Canadian Community Economic Development Network

Community Data Program

Guide to Using Community Data 3.1 Part 1: Beyond 20/20 Professional Browser

In this Guide, we explain some basics of Beyond 20/20 Professional Browser and its .ivt file format, using an example table from the 2011 Census. You're welcome to read all the way through, or simply cherry-pick what you need. If you need any further assistance with Beyond 20/20, don't hesitate to **ask us**.

Contents

1. FAQ

1.1 What is Beyond 20/20 and the .ivt format?

Beyond 20/20 Professional Browser is a program for viewing multidimensional datasets in the .ivt file format. It is free to download and install. **Multidimensional datasets**, or cubes, allow tables to have more than one column and one row.

➔ [Download Beyond 20/20](#)

1.2 Why bother with Beyond 20/20?

The answer is simple: Most data from Statistics Canada is available uniquely in .ivt format. So regardless of the software you're most comfortable with, you'll need to understand the basics of Beyond 20/20 in order to open and view most CDP data. Don't worry though—you can export .ivt tables into more convenient formats without too much trouble.

1.3 When should I use Beyond 20/20?

- Opening Statistics Canada data only available in the .ivt format
- Viewing data with more than one set of rows and columns (multidimensional data)
- Setting up a standard (two-dimensional) table for export

1.4 When should I not use Beyond 20/20?

- Creating a map or chart
- Using a formula
- Modifying individual cells
- Generating statistics or indicators
- Any other analysis

1.5 How can I learn more about Census geographies?

This Guide will discuss Census geographies at various times. These geographies can be difficult to understand for beginners.

Our **Guide to Using Community Data 2.3, Part 1** (formerly called Product Profile) explains each of the typical Census geographies. You can also view the Statistics Canada page on **Census geographies**, and use **GeoSearch** to find a specific geographic area.

1.6 What data is available to CDP members?

There's plenty of data available to CDP members in the .ivt format. Any table from the **Census** or **National Household Survey** will be available uniquely in .ivt format. Also, **Canadian Business Patterns** and **Labour Force Survey** data are only available in .ivt.

More generally, **Schedule B** lists the data that we plan to acquire during any given program year (April 1 to March 31).

Finally, you're always welcome to **email us** if you need assistance finding data. We respond to all emails within one business day.

1.7 What other resources are available for learning about Beyond 20/20?

The **Orientation: Using the CDP catalogue and Beyond 20/20** Community Data Program webinar provides an overview and demonstration of how to use Beyond 20/20. The section on Beyond 20/20 starts at approximately 30:30 into the video.

1.8 Which Census table does this guide use in its examples?

For every example below, we will be referring to the topic-based tabulation 98-311-x2011018 from the 2011 Census: Age (131) and sex (3) for the population. (You can **download 98-311-x2011018 directly from the Statistics Canada website**.) That being said, this guide is applicable to all Beyond 20/20 tables.

1.9 Caution: When working with an .ivt table, never save it as an .ivt file

Although the original .ivt table can be retrieved from the CDP catalogue, **saving the file as an .ivt file will result in the removal of any hidden rows or columns** and should always be avoided.

2. Install Beyond 20/20

To open .ivt files, you need to first make sure that you have installed Beyond 20/20 Professional Browser. It is **available free of charge**. (You may need to ask your IT department for permission. If you are having trouble with this, **contact us**.)
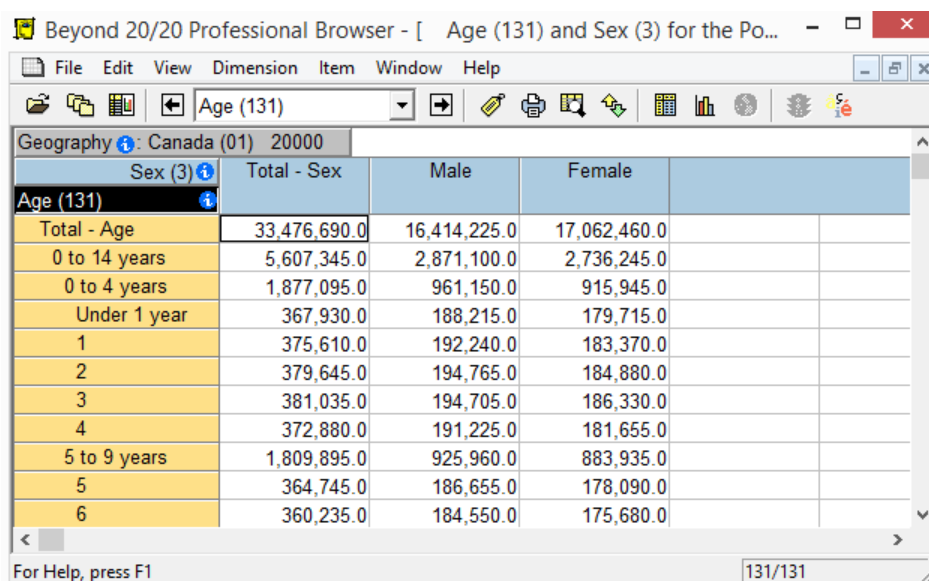
3. Open a table and check its metadata

