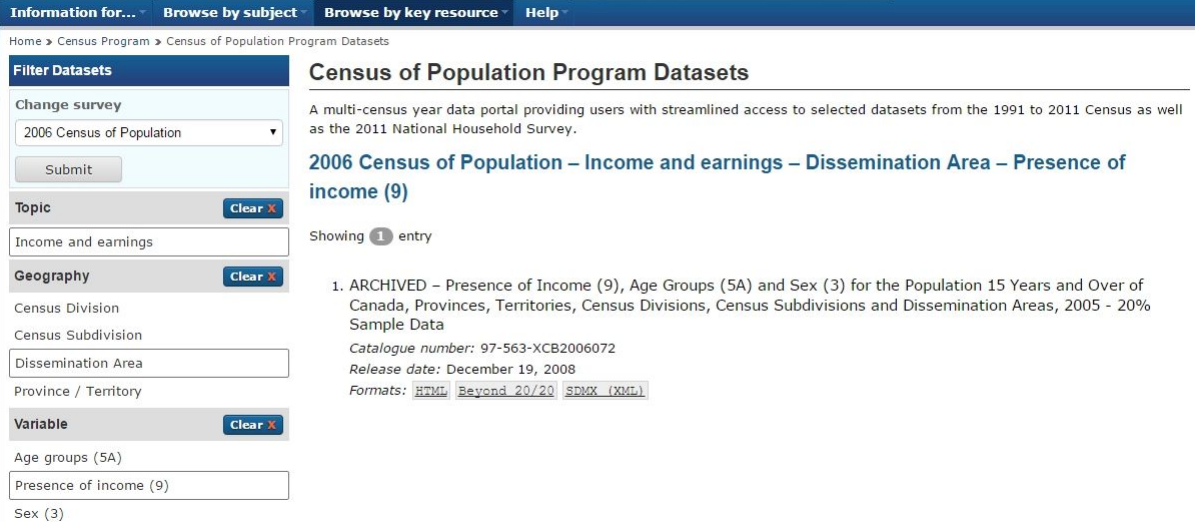


## GEG 4920 - Finding and Mapping Census Data

### Step 1: Finding census data

- Sample question: How did income vary by Dissemination Area in Côte-des-Neiges (Montreal) in 2006?
- Navigate to <http://www.statcan.gc.ca/>
- Click on Census Program
- Click on Census of Population Program datasets
- Choose:
  - **Year/Survey:** 2006 Census of Population
  - **Topic:** Income and earnings
  - **Geography:** Dissemination Area
  - **Variable:** Presence of income
- Download the associated table (catalogue number: 97-563-XCB2006072) in Beyond 20/20 format (35.71 MB)



Information for... Browse by subject Browse by key resource Help

Home > Census Program > Census of Population Program Datasets

### Filter Datasets

Change survey  
2006 Census of Population  
Submit

Topic **Clear X**  
Income and earnings

Geography **Clear X**  
Census Division  
Census Subdivision  
Dissemination Area  
Province / Territory

Variable **Clear X**  
Age groups (5A)  
Presence of income (9)  
Sex (3)

### Census of Population Program Datasets


A multi-census year data portal providing users with streamlined access to selected datasets from the 1991 to 2011 Census as well as the 2011 National Household Survey.

#### 2006 Census of Population – Income and earnings – Dissemination Area – Presence of income (9)

Showing 1 entry

1. ARCHIVED – Presence of Income (9), Age Groups (5A) and Sex (3) for the Population 15 Years and Over of Canada, Provinces, Territories, Census Divisions, Census Subdivisions and Dissemination Areas, 2005 - 20% Sample Data  
Catalogue number: 97-563-XCB2006072  
Release date: December 19, 2008  
Formats: [HTML](#) [Beyond 20/20](#) [SDMX \(XML\)](#)

### Step 2: Working in Beyond 20/20

- Open the table in Beyond 20/20
- Select income variable(s) to include in the analysis (e.g. Average 2005 total income \$), then right-click to choose the “show” option
- Select dissemination areas found in Montreal (beginning in “2466”), again right-clicking to choose the “show” option
- Ensure headers show the appropriate geographic codes by clicking the  button on the toolbar
- Save As CSV format

Sex (3) ⓘ: Total - Sex	Age groups (5A) ⓘ: Total - Age groups	Presence of inc ⓘ	Average 2005 total income \$
Geography ⓘ			
24660001			40,393
24660002			45,987
24660003			28,778
24660004			41,879
24660005			0
24660006			35,339
24660007			31,397
24660008			34,973

### Step 3: Working in Excel

- Open the CSV file in Excel
- Change header names to conform to ArcGIS (e.g. "Average 2006 income" to "AVG\_INC\_2006")
- Save As XLS format

	A	B	C	D	E	F
1	DAUID	AVG_INC_2006				
2	24660054	27844				
3	24660055	28293				
4	24660056	33882				
5	24660057	26281				
6	24660058	25238				
7	24660060	29118				
8	24662905	29132				
9	24660001	40393				

