Integrating Numeric, Statistical, and Geospatial Data Services for Graduate Students

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Agenda

- The Age of Big Data/ UN Global Pulse
- Data intensive social sciences/Demand for skilled graduate students
- Are academic libraries ready to serve data intensive research in social sciences?
- Data services and strategy at UCLA Research Library
- Questions & Discussion
This presentation is not about...

- Scientific data
- Data management plan
- Long-term digital preservation and access
- Data repositories
The Age of Big Data

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Big Data
Are academic libraries ready to face Big Data challenges?

- Questions

- Is about the voluminous quality of data
- Is growing at 50 percent a year
- Is doubling every two years
- Is aiming to understand changes in the world
- Is helping in decision processes
- Demanding analytical experts, data librarians, informatics metadata experts, archivists
<table>
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<th>Data intensive social sciences</th>
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<td>- Economic forecasting (long time-series)</td>
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<td>- Political Sciences (time series–cross section, microdata)</td>
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<td>- Marketing/Advertising (lifestyle consumers, census and business data)</td>
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<td>- Media Art (time-series)</td>
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<td>- Public health (bio-informatics)</td>
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Infochimps – social data tags

- Public policy (regional small geography units)
- Urban planning (regional and spatial data)
- Geography (spatial and geographic units)
- Demographics (censuses, surveys, vital registrations)
- Education & Justice (cross-classified tables)
- Sociology (spatial distribution of social variables)
Are academic libraries ready to serve data intensive research in social sciences?
Data Services

AGENDA

- Role of Libraries
- Current Engagement
- Questions

- Served population – faculty, graduate students, and upper division undergraduates
- Available expertise – librarians, archivist, GIS specialist, and statistical consultants
- Collection building – different formats, suppliers, unique holdings
- Management – subscription, licensing, purchase, access
- Available budget – shared, endowments, discretionary funds
- Outreach – work with faculty, graduate students, and peers
Graduate students and faculty demand for data

Based on individual consultations between April 2011- April 2012

- U.S. Census – 75
- Haver Analytics (national and regional) - 68
- International (GDP, interest rate, foreign investment, currency intervention, wages, unemployment, government spending) - 53
- International historical data - 46
- GIS shapefiles and tabular data - 33
- Census (British, Indian, Polish) – 16
- Economic census – 23
- Referrals (Data Archive, Mapshare, local agencies) – 36
Data strategy

- Know your sources to discover data
- Determine what students want to achieve by requesting data
- Focus on data from trusted sources
- Look for raw, not processed data; students prefer to analyze own data
- Make referrals to units with better data accessibility
Data collaboration

AGENDA

- Role of Libraries
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- Institutional policies for external collaborations
- Policies on data sharing resources
- Funded research supporting purchase of datasets
- Institutional cross-training
- Collaborative communication tools
- Events to present ongoing research and projects
Data challenges

- Multi-layered administration
- Support for professional training
- Sheared purchases (Tier system)
- Licensing policy and access
- Purchasing different format materials
- Technical infrastructure
- Budgetary constraints
Thank you!

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