

Maps & Geospatial Data - Queen's University Library

Locate and download 2011 Census Boundary files by way of:

Option 1 *Statistics Canada* or **Option 2** *Scholars GeoPortal*

Example: 2011 Dissemination Areas (DAs) within Kingston Census Metropolitan Area (CMA)

Option 1: Downloaded by way of Statistics Canada

Go to the Statistics Canada Census Geography web page :

(<http://www12.statcan.gc.ca/census-recensement/2011/geo/index-eng.cfm>)

Select Spatial information products ... Boundary files.

Census

2011 Census

By topic

Data products

Analytical products

Reference materials

Geography

Consultation

Custom services

Census of Agriculture

Corrections/Updates

Previous censuses

2006 Census of Population

ARCHIVED - 2001 Census of Population


ARCHIVED - 1996 Census of Population

Future censuses

2016 Consultation

Geography

Information on a wide range of census geographic areas



Census geography covers a wide range of geographic areas – from provinces and territories down to city blocks. These geographic areas have boundaries, names, and other information that make it possible to locate them on the ground and relate census data to them.

Maps

- [GeoSearch](#)
- [Reference maps](#)
- [Thematic maps](#)

Spatial information products

- [Road network files](#)
- [Boundary files](#)

For this example, select the year 2011

Year	
Census year	Intercensal year
2011	2012
2006	2010
2001	2009
	2008

Then, select **English ... ArcGIS (shp) Dissemination Areas (DAs) AND Census Metropolitan Areas (CMAs)** from <http://www12.statcan.gc.ca/census-recensement/2011/geo/bound-limit/bound-limit-2011-eng.cfm> *Note: This will require two separate downloads.*

Language

☒ English
 ☐ French

Format ¹

☒ ArcGIS® (.shp)
 ☐ Geography Markup Language (.gml)
 ☐ MapInfo® (.tab)

Boundary files (Select one file from the list below) [More information](#)

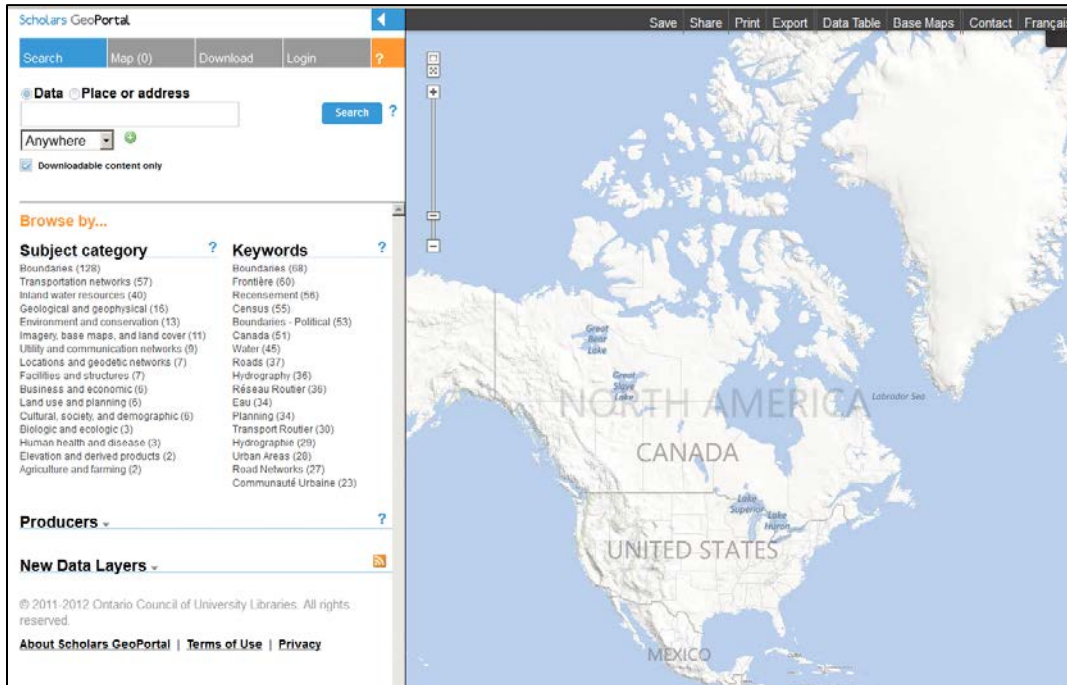
Geographic Area or Water Feature	Cartographic Boundary File	Digital Boundary File
Provinces/Territories	<input type="radio"/>	<input type="radio"/>
Federal Electoral Districts (2003 Representation Order)	<input type="radio"/>	<input type="radio"/>
Economic Regions	<input type="radio"/>	<input type="radio"/>
Census Divisions	<input type="radio"/>	<input type="radio"/>
Census Agricultural Regions	<input type="radio"/>	<input type="radio"/>
Census Consolidated Subdivisions	<input type="radio"/>	<input type="radio"/>
Census Subdivisions	<input type="radio"/>	<input type="radio"/>
Census Metropolitan Areas and Census Agglomerations	<input type="radio"/>	<input type="radio"/>
Census Tracts	<input type="radio"/>	<input type="radio"/>
Dissemination Areas	<input checked="" type="radio"/>	<input type="radio"/>
Dissemination Blocks	<input type="radio"/>	<input type="radio"/>
Designated Places	<input type="radio"/>	<input type="radio"/>