### Step 4: Download boundary files from Statistics Canada

- Open a web browser and navigate to: <http://www.statcan.gc.ca>
- Click on Census Program
- Click on Geography
- Click on Boundary files
- Click on Census year of choice (e.g. 2006)
- Make the following selections:
  - **Language:** (By choice)
  - **Format:** ArcGIS (.shp)
  - **Boundary files:** Dissemination Areas (Cartographic Boundary File)
- Click Continue
- Download the Compressed Archive (ZIP) version of the file
- Unzip the file in preparation for Step 5

Language			
<input checked="" type="radio"/> English <input type="radio"/> French			

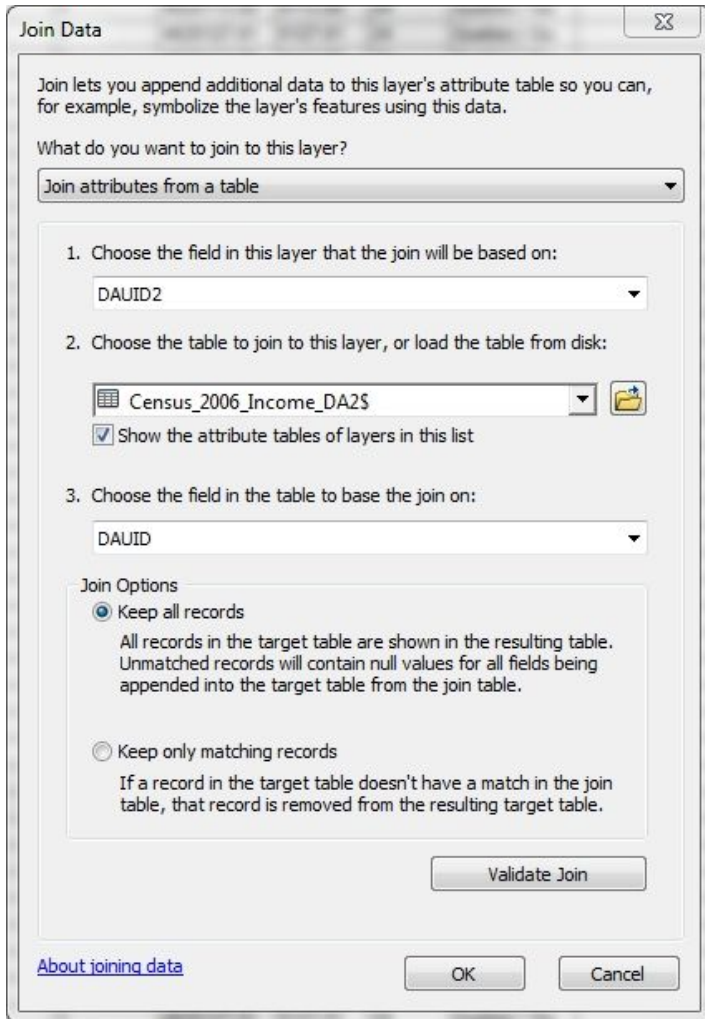
Format			
<input checked="" type="radio"/> ArcGIS® (.shp)			
<input type="radio"/> Geography Markup Language (.gml)			
<input type="radio"/> MapInfo® (.tab)			

Boundary files			
Geographic Area or Water Feature	Cartographic Boundary File	Digital Boundary File	Water 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"/>	...

### Step 5: Joining census data to boundaries in ArcMap

- Launch ArcMap
- Add Dissemination Area boundaries shapefile (.shp) to ArcMap
- Add Excel XLS table to ArcMap (from Step 3)
- In order to join these tables, you need a common field (e.g. DAUID) that is in the same format in both tables (e.g. Double, String, etc).
  - In our case, DAUID in the boundary file is a String, but the DAUID in the Excel table is a Double
  - To align both fields to the same formats, follow these steps:
    - Open the boundary file attribute table
    - Add a new field as a Double and name it DAUID2
    - Open Field Calculator for the new field
    - DAUID2 = [DAUID], click OK
    - Now you have a common field in the *right format* that is ready to be joined
- In ArcMap, right-click on the boundary file, select Joins and Relates, and click Join...
- In the Join Data window, select the following:



- Click OK
- Your final table should now include your income variable, as shown below:

DAUID2	DAUID	AVG_INC_2006
24660670	24660670	16726
24660664	24660664	19378
24660697	24660697	33427
24660657	24660657	23846
24660694	24660694	22274
24663194	24663194	20760
24661322	24661322	24421
24661321	24661321	16662
24661340	24661340	18674
24661328	24661328	18113
24660669	24660669	19858
24660682	24660682	0
24661323	24661323	18682
24663273	24663273	18307

- To make this join permanent, export this layer as a new shapefile