GETTING POPULATION DATA ABOUT CANADIANS

The best place to get information about the Canadian population is through Statistics Canada (StatsCan), and one of their most important sources of sociodemographic and socio-economic data is the Census of Population, which is administered every 5 years (most recently in 2016). Aggregated StatsCan data is available from their website and the Census Program home page; more detailed data, microdata, can be accessed through UNB Libraries using a tool called DLI Nesstar.

SITE SEARCHING STATCAN.GC.CA

For existing tables that have already been produced it is possible to use Google to search the StatsCan website. To do this, simply type the relevant key words into the Google search bar and then add the site search command site:statcan.gc.ca.

* It is possible to site search any website using Google as long as you use its unique URL. *

GETTING TO LIBRARY DATA

The best way to access data (of all kinds) through the library is through the Government Documents, Data & Maps pages, which can be reached by going to the top of the library homepage, selecting resources and then clicking on Government Documents, Data & Maps, which is located halfway down the right-hand column in the menu.
From the landing page, select the *Data* link on the right under *Our Services*.

**BASIC DATA**

All standard census data can be obtained from StatsCan’s Census Program homepage, which is freely available online using a Google search, but can also be reached from our Data page by selecting *Census (Stats Can)* in the Quick Links menu.

From the Census Program homepage, the quickest and easiest way to start finding Census data is by using the Census Profiles.

**CENSUS PROFILES**

Census profiles provide a detailed overview of a specific community. These are rich in information, but provide only aggregated information that cannot be broken down or manipulated.

The Census Profile for a community can be located by searching the place name in the search box on the right-hand side of the Census Program homepage.
For even more detailed data from the Census (and other StatsCan surveys), UNB Libraries subscribes to DLI Nesstar, which provides users with a survey’s PUMFs (Public Use Microdata Files) and a tool that allows users to manipulate that data to a certain degree.

Access to DLI Nesstar is also available through the Data page:

Once you are in DLI Nesstar, you can access the Census (and other datasets) by expanding the Statistics Canada Public Use Microdata Files (PUMF) and selecting the survey you are interested in. For microdata related to the Census, choose Census of Population.
ADDING DATA TO A NESSTAR TABLE

From here, selecting Variable Description will open a list of the available variable classes (like geography, language and income). These variable classes can be further expanded and their individual components can be selected and added to a table for you to view. To add and view variables, you have to do two things:

1. **Switch your Nesstar view from Description to Tabulation:**

   ![Screen shot of Nesstar interface with Description tab selected]

   - Click on the Description tab to switch to the tabulation view.

2. **Expand a variable class, click on your desired variable and indicate where you want to add it.** For instance, if you want to know how many people there are in New Brunswick, select Geography, click on Province and Add to column.

   ![Screen shot of Nesstar interface with expanded Geography and Province selected]

   - Expand the Geography class and click on Province.
   - Click on Add to column to add the variable to the table.
You may note that the numbers in the table, while they represent the population of Canada, are much smaller than Canada’s actual population; this is because of the way census data is collected and distributed. The displayed data can be changed to represent the entire population at any time by adding *weights* to it, using the small scale-shaped icon towards the upper right-hand corner of the screen. However, as this is best done once all variables of interest are added to a table, this process will be addressed later.

**HIDE UNWANTED DATA**

It is not necessary to see and sort through all of the data available for all options within a survey. If, for instance, you are only interested in information about the New Brunswick population, it is possible to hide the information for other provinces by going to the variable’s drop-down menu, selecting *Change selection* and selecting only the provinces (or other variables) of interest.

**GETTING THE TYPE OF DATA YOU WANT**

Sometimes, when adding a variable to a Nesstar table, the type(s) of data being displayed can change. For instance, in a table that addresses only the population of New Brunswick, the population is expressed as a frequency and as a percentage of Canada’s total population. However, when looking at just New Brunswick and adding in the variable *Immigrant status*, the frequency value disappears and the table only presents percentages. This can be changed by going to the *Type* drop-down menu and selecting *Raw numbers*.
**ADDING MORE DATA – LIMITATIONS**

The only limit to the number of variables you can add to a Nesstar table is dictated by the survey’s *release guidelines*. Located in each survey’s documentation, release guidelines tell the user not to publish data that has not been weighted and also at what point the data has been divided too much and when it is no longer acceptable to release cell counts. The Census has a *pre-weighting* threshold of 30, which means that no cell in a table with a value lower than 30 can be weighted to be considered representative of the population.

For instance, it is acceptable to create a table that provides information about the number of immigrants in New Brunswick, but a table that provides information about the number of immigrants in New Brunswick who are also single parents cannot be have the weight applied and therefore cannot be used in a paper.

* The threshold dictated by a survey’s release guidelines applies to the data before it has been weighted. *
* Other surveys (than the Census) will have different thresholds which must be verified before they can be used. *

**APPLYING WEIGHTS**

When all the variables of interest have been added to a Nesstar table, and it has been determined that all of the cells comply with the survey’s release guidelines, the final step is to apply weights to it. Applying weights to a table transforms the data in the table so that it represents the total population of the survey and not just the sample who responded (e.g. adding weights to Census data cases it to reflect the entire population of Canada).

To apply weights to a table, click on the scales icon in the toolbar to the upper right of the screen.
Select the *Individuals weighting factor* and use the arrows to move it to the box on the right.

Select *OK* to return to your table, which should now have values that are in line with the entire population rather than just the sample that was polled.