Download the files into a working directory.

 Continue this tutorial at page 5, after the download by way of Scholars GeoPortal section.

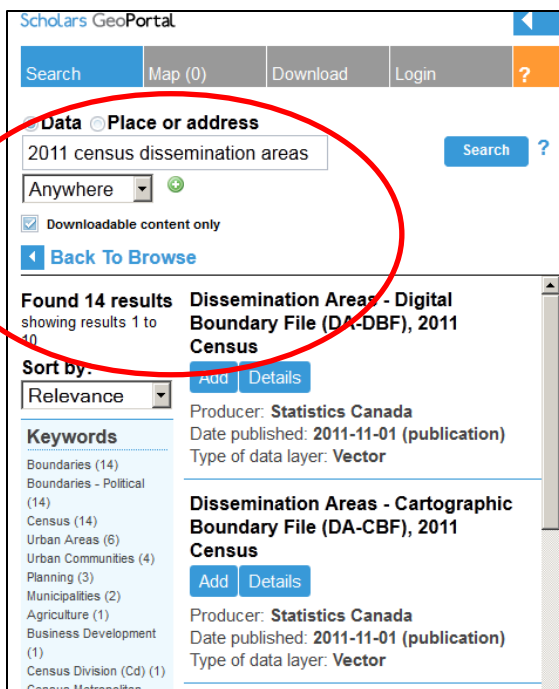
Option 2: Downloaded by way of Scholars GeoPortal

Go to the Scholars GeoPortal site <http://geo2.scholarsportal.info/>



Add DA layer

Type in *2011 census dissemination areas* as a Data search in the Anywhere field. (An "Anywhere" search looks for your search term anywhere in the metadata record; you can restrict your search to the data set's Title, Keywords, Abstract or Series name.) Restrict the search to downloadable content only by making sure the box is checked.

