• Google • Open Data

• Geospatial Data • Microdata

• Canadian Data • International Data
You can add standard Stats Can geography to your search terms.

**Google search tips:**

- Try adding the following to your search expression: (data OR dataset OR stat OR statistic)
- Try using the "Country" filter in Google.ca
- Try limiting to federal, provincial, or municipal governments with the site operator - `example: site:.gc.ca`
- Try finding spreadsheets by using the filetype operator – `(filetype:csv OR filetype:xls OR filetype:xlsx)`
Collections of tutorial material on the Exercises, Tutorials, Learning Material page:

Other interfaces for finding data or statistics: see the Google section for exercises about using Google to find data and statistics.
Searching Google

- **Site:** adresse of website or domain to search in a specific web site or domain.
- **Filetype:** extension to search for specific types of files
- **-word** to search pages that don’t have a specific word in their results.
- **OR** to find synonyms.

Don’t forget to check the sources of your findings!
Geospatial Data

Look for geospatial data (data that includes a variable that situates it geographically) when you need to create maps.

Search tips:

• Try the links shared on the Geospatial data page of the Data and Statistics research guide.
• See the datasets shared by Dal's GIS Centre (look at links under "Centre Services - Getting Help with ArcGIS - ArcGIS geospatial data acquisition and distribution").
• Consider booking an appointment with the GIS Centre.
• Try a search in Google with the keywords ("boundary file" OR shapefile OR KML)
• Go to the **2016 Halifax Census Tracts – From Data to Map** section of the **Geography and geospatial data box** of the Data and Statistics research guide for a series of slides and screen recording that cover downloading data from the census analyser, organizing it in Excel, downloading GIS compatible geography files, and then putting it all together in ArcMap or ArcGIS Pro.

• Go to [Dal’s GIS Centre help page](#) for a series of PDFs and videos about working with geospatial data in ArcGIS and about conducting spatial analysis in ArcGIS.
Data and Statistics

A guide to finding data and/or statistics of interest to students and scholars engaged in all kinds of research.

Click on a geography to jump to the right section of the page.

<table>
<thead>
<tr>
<th>Canada</th>
<th>World</th>
<th>Nova Scotia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>British Columbia</td>
<td>Manitoba</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Newfoundland</td>
<td>Ontario</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>Québec</td>
<td>Saskatchewan</td>
</tr>
<tr>
<td>Yukon</td>
<td>Countries</td>
<td></td>
</tr>
</tbody>
</table>

Canada

To expand your search to Canadian census products, consult the “2016 Census - Maps and Geography” box of the census page. You might also want to look at resources listed in this page under “World” to see if they have Canadian coverage.

GIS RESOURCES

Additional map and geospatial information

GIS software and data products
- DMTI Spatial Inc.
- ESRI Canada
- PCI Geomatics

Government data
- GeoBase Free, downloadable Canadian data
- GeoConnections Canadian federal and local maps, images, data sets (free and for purchase)
- GeoNova “Gateway” site for geographic information about Nova Scotia
- GeoB CCG - Resource site

GIS Centre
- Early Canada Centre of Excellence (ECCE) in GIS
- GIS Resources
- GIS Technology
- GIS Centre General Inquiries
Microdata

Data from Stats Can surveys are sometimes available as microdata – huge files where every row is a respondent and every column a variable. Surveys are often available at different levels of access.

Access microdata:
- By searching Odesi (search only).
- By searching and retrieving datasets from Nesstar.
- By retrieving datasets from SDA.
- By finding Canadian census PUMFs in the Canadian Census Analyser.
- By searching and retrieving international datasets from ICPSR.

When looking at microdata, be sure to:
- Respect the DLI license (where applicable). No using for commercial purposes, no sharing the microdata externally (but sharing results is okay), etc.
Microdata Tutorials

Collections of tutorial material on the *Exercises, Tutorials, Learning Material page*: Restricted interfaces for accessing or viewing Stat Can microdata

See the **Odesi** section for exercises about searching for variables in Stat Can’s collection of microdata files.

See the **SDA** section for videos and exercises about using the SDA interface to access Stat Can microdata. The SDA interface is also used when accessing PUMFs via the Canadian Census Analyser.

See the **Nesstar** section for some slides about accessing Stat Can microdata.

Learn more about using ICPSR on their **Teaching and Learning page**.
MICRODATA

Stats Can PUMFs
Accessing Canadian microdata at Dal requires complying with the DLI license.
Dalhousie University does not subscribe to Odesi, and so it is not an appropriate interface to use to access data.

However, Odesi has excellent metadata and is a great way to search for variables in the DLI’s collection of Public Use Microdata Files (PUMFs). These can then be accessed in SDA or Nesstar.

**Access Odesi:**

- By going to [Odesi.ca](http://Odesi.ca)

**Locate PUMFs:**

- Uncheck "All of Odesi" and check only "Statistics Canada (microdata)"
- Search for relevant keywords.
- Look at the "Series" filter to explore possible relevant surveys.
- Order results by date instead of relevance, and click on "Matching Variables" if available.
SDA allows you to download microdata from some Statistics Canada surveys (and a few extra datasets), and also to create online cross-tabs.

Access SDA:
• By going to [SDA](#) and logging in with your Dalhousie credentials (if off-campus).
• Make sure to comply with the DLI license agreement.

Learn about using SDA:
• View "[Accessing SDA@CHASS]" video to see how to access and download data.
• View "[Using SDA@CHASS to View Data]" video to see how to create online cross-tabs.
• Try one of the exercises under "SDA" in the "Restricted interface" box of [this page](#).
Access international microdata from all kinds of datasets and surveys. There is a slight focus on American datasets, but there are many global and foreign country datasets available.

