

Freely Accessible Data

Community Scholars Program
Susie Wilson, Data Services Librarian, UNBC
April 23, 2019

Wait, isn't this a program that gives me access to materials from academic publishers?

Academic publishing contains a lot of great information, but for data about Canadians the best places to get information are freely available websites. Government agencies have the time and funding (usually) to conduct surveys at a scale that give reliable estimates of demographics, population characteristics, and other information about populations and communities.

Some definitions

Data/Microdata

Data are the actual observations, values, etc. that are measured. Often presented in a table or spreadsheet

Example: a list of all of our heights

Statistics

Statistics are values calculated from the data

Example: from our list, I could calculate our average height, or average heights of men and women

Aggregate Data

Aggregate data are statistics presented in a table - they **look** like data, but are actually a collection of statistics

Example: I could make a table that included the average height of all our workplaces

A note on definitions

- Don't worry if you use the “wrong” word when talking about data and statistics. Today I'll mostly stick with the word “data” because that's what people use when they ask these questions - if you can describe what you need you'll be able to find it

Overview of today's topics

- 1 | Geography - as defined by Statistics Canada
- 2 | Census data
- 3 | Other Statistics Canada Surveys
- 4 | BC Stats and the BC Data Catalogue

Overview of today's goals

- 1 | Understand how topics and area of interest can affect the data available
- 2 | Know how to search for Census and other data on the Statistics Canada website.
- 3 | Explore data available from provincial providers.

As defined by Statistics Canada

Geography of Canada

Statistics Canada Census Geography

Why do we use this classification?

- Statistics Canada breaks the country up into progressively smaller sections for collection, analysis, and dissemination of data from the Census of Population

These geographic units sometimes conform to boundaries we already know (provinces, regional districts, municipalities) and sometimes are defined solely by Statistics Canada for statistical purposes. Data and statistics from other surveys conducted by Statistics Canada also use these geographic units

Small Geographies

Census Division

Regional Districts

Census Sub-division

Municipal Boundaries

Census Metropolitan Area/Census Agglomeration

These are collections of Census Sub-Divisions, grouped together based on the percentage of population that commutes in to a central Census Sub-Division for work. CMAs are larger, and CAs are smaller, population-wise. They will share the name of the central Census Sub-Division

Smaller Geographies

Census Tracts

Areas that are relatively stable, and usually have a population between 2,500 and 8,000. They are **only** located in Census Metropolitan Areas, and Census Agglomerations with a core population of at least 50,000

Dissemination Areas

Area composed of one or more neighbouring dissemination blocks, with a population of 400 to 700. **All** of Canada is divided into dissemination areas

Dissemination Blocks

City blocks.

How can these definitions help?