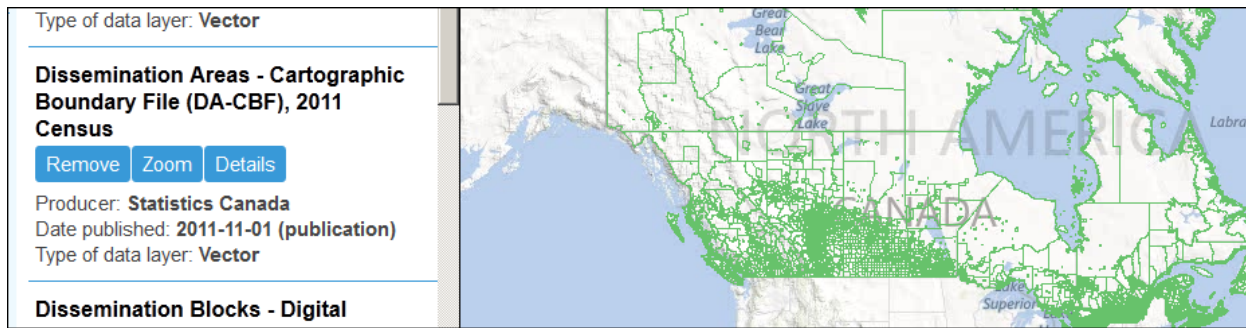


About 14 results are returned. The ones listed in the image to the left are the ones we will consider in this tutorial.

Cartographic Boundary File is a Statistics Canada term referring to the clipping of boundaries at shorelines. (*Digital Boundary File* extends out into the water.) For a more complete explanation, refer to the Statistics Canada [Glossary](#).

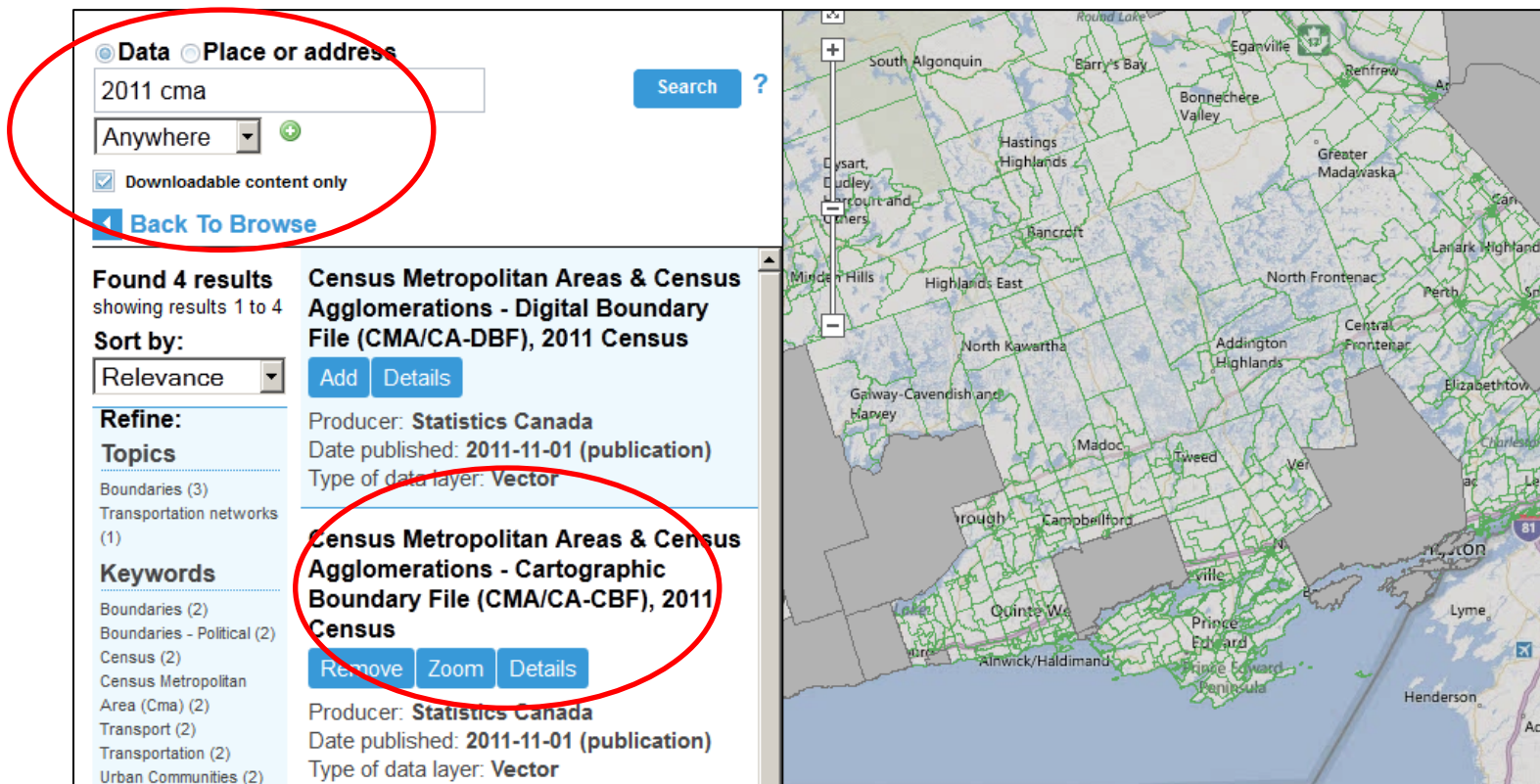
(Bonus exercise: Download both versions and compare.)

