

GEOG 2017E
Lab 7
Preparation and Planning for Term Project

The purpose of this lab is to ensure that you have downloaded the necessary files needed to complete your term project (separate attachment):

Part 1 Understanding your Data

Refer to Lab 4 Part 1 to make sure you have downloaded the “Boundary Files, Reference Guide,” for the 2006 census from Statistics Canada (StatCan) website. It might be saved on your flash drive or the C: drive as 92-160-G2006003-eng.pdf.

Q1. What is metadata? (short answer 1 point –the answer’s not in the pdf! This was discussed in class – just look it up.)

Q2. How many Economic Regions (ER) are there in Canada (2006 census)? (1 Point). Hint – remember the Appendices in the 2006 Census Boundary Files Reference Guide you downloaded in Lab 4 Part 1. Also, you can search a pdf file by pressing Ctr-F (for find) and typing the text you want.

Read “Record layouts and item/field descriptions” pages 16 to 23 and answer the following:

Q3. What are the components of an Economic Region Unique Identifier ERUID? (1 point)

Q4. What does a Statistical Area Classification (SAC) code of “6” mean? (1 point)

Q5. Where does a municipality (CSD) with a SAC code of “1” lie in relation to a CMA (Census Metropolitan Area)? (1 point)

Part 2 Downloading Census Boundary files

Census Subdivision file

1. Refer to Lab 3 Part 1 to download and select the Census Subdivision file from Equinox (via library). This is a national scale file so it may take a few minutes. Zipped, this file is approximately 75MB, unzipped approximately 107MB. Check the space on your flash drive to see if you have room to save. If not, you may have to revert to creating a temporary folder on the C: drive (as in Part 1 A of Lab 3). **DON’T ANSWER QUESTIONS FROM LAB 3 AGAIN.**
2. You don’t want all the CSDs from across the country, so select only those from Ontario. Refer to Lab 4 Part 3 “Selecting and Exporting Data.” **DON’T ANSWER QUESTIONS FROM LAB 3 AGAIN.** Select by Attribute where “PRUID” = ‘35’ (Ontario) (you can also select by PRNAME)
3. Export the Ontario Census Subdivisions as a shapefile on your flashdrive. (also Lab 4)

Q6. How many CSDs are there in Ontario (use Open Attribute to figure this one out). Bottom of the Attribute window tells you how many records you have. (1 point)

Economic Regions file

Repeat the above process so that you have an Economic Regions Boundary file

Q7. How many Economic Regions are there in Ontario? (1 point)

Create a map for Export (3 points)

1. Create a map mxd file of Economic Regions and Census Subdivisions in Ontario
2. Make sure the ER is on top of the CSDs
3. Make sure the ER symbology is Features> Single Symbol and
 - a. double-click on the default symbol then select “Hollow” from the samples on the left (usually 1st col 2nd row), but
 - b. thicken the Outline Width to 2 (Options on the middle-right side of the Symbols Selector window). The Fill colour should be blank;
 - c. you can chose an outline colour of your choice, but black (default) is fine.
4. Zoom in to an area you think you may want to map for your term project (there’s no commitment to stick to this area for your term project)
5. **Export the current View (no need to layout with carto elements) to a pdf and send to TA and myself. (3 points)**

Part 3 Download Census Attribute files

1. Refer to Lab 5 Part 1 to go to SatCan’s E-Stat website and download the necessary files for your term project. This time, for Part 1 Step 1 “Selecting a geographic region” you want to make sure to select ***Provinces and Territories by Census Subdivision***
2. **Provide a detailed list of the census variables you downloaded. (3 points) Remember there’s a View Checklist button that is helpful because the census Universes area well laid out as well as the variable hierarchy**
3. At least one of your variables **MUST** be part of a hierarchy e.g. This will be important so that you can create a pie or bar chart map. E.g. in the **Housing** towards the end of the list

- Total number of private households by household type - 20% sample data
- One-family households, private households by household type
- Multiple-family households, private households by household type
- Non-family households, private households by household type

The small indent starting at “One-family”..tells you that it is a component of the “Total number of private...” Therefore, One, Multiple and Non-family household counts should equal Total. It’s ALWAYS a good idea to download the “Total” for your variables so that you can check your data.

Create a map

1. Join the CSD attribute file from E-Stat to the Spatial CSD file from Equinox (the library). (Lab 5 Part 2).
2. Map (**IN LAYOUT VIEW**) ANY variable you want, using whatever classification method you want. Just be VERY clear what it is you are mapping in your title and legend. Remember, you are mapping one of more than 2,000 variables, so Holly and I cannot guess at which one you selected.
3. For now, just a meaningful title and description of classification type (as legend title) will do; no other carto elements necessary.
4. Export to pdf and send to TA and myself (2 points).