Geographic Information Systems (GIS) Collection Development Plan for the UCSD Libraries

Geographic information systems (GIS) collection development encompasses bibliographic and electronic resources. Due to the technological nature of GIS and its diversity of application, the strategies and content contained within this plan may differ from other collection development plans found within UCSD. Even with GIS' differences, the fundamentals of any other collection development plan are present for GIS and include the relevancy of the item, its cost, and licensing terms.

Bibliographic Resources

For popular and highly relevant bibliographic GIS materials, it is intended that there will be a circulating copy either in the SSH stacks or in the Data & GIS Lab Circulating collection, and a reference copy to be located in the Data & GIS Lab Reference collection. This is a different approach to typical bibliographic collection due to the specialized nature of GIS and its use as a hands-on research tool – these factors combined with a patron-oriented service philosophy lead to the need to have a comprehensive library on hand for patron use *in the same location* as the computing technology. Not only does this facilitate technical assistance to the patrons and lab staff alike, it provides an immediate source of ideas and a visual reminder of the breadth of GIS across the disciplines.

Electronic Resources

When working with GIS, electronic resources ranging from multidisciplinary databases, satellite imagery, and digital GIS data serve as or complement geospatial information. It is not the intent of the GIS collection development strategy to duplicate efforts of other bibliographers, but rather to work with them to leverage existing resources as best as possible while obtaining access to new electronic resources with great applicability in a GIS. That said, the primary collection development goal for electronic resources in GIS is to obtain GIS data. Additional detail about how GIS data is handled is contained in Appendix A, and a list of potential vendors is contained in Appendix B.

Location of GIS Collection

Under the Library of Congress classification system, GIS materials are scattered across many different call numbers. The bulk of the bibliographic collection will be found in G70.212 = Geographic information systems; however, other LC call numbers used for GIS materials are those that pertain to the underlying subject matter i.e. GIS in archaeology books can be found in CC80.6, GIS in urban studies in HT166.

GIS data is found by patrons on a server called the 'X Drive'. This is a 1 terabyte server that is managed by Library ITD. All data on this server has metadata and is organized roughly continentally. Patrons can access the X drive from the workstations in the Data & GIS Lab in the Geisel Library building only. There is a unique username and password for these machines and only current members of the UCSD community are allowed to use the GIS software and data on those machines.

Primary Focus of GIS Collection

Primary topical focus for the GIS collection are the SSH subjects, followed by geographic regions that include San Diego and its surrounds, and lastly those topics that are identified by patron demand. As of June 2009, current heavy users of GIS include those working in the disciplines of urban studies and planning, economics, SIO and biology.

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Appendix A – Detailed Considerations for GIS Data Purchases

- Selection
  - Currency of data i.e. historical, current, projection into future
  - Relevance across disciplines vs project/research specific data
    - All purchases should fit within the scope of the UCSD Libraries' overall collection
    - All purchase should support teaching and research at UCSD
  - It is preferred to select resources that others in GIS community have verified for quality

- Availability
  - Items which may be removed from future access are given higher priority over those that will likely remain more permanently accessible.
  - Uniqueness of purchases is considered important and *may* be given priority.
  - No preference is given for data that is found online versus on a fixed media such as a DVD/CD
  - For GIS data, all file types must be compatible with the primary GIS software used at UCSD
  - Data that requires additional conversion and thus additional staff time is not preferred to that which can be purchased in ready to use format.

- Documentation
  - Metadata for any GIS data purchases should have, at minimum:
    - Scale
    - Attributes
    - Accuracy
    - Source

- Types of data
  - Imagery
    - Goal is to obtain complete mosaicked image of entire areas as well as more detailed smaller areas
  - Vector
  - Topic-specific

- Licensing
  - Preferred licensing terms are for the data be stored on our server without further access restrictions; however, data with greater restriction will be purchased if it has a high degree of relevance for our patrons.

- Price
  - Whenever possible, it is the goal to share the purchase across disciplines in SSH or other UCSD Libraries.
  - One-time purchases are preferred over continuations or subscription type purchases.

- Miscellaneous
  - It is preferred to obtain materials that can be tracked with use statistics or some other mechanism when possible.
  - It is preferred that the purchase can be shared across other UC campuses.
  - Regional GIS collaborative purchases are encouraged when possible.

Appendix B – Potential GIS Data Vendors

- Vendors
  - Prevalent GIS Data Commercial Vendors
    - East View Cartographic (extensive experience working with libraries)
    - Map Mart (good to work with)
    - LeadDog (good to work with)
    - GfK Macon (more restrictive with licensing)
    - Bartholomew (more restrictive with licensing)
    - All China Marketing Research Co. & China Data Center (good for China data)
    - ML Infomap (good for India data)
  - Government
    - Federal depository status – try to use when possible
    - Municipalities – attempt to obtain data for free rather than purchase

  - Free Data Sources
    - SanGIS & SANDAG – Local San Diego organizations where we can obtain free data **(in process of trying to decide if we can serve as a repository for their datasets and maintain historic San Diego GIS data)**