Select the *Cartographic Boundary File* and add it to your GeoPortal view. Notice that you can see DAs for all of Canada. Zoom in to the Kingston area.



Add CMA layer

Search for Data = *2011 cma* in 'Anywhere' and add the national Cartographic Boundary File to the map view.



Click on **Download ... Download entire datasets ... Download** . The data will be added to 'My download list'. (Note: at the moment it works better to download entire vector datasets, rather than clip them to your area of interest.) The [FAQ](#) in Download Help explains further.

Scholars GeoPortal

Search Map (2) **Download (2)** Login ?

☐ Download by area of interest

☒ **Download entire datasets** ?

Select datasets to include:

☒ ☒ Census Metropolitan Areas & Census Agglomerations - Cartographic Boundary File (CMA/CA-CBF), 2011 Census

☒ ☒ Census metropolitan area 2011 CBF

☒ ☒ Dissemination Areas - Cartographic Boundary File (DA-CBF), 2011 Census

☒ ☒ Dissemination area 2011 CBF

Download

My download list: [Clear List](#)

[DLI 2011 Census CBF Eng Nat cma.zip](#)

[DLI 2011 Census CBF Eng Nat da.zip](#)

The compressed data files are now available to download and save to your computer.

My download list:

[DLI 2011 Census CBF Eng Nat da.zip](#)

[DLI 2011 Census CBF Eng Nat cma.zip](#)

Opening DLI_2011_Census_CBF_Eng_Nat_cma.zip

You have chosen to open:

DLI_2011_Census_CBF_Eng_Nat_cma.zip

which is a: WinZip File

from: <http://geo2.scholarsportal.info>

What should Firefox do with this file?

☐ Open with Windows Explorer (default)

☒ **Save File**

☐ Do this automatically for files like this from now on.

OK Cancel

Note: From this point on, instructions are combined for data from Statistics Canada or from Scholars GeoPortal

Download the files into a working directory. The zipped file names are slightly different from the two sources but the data should be equivalent.

Name ^	Date modified	Type	Size
gcma000b11a_e.zip	12/04/2012 9:51 AM	Compressed (zippe...	6,773 KB
gda_000b11a_e.zip	12/04/2012 9:52 AM	Compressed (zippe...	146,896 KB

StatsCanada download

Name ^	Date modified	Type	Size
DLI_2011_Census_CBF_Eng_Nat_cma.zip	13/12/2012 3:36 PM	Compressed (zippe...	6,766 KB
DLI_2011_Census_CBF_Eng_Nat_da.zip	13/12/2012 3:37 PM	Compressed (zippe...	146,690 KB

GeoPortal download

These are compressed (or zipped) files which need to be uncompressed using a utility like 7-Zip or WinZip. *You will often need to do this more than once until all zipped folders within other folders are unzipped.* (To use the utility, right click and various options will appear.) At the end, you should see a collection of files (dbf, prj, shp, shx) that comprise the shapefile. (See the ArcGIS Help for a good explanation of the different extensions.) There is also data documentation in PDF format.