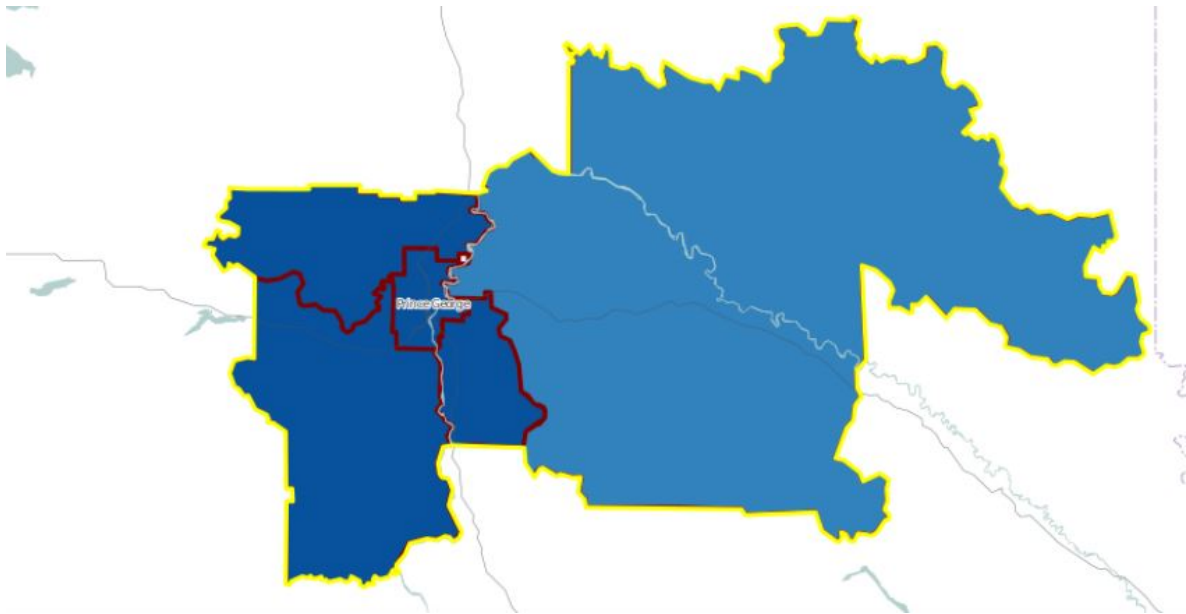
- Knowing how the geographic areas you are familiar with related to Statistics Canada areas will allow you to find the data you want more efficiently
- Smaller geographies allow you to look at differences between areas within a municipality
- Larger geographies will allow you to look at larger trends in populations

There are many more geographic classifications. *The Census Dictionary* covers all these (and more) if you need a refresher.



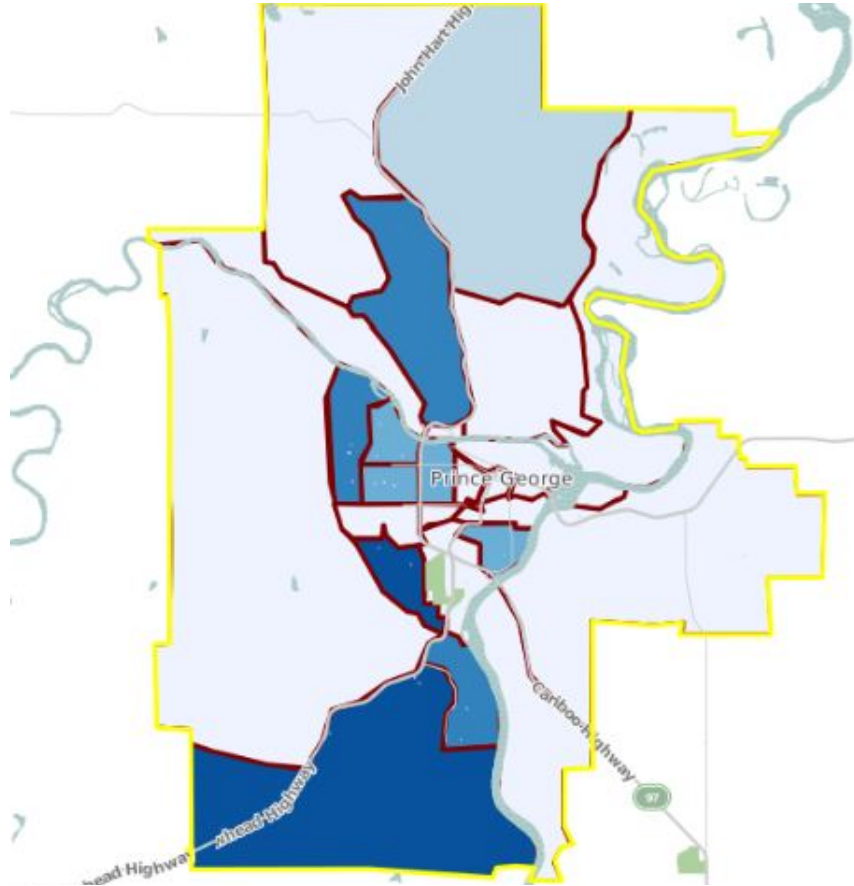
Census Agglomeration of Prince George

SimplyAnalytics (2017). Census 2016 Adjusted Data. Retrieved September 14, 2018, from SimplyAnalytics database.