Access ICPSR:
• By going directly to ICPSR.
• Many datasets are open access, and almost all documentation is open access.
• Some restricted datasets can be accessed if you register for an account. Use your Dalhousie University email address.
Select Sources of international Data
<table>
<thead>
<tr>
<th>Country or Area</th>
<th>Year(s)</th>
<th>Variant</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>Const. mortality (Medium)</td>
<td>62</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>Constant-fertility scenario</td>
<td>1,297</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>High variant</td>
<td>89</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>Instant replacement</td>
<td>89</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>Low variant</td>
<td>89</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>Medium variant</td>
<td>91</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>No change (Const, Fem, Mort, Zero migration)</td>
<td>913</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2100</td>
<td>Zero migration (Medium)</td>
<td>93</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2095</td>
<td>Const. mortality (Medium)</td>
<td>65</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2095</td>
<td>Constant-fertility scenario</td>
<td>1,067</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2095</td>
<td>High variant</td>
<td>79</td>
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<td>Afghanistan</td>
<td>2095</td>
<td>Medium variant</td>
<td>773</td>
</tr>
</tbody>
</table>
More here – Including Datastream and Bloomberg
Select Sources of Canadian Data
The Canadian census happens every 5 years (on the '1s' and the '6s'). Data is available through publicly accessible tables and profiles, as well as through restricted to Dalhousie interfaces that also include special subsets of data not available on the open web.

**Access 2016 data:**
- Through Statistics Canada's [Census Profile](#).
- Through Statistic Canada's [Data Tables](#).
- Via CHASS's [census analyser](#).

**Access older data** (try links above first):
- By consulting the print collections – see links in the [Data and Statistics research guide](#) or [internet archive's collection](#).

**When looking at census data, be sure to:**
- Be aware of [random rounding](#).
- Learn census geography.
- Try to use Beyond 20/20 (see the [tutorials page](#) for more) to extract complex data tables.
- Be prepared to take on some challenges if looking for data for smaller geographies, working with older censuses, or trying to compare numbers in time.
Census Tutorials

Collections of tutorial material on the Exercises, Tutorials, Learning Material page:

Interfaces for accessing or viewing Stat Can data: see the Beyond 20/20 section to learn to easily manipulate and shape census tables in a free Windows-only software. The result can be exported to a CSV format compatible with Excel.

Restricted interfaces for accessing or viewing Stat Can microdata

• See the Canadian Census Analyser section to learn about an interface that allows quick downloading of census profiles through time and at different levels of geography, and gives access to census Public Use Microdata Files (PUMFS).
• See the SDA section to learn how to use the SDA interface, which is how PUMFs are accessed in the Canadian Census Analyser.

Other interfaces for finding data or statistics: see the Stat Can’s Census Profile and Data Tables section for exercises about accessing census profiles on Stat Can’s public website.

Geography and geospatial data: see the 2016 Halifax Census Tracts – From Data to Map section for a series of slides and screen recording that cover downloading data from the census analyser, organizing it in Excel, downloading GIS compatible geography files, and then putting it all together in ArcMap or ArcGIS Pro.
What data is available in the census?
Stat Can Data Tables

Publicly accessible interactive data tables (formerly known as "CANSIM tables“) from Statistics Canada available for various topics.

Access these:

- By using Stats Can's Data search (click on "Tables").
- From data associated with specific Stats Can surveys.
- By searching in CANSIM@CHASS.
- By exploring subjects in Stat Can's subjects browse.

When looking at a data tables on Stats Can's website, be sure to:

- Click on "Add/Remove data" to see more options and change where variables are displayed.
- Keep track of the table numbers (just in case).
- Look at the notes added to the table titles to see if earlier or more recent versions of the table exist.
Collections of tutorial material on the Exercises, Tutorials, Learning Material page:

Interfaces for accessing or viewing Stat Can data: see the Interactive Data Tables section to learn how to navigate Stat can Data Tables, and to work through an exercise (multiple versions).
Finding Data Tables via Statistics Canada's Data Search

- Click on "Data" from any Stat Can webpage.
- Search a keyword and/or select a subject.
- Select a level of geography (if applicable).
- Click on the "Tables" tab.
Click on "Add/Remove" data (if available) to reveal additional fields/variables and to change where variables are displayed (rows or columns).

Keep track of the table numbers (just in case).

Look at the notes added to the table titles to see if earlier or more recent versions of the table exist.

Click on "Download" and choose between the table as displayed, or all the data.
Check open data repositories at national, district, provincial, and even neighborhood and city level to see if you can find any datasets for your desired level of geography. Typically contains less detailed data but sometimes at very precise levels of geography. Try googling "open data" and the name of the country or sub-country region you are interested in exploring.

For Canadian Data Repositories:
- Explore FRDR.
- Explore a list of Canadian Open Data repositories in Open Government Canada.
- Try looking at Canadian Research Repositories (see this presentation by Peter Webster and exercise).

For Halifax:
- Try the Nova Scotia Open Data Portal.
- Try the Halifax Open Data Catalogue.

For global data:
- Try re3data.org.

Global Open Data Rankings:
- Explore in the Global Open Data Index.
- Explore in Open Data Watch.
Look for different levels of geography
Open Government Across Canada

From coast to coast to coast Canadian provinces, territories and municipalities are joining the conversation on open government. Here you can find open government activities across the country, and tools to help get your jurisdiction engaged in open government.

- Open Government Programs in Canada
  - Open Provinces
  - Open Municipalities
  - Open Initiatives
Find open data

Data Portals  A Comprehensive List of Open Data Portals from Around the World

551 Data Portals listed »

Search in Google for a country or location + "open data portal"