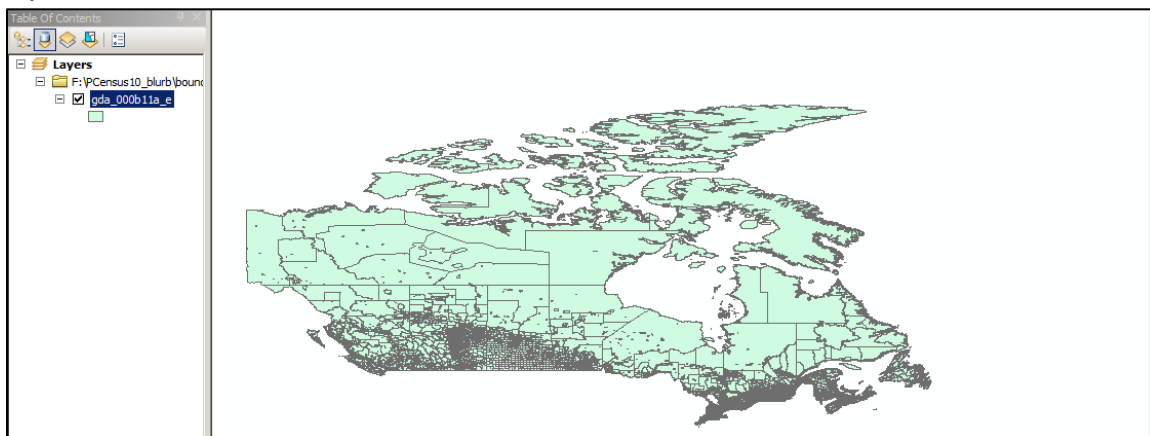
DAs

Name ^	Date modified	Type	Size
92-160-g2011001-eng.pdf	28/11/2011 1:57 PM	Adobe Acrobat Doc...	547 KB
gda_000b11a_e.dbf	18/11/2011 4:23 PM	DBF File	25,194 KB
gda_000b11a_e.prj	18/11/2011 4:00 PM	PRJ File	1 KB
gda_000b11a_e.shp	18/11/2011 4:23 PM	SHP File	196,256 KB
gda_000b11a_e.shx	18/11/2011 4:23 PM	SHX File	440 KB
gda_000b11a_e.zip	14/12/2011 11:54 AM	Compressed (zippe...	146,896 KB

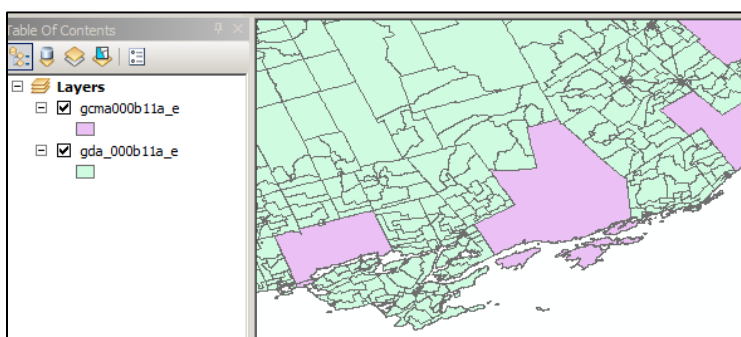
CMAs

Name ^	Date modified	Type	Size
92-160-g2011001-eng.pdf	28/11/2011 1:57 PM	Adobe Acrobat Doc...	547 KB
gcma000b11a_e.dbf	18/11/2011 4:23 PM	DBF File	25 KB
gcma000b11a_e.prj	18/11/2011 3:31 PM	PRJ File	1 KB
gcma000b11a_e.shp	18/11/2011 4:23 PM	SHP File	8,474 KB
gcma000b11a_e.shx	18/11/2011 4:23 PM	SHX File	2 KB
gcma000b11a_e.zip	14/12/2011 11:52 AM	Compressed (zippe...	6,773 KB

Opened in ArcGIS, the national DAs look like this.



