Spatial Data Acquisitions

MIT Library Highlights

The GIS website:

MIT Library Online Catalog:
When looking for gis data in Barton it is recommended to use the Advanced search options. Many of our cd's will come up if you do a subject = gis search. If you are looking for digital data you can limit the physical format in your search to CD-ROMs or DVDROMs only.

MIT Library online map guides:

Geodata repository – bring gis data directly into ArcMap over the network

US Data:
US Demographic data
In addition to the several drawers of cd's from the US Census Bureau in the GIS lab the MIT Libraries has a host of packaged census data from Geolytics. Geolytics' goal is to make mapping census data easier. Data can be exported from Geolytics cd's as shapefiles and brought into ArcGIS where one would find many additional analysis and display tools and options. To find Geolytics cd's do an advanced search in Barton on Publisher = Geolytics.

- CensusCD 1970
- CensusCD 1980
- CensusCD+maps
- CensusCD. 1990 long form in 2000 boundaries
- CensusCD 1990. Blocks
- CensusCD 2000
- CensusCD 2000 long form SF3
- CensusCD neighborhood change database (NCDB): 1970-2000 tract data: selected variables for US Census tracts for 1970, 1980, 1990 and 2000 and mapping too!
- CensusCD estimates, projections, consumer expenditures and profiles, 2003/2008
- Crime reportsCD electronic resource].

ICPSR – Numeric Social Science data available through the Harvard-MIT Data Center

US Locations covered by detailed GIS datasets found in the MIT Libraries:
King County, WA
Location Rotch Library - GIS Collection | CDROM G4283.K3 2003.K49

ARIS, Atlanta region information system
Location Rotch Library - GIS Collection | CDROM G3924.A8 2002.A7

MassGIS data
Location Rotch Library - GIS Collection | CDROM G3760 2002.M47

World Data

Title Global planner [electronic resource]: international datasets / Tobin International, Ltd.
Location Rotch Library - GIS Collection | DVDROM G3200 2004.T63
Set of DVD's with 3 separate datasets on each DVD. 1)Russian maps (1:500:000 scale); 2) digital chart of the world (dcw) (vector files at 1:1,000,000 scale) 3) usgs geologic data

Title Landsat mosaics [electronic resource] : worldwide bundle.
Location Rotch Library - Circulation Desk | CDROM G3201.A43 2004.L3

Title NIMA GEOnet names [electronic resource] : shapefile format for GIS.
Location Rotch Library - GIS Collection | CDROM G105.N55 2003
Helpful for searching for names, especially when overlaid on Russian maps (from Global Planner) or landsat images

Title World [electronic resource].
Location Rotch Library - Circulation Desk | CDROM G3200 2000.W67

Great datasets that are **in process** in the library so you must **ask Lisa** about them at this point:

- Boston Metro area aerial photo– 1 foot resolutions taken February 2004
- City of Boston 2004 assessor's data
- City of Cambridge GIS – ¼ foot resolution aerial photo taken April 2003
- City of Cambridge 2004 data:
    - Annotation
        - Labels for City features
    - Conservation
        - Delineated wetlands
    - Grids
        - Grids used for Cambridge mapping
    - Historical
        - Conservation Districts
        - Historical Districts
        - Historical Landmarks
        - Historical Markers
    - Planimetric (2003 unless noted)

Buildings – building polygons. Footprints split with common walls
Building High Point – geodatabase, high point and roofline elevations
Hydro – water bodies
Paved Surfaces –roads, sidewalks, parking lots, & driveways

Political Boundaries
City Boundary
Neighborhoods – Cambridge CDD neighborhoods
Wards & Precincts – cuurent
Zip Codes

Recreational
Open Space – Current

Schools
Public school locations – new as of fall 2003

Tax
Assessors tax parcels. Current to FY2004

Topo
Contours – 2-foot interval
Spot Elevations
DTM – from 4/17/03 flyover

Transportation
Rail Lines from 4/17/03 flyover -
Road Centerlines from 1995

Zoning
Cambridge Zoning – Current

- New York City – similar to listing for the City of Cambridge above
- Geocoding allows one to map a list of addresses by associating it with a street file in a GIS system. **ESRI Street Map USA** data files are a great data source for geocoding in the US. Currently the files must be requested from the GIS lab.
  Another source for geocoding are the US Tiger files, which can be freely downloaded from multiple sources, one of which is:
  http://www.esri.com/data/download/census2000_tigerline/ The TIGER files are not as well maintained as ESRI's Street Map USA so they can be more challenging to work with.
- ESRI Data And Maps

Massachusetts Data Online:

MassGIS:
http://www.mass.gov/mgis/database.htm

- Image Data
- Political/Regional Boundaries
- Indexes
- Infrastructure
- Demographics (Population)
- Topography
- Physical Resources
- Hydrographic (water-related) Features
- Conservation/Recreation
- Regulated Areas
- Environmental Monitoring
- Coastal and Marine Features
- Miscellaneous

Color Orthophoto 1:5,000 Index Grid:
http://www.mass.gov/mgis/oqindx.htm
You will want to download the shapefile version of this index and open it in your GIS project to figure out the file name for your area of interest.

The Grid ID is composed of the first 3 digits of each coordinate in this xy pair. For example, a grid cell with xy coordinates of 253000m 942000m at the lower right corner would have an ID of 253942. All datalayers registered to these index covers will have the grid number ID as part of their name.

US Public Domain Data Online:

The US has a lot of public domain data created by the federal government at consistent scales for the entire US. The following data types are available through national and state websites:

USGS Seamless data server - http://seamless.usgs.gov/
The National Map - http://nationalmap.usgs.gov/
Links to many state websites through the MIT Library GIS page -

DOQQs – Digital Orthophoto Quarter Quadrangles - Public domain aerial photos covering the United States, generally about 1 meter resolution

NED – "National Elevation Dataset" - 30 meter resolution elevation data for the US gathered by the USGS over many years.

SRTM – "Shuttle Radar Topography Mission" – 30 meter resolution elevation data for the US; 90 meter for the world gathered by NASA during an 11 day shuttle mission.

NLCD – "National Land Cover Dataset" 30 meter resolution land cover for the US

NHD – "National Hydrography Dataset" 1:100,000 scale hydrography for the entire US, more detailed scales available in areas where local governments have participated with the USGS http://nhd.usgs.gov/