# Searching for GIS Data

## Web Searches

**Data Clearinghouses** are websites where you can directly download a variety of GIS data. Sometimes these require registration, and some have fees to download large or licensed datasets. But many offer GIS data for free. The Canadian and American federal governments have clearinghouses for much of their data. An example is the Natural Resources Canada's data clearinghouse, GeoGratis [1]. Several states, provinces, counties and municipalities also have clearinghouses.

**Data Portals** are websites that provide links to other websites containing GIS data, including data clearinghouses. The UBC Geomatics website (http:/ / gis. ubc. ca) has a data portal that has links to websites with frequently-requested GIS data:

Data Sources [2] (UBC Geomatics website)

The majority of free, easily acquirable GIS data for North America can be downloaded directly from Canadian and American government agency websites. Consider which government body might have created the data you are looking for, and start with their website's search box.

**Advanced Google Search Help** can be found on Google's More Search Help [3] page.

## GIS Data at UBC

**UBC Library** has obtained many commonly-requested datasets that require a licence or fee for use by UBC students, faculty and researchers. The datasets are on a server called *Abacus*. Information on accessing Abacus can be found on the GIS Data at UBC Library [4] tab of the GIS Research Guide.

**GIS datasets of UBC Vancouver campus** are available to UBC students, faculty and staff for educational purposes. Older files can be downloaded from the Geomatics [5] website (see the UBC Campus link in the right column). Newer files can be obtained by contacting the GIS Librarian, Tom Brittnacher [6].

## GIS Data Acquisition Tips

Searching for GIS data sets online can be frustrating and time-consuming. Here are some things to keep in mind as you go through the process.

### Finding Data

- Allow enough time to find data.

  It can take quite a few hours or days of searching to find the data you need

- The data may be within a greater data set that covers many topics.

  For example, glaciers may be in a land cover data set or grocery stores may be within a points-of-interest data set

- Data sets may cover a larger area than you are looking for.

  Although your study area may only be around one municipality or landform, the data may exist at the provincial, state or national level

### Downloading Data

- Data sets may be compressed.

  Large files may be distributed in a compressed format with extensions such as .e00 or .tar.gz. Specialized software may be required to uncompress the files. If you need help with this, the GIS Librarian can assist you.

- Data sets may not be free.

  Some government and many commercial data products may require a fee to access the data. Most Canadian and American government data sets are free. Outside of North America it is difficult to find detailed data sets at no cost. Check for open or crowd-sourced data, as this is becoming more popular in developing countries. (See the International Data Sources [7] page of the Geomatics website for a list of major open data sites.)

- Data sets may not be GIS-ready.

  The information you are seeking may be in tables or reports. You may need to put the data into a format that can be read by GIS software (such as by adding columns for latitude and longitude coordinates).

### Evaluating Data

- Check the level of detail.

  At what scale was the data created? The Vancouver coastline will not be represented well in a shapefile created at 1:1,000,000 and covering all of Canada. If metadata is present, check to see how the data set was created and what error might have been introduced in its development.

- Check the attribute table.

  Does the data set include the information you need? Can you interpret the values in the attribute table? Is there a metadata file to describe the attributes?

- Check the time period.

  Does the data set's creation date correspond with your project? How does it correspond with other data sets you are using?

### Three Key Tasks to Remember

1. Download the Metadata
2. Document where you downloaded the data sets as you go
3. Review the data set's licence (if applicable) for use restrictions and citation requirements

## References

[1] http://geogratis.cgdi.gc.ca/geogratis/en/index.html
[2] http://gis2.forestry.ubc.ca/?page_id=36
[3] http://www.google.com/support/websearch/bin/static.py?hl=en&page=guide.cs&guide=1221265&answer=136861&rd=3
[4] http://guides.library.ubc.ca/gis#tabs-5
[5] http://www.gis.ubc.ca/
[6] http://toby.library.ubc.ca/libstaff/showperson.cfm?PID=782
[7] http://gis2.forestry.ubc.ca/?page_id=155

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