Add the national CMA data as a layer in ArcMap and zoom in to the Kingston region.

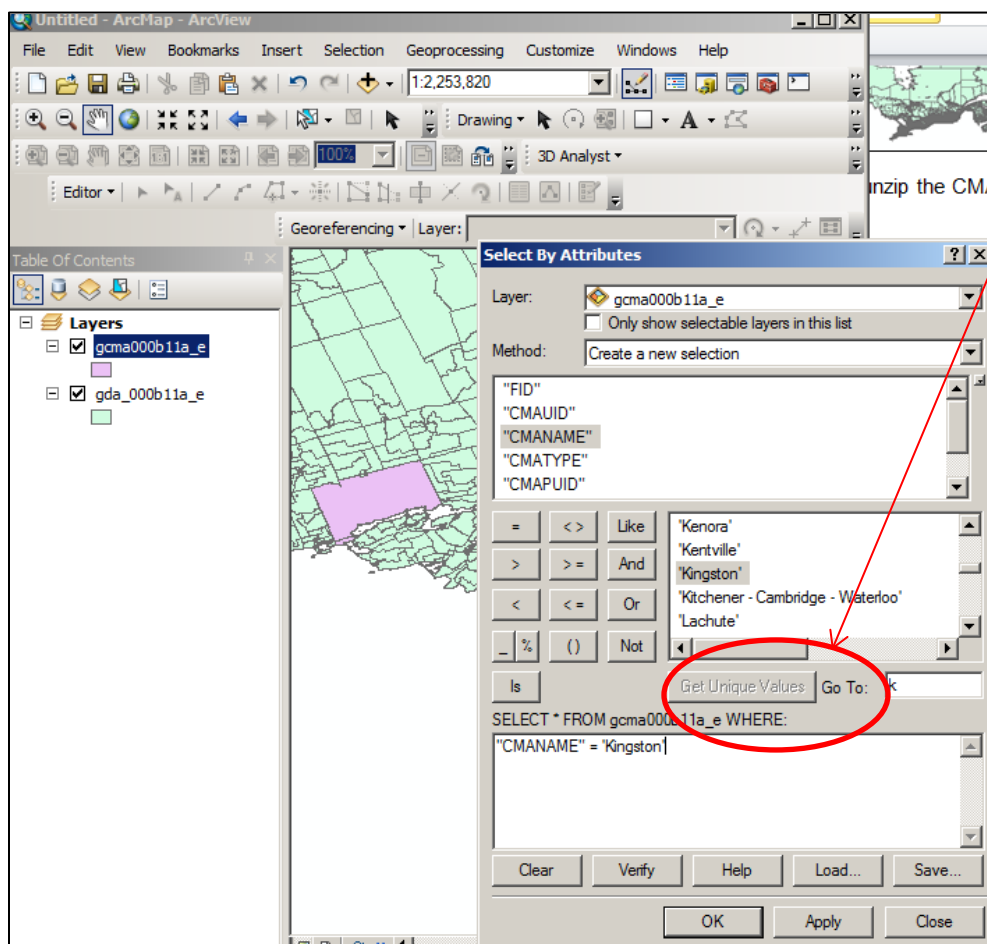


Just the Kingston CMA

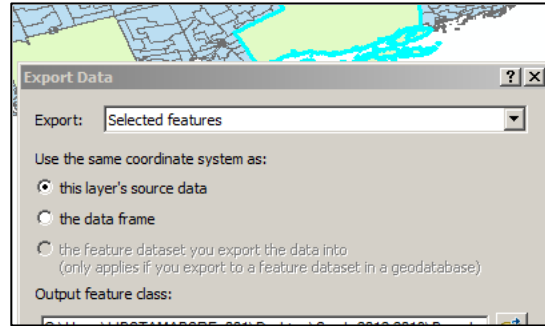
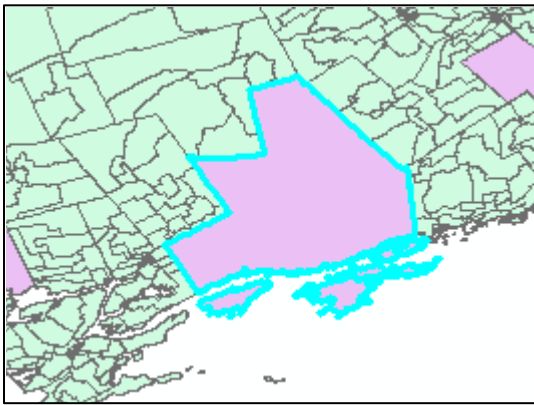
Make the CMA layer active. Click Selection ... Select by Attributes ... and fill in the box as shown below. (FID, CMAUID, CMANAME, etc. are all elements in the CMA data's attribute field.)

Double click on the operations buttons like <>, =, etc. to add them.

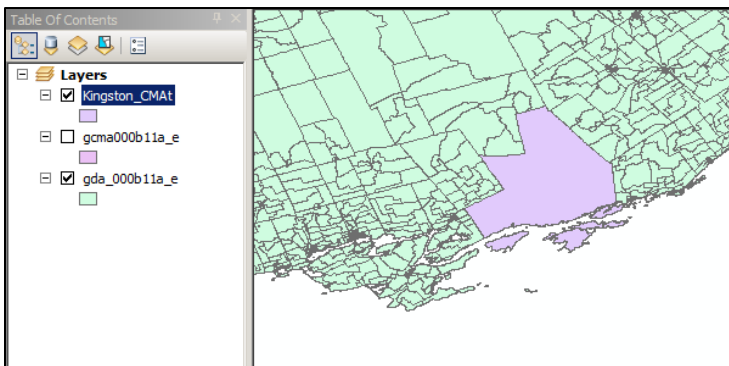
