

Figure 3 - Study Area

Dataset 1: Santa Monica City Boundary
- Sources – The data was through Esri’s ArcGIS Online.

Dataset 2: Los Angeles Transportation Infrastructure
- Sources – USC Geoportal
Dataset 3: LACBC Bike Counts

Sources – The data was acquired via the UCLA Luskin Bike Count Clearinghouse. The data was originally collected in collaboration between the Los Angeles County Bicycle Coalition (LACBC) and the Los Angeles Department of Transportation.

http://www.bikecounts.luskin.ucla.edu/
Figure 5 - Bike Count Volumes & City Bike Network

Legend
- Santa Monica Boundary
- METRO Data Downloaded 12-15-2010
- Class 1 - Bike Path
- Class 2 - Bike Lane
- Class 3 - Bike Route or Sharrow

Dataset 4: Bicycle Infrastructure
- Sources – Los Angeles Metro’s bike maps and LA County Bicycle Coalition Surveys. I acquired this dataset via Esri’s ArcGIS Online.
Dataset 5: Cyclist Collisions Involving a Motorist
- Sources – The data was originally collected by the California Highway Patrol’s Statewide Integrated Traffic Records System and organized by Berkley’s Transportation Injury Mapping System.
Discovery and Access

Mapshare: UCLA's Spatial Data Repository

NEW! The ESRI Data & Maps collection was just released in the summer of 2010 and is available here under the series name "ESRI 10". It contains the most up to date data for the United States (including street layers, census layers with basic demographic attributes).

NEW! Parcel Layer and Tax Roll Data
Parcel data and tax local roll data is now available for download. The attributes included in the local roll data is described here. To use this data in ArcMap, add the parcel shapefile and the local roll text data in ArcMap, and join them by the "AIN" field.

- Los Angeles County Parcel Shapefile (526MB)
- Los Angeles County Local Roll (txt format) (130MB zipped, 945MB unzipped)

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<th>By Region</th>
<th>By Feature Type</th>
<th>By Series Name</th>
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<td>Asia and Australia</td>
<td>Multipoint</td>
<td>ESRI 10: Data and Maps : Street Map North America</td>
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<td>North America</td>
<td>Raster</td>
<td>ESRI 9.3: Data and Maps and StreetMap North America: USA</td>
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the good - preview a dataset in an interactive mapviewer
the good - datasets for target audiences
Step 1: Zoom in and select an area

Step 2: Select data for download
- CA_Airports
- CA_Airport_Boundaries
- CA_Amtrak_Routes
- CA_Bay.Area.Rapid_Transit
- CA_Bike_Routes
- CA_Blockgroups
- CA_Blocks
- CA_Congressional_Districts
- CA_Counties
- CA_Elementary_School_Districts
- CA_Faults
- CA_Fire_Hazard_Severity
- CA_Flood_Hazards

Step 3: Complete ordering details and click "Download"

Feature format: File GeoDatabase - CDB - .gdb
Raster format: ESRI GRID - GRID

the good - download some data for a specific area
the bad - coverage/date
the bad - where is the data?
the ugly - descriptive metadata
Challenges

- What is GIS DATA - attribute data position in various map layers?
- How to catalog thematic and monothematic spatial data layers?
- Where to store spatial data (repository, network drives, or external hard drives)?
- How to make data available for users?
- Who should collect and preserve local data?
- How about infrastructure?
Infrastructure

- Staffing/Skills - provide resources or hands-on help
- Who will liberate data from its CD-ROM prison and make it easily discoverable?
- Who will create metadata describing geographic data layers, standards?
- Who is responsible for spatial data management and curation?
Collection development is not enough

- Inform users what is collected:
  - Formats, layers, materials, etc.
  - The coverage of the collection
  - Historical, current, etc.
  - Strength of the collection

- Address stewardship of local spatial resources
Call for Policy

Spatial data needs:
● Collection Development addressing user needs

● Supporting infrastructure to provide the services and research support needed by students and faculty

● Stewardship of local spatial data
Thank You!

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