Census Agglomeration of Prince George, divided into Census Sub-Divisions

SimplyAnalytics (2017). Census 2016 Adjusted Data. Retrieved September 14, 2018, from SimplyAnalytics database.



Census Sub-Division of Prince George, divided into Census Tracts

SimplyAnalytics (2017). Census 2016 Adjusted Data. Retrieved September 14, 2018, from SimplyAnalytics database.



Census Tract CT0014.00, located in Prince George

SimplyAnalytics (2017). Census 2016 Adjusted Data. Retrieved September 14, 2018, from SimplyAnalytics database.



Census Tract CT0014.00, separated into Dissemination Areas

SimplyAnalytics (2017). Census 2016 Adjusted Data. Retrieved September 14, 2018, from SimplyAnalytics database.



Free, Accessible Data

Finding data - general considerations

If you want data, you often hope someone else has already collected it. This is often true, but it means you are constrained by how the data was collected and if/how it is publicly available. In general you want to ask yourself:

- **Is this data likely to exist?**

Are you looking for something general enough that government or another organization might have collected it already?

- **Would people be identifiable in the data?**

Small geographic areas, sensitive topics, or rare circumstances can make people identifiable in the data, which would make it not suitable for release.

- **Would there be value in the data being shared?**

Cleaning up and anonymizing data takes time. The people producing it need to think there is value to a broad group of people in order to put the effort in.

Statistics Canada: Census Data

- The Census of Population is conducted by Statistics Canada every 5 years
- There is a short-form (100% coverage) and long-form (25% coverage) version, covering a variety of themes
- Comparable across years

Note: in 2011 the long-form census was replaced with a voluntary National Household Survey. The methodological change means that we can't directly compare the NHS data to long-form census data

Statistics Canada: Census Data

- Census Data is your best bet for demographic data.
- It is available to very small levels of geography
- A variety of products are available, including analysis, reports, data tables, and highlight series

DEMO: Census Data

Other Statistics Canada Surveys

- Statistics Canada has 350+ surveys in collection at any given time

Almost any theme you can think of is covered

- Not available to as small levels of geography as the Census

Different surveys are designed to give estimates at different levels of geography. Some are only good to the national level, while some go down to the CMA/CA level.

- Important note: all data is self-reported

Some surveys are mandatory and some are voluntary, but all are self-reported. This is important to remember, especially when dealing with anything related to sensitive topics (health, drug use, etc)

DEMO: Statistics Canada

- BC Stats conducts their own surveys and analyses, as well as compiling data and statistics from other sources

All with an eye on being useful to British Columbians

- Some of their data is from national sources, like Statistics Canada

Because they do BC-specific analyses there is less for you to dig through

- Different data can come from different branches and departments

There is a less uniform experience than on the Statistics Canada website

DEMO: BC Stats

BC Data Catalogue

- BC Data Catalogue includes a variety of data types

Administrative data, GIS data, tabular data, interactive products

- Some data is publicly accessible, and some is restricted

If you find a restricted data set there will be information about who to contact for permission to access it

- Data separate from Statistics Canada

While BC Stats sometimes uses StatCan data, the data catalogue includes uniquely BC Data

DEMO: BC Data Catalogue

What did we learn?

Wrap-up

Review

- Statistics Canada has **many** geographical classifications that are used for analyzing and disseminating data
- There are many different data products available from Statistics Canada freely and publicly that can give you data for different areas and themes
- BC Stats and the BC Data Catalogue have a variety of resources for provincial data

Thank you!

Contact: susie.wilson@unbc.ca