In order to see the options for CMANAME (or another field), press "Get Unique Values" after filling in "CMANAME" (or other name) in the Select by Attributes dialogue box.



After clicking OK, the map shows the Kingston CMA highlighted.



In ArcMap, right click on the name of the CMA layer in the Table of Contents and go to Data ... Export Data and export the **selected** feature as a shapefile. When prompted, add it as a layer to the map, after giving it a meaningful name.



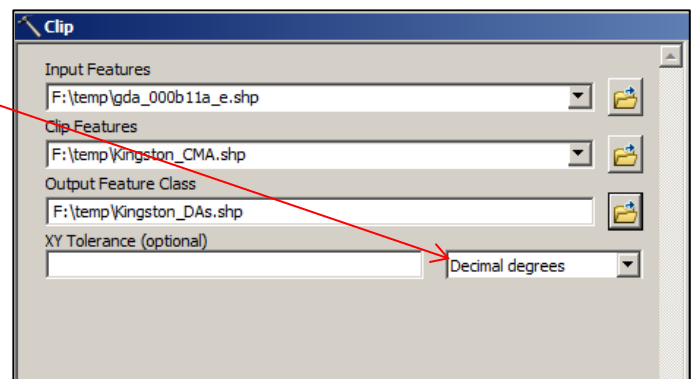
Just the DAs within the Kingston CMA

Clip the national DA data to the Kingston CMA boundary by choosing Geoprocessing ... Clip and then completing the Clip dialogue box.

Input features = [...]DLI_2011_Census_CBF_Eng_Nat_da\da\gda_000b11a_e.shp

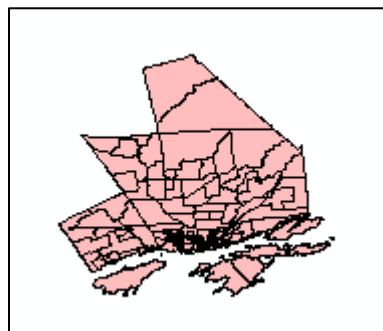
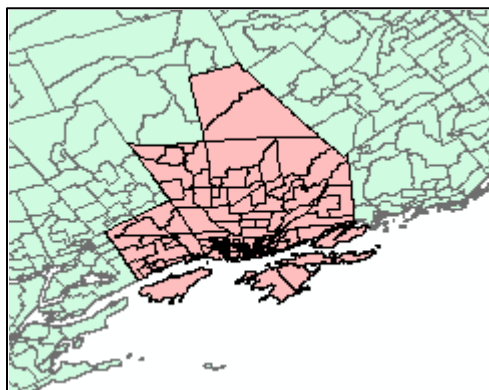
Clip features = [...]Kingston_CMA.shp .

Leave defaults as they are for this exercise.



Click 'OK' and the geoprocessing takes place. The new shapefile, consisting of DAs for Kingston, is added to the map. (You should give it a meaningful name.)

Then, turn off the national level DA layer to show just the DAs for Kingston CMA.



Finally!

Right click on the name of the clipped file in the Table of Contents and Open the Attribute table. The Field called DAUID holds a unique identifier for each of the DA polygons. It is the Field that will be joined with a matching Field (usually called CODE) in the statistical data files from PCensus.

FID	Shape *	DAUID	CDUID	CDNAME	CDTYPE	CSDUID	CSDNAME	CSDTYPE	CCSUID	CCSNAME	ERUID	ERNAME
0	Polygon	35100307	3510	Frontenac	CTY	3510020	South Frontenac	TP	3510020	South Frontenac	3515	Kingston--Pembroke
1	Polygon	35100273	3510	Frontenac	CTY	3510010	Kingston	CY	3510010	Kingston	3515	Kingston--Pembroke
2	Polygon	35100159	3510	Frontenac	CTY	3510010	Kingston	CY	3510010	Kingston	3515	Kingston--Pembroke
3	Polygon	35100084	3510	Frontenac	CTY	3510010	Kingston	CY	3510010	Kingston	3515	Kingston--Pembroke
4	Polygon	35100094	3510	Frontenac	CTY	3510010	Kingston	CY	3510010	Kingston	3515	Kingston--Pembroke
5	Polygon	35100193	3510	Frontenac	CTY	3510010	Kingston	CY	3510010	Kingston	3515	Kingston--Pembroke
6	Polygon	35100102	3510	Frontenac	CTY	3510010	Kingston	CY	3510010	Kingston	3515	Kingston--Pembroke

Reference documents

Statistics Canada 2011 Geography

- [Geography Catalogue](http://www.statcan.gc.ca/pub/92-196-x/92-196-x2011001-eng.htm) <http://www.statcan.gc.ca/pub/92-196-x/92-196-x2011001-eng.htm>
- [Illustrated Glossary](http://www.statcan.gc.ca/pub/92-195-x/92-195-x2011001-eng.htm) <http://www.statcan.gc.ca/pub/92-195-x/92-195-x2011001-eng.htm>
- [Reference guides](http://www12.statcan.gc.ca/census-recensement/2011/geo/ref/guides-eng.cfm) <http://www12.statcan.gc.ca/census-recensement/2011/geo/ref/guides-eng.cfm>

2011 Census Reference Materials (includes questionnaires)

- <http://www12.statcan.gc.ca/census-recensement/2011/ref/index-eng.cfm>

Scholars GeoPortal User Guide

- <http://guides.scholarsportal.info/geoportal>