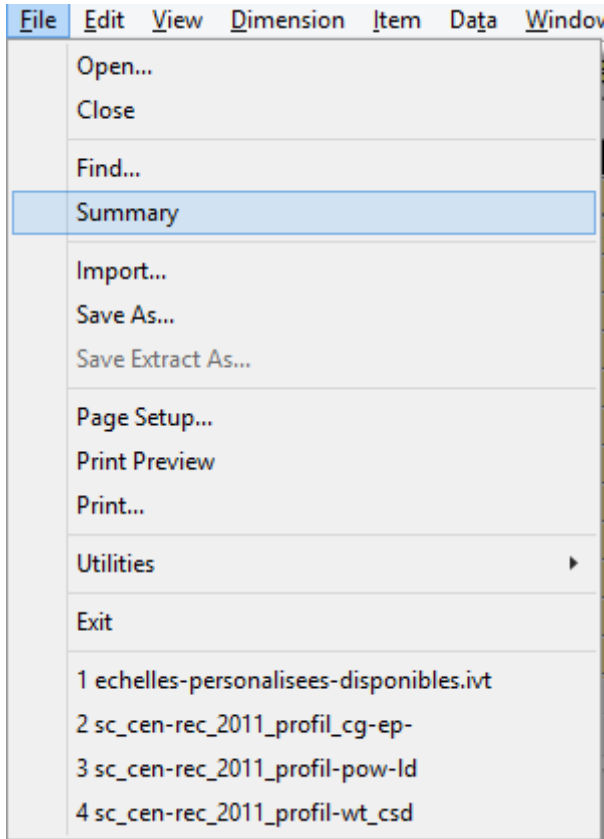Beyond 20/20 files are always in .ivt format. They have a yellow icon that looks like this:

Once you've installed Beyond 20/20 Professional Browser, you can open any .ivt file by double-clicking on its icon. When it opens, it will look something like this:

To find out more about the table, we always encourage you to select *File* > *Summary*.
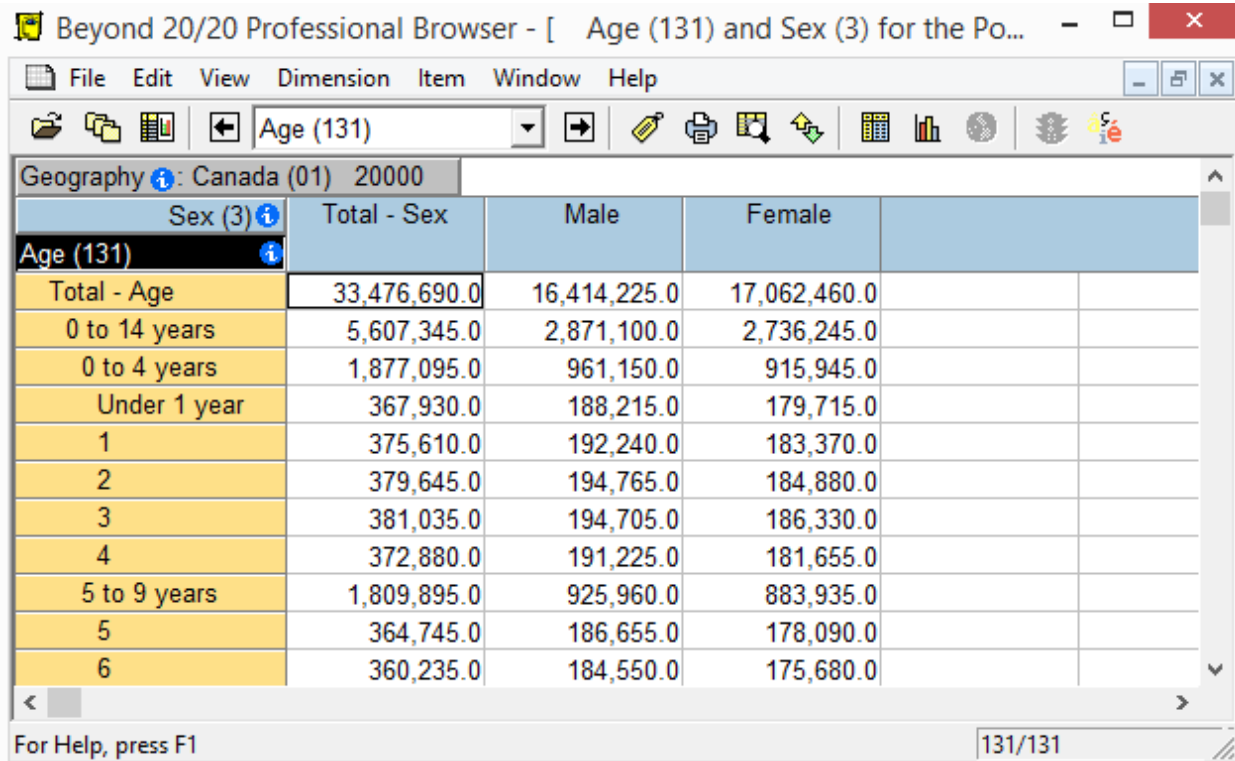
This will take you to a metadata page. Metadata is information about the data table you've opened. For example, title, source, and year are all examples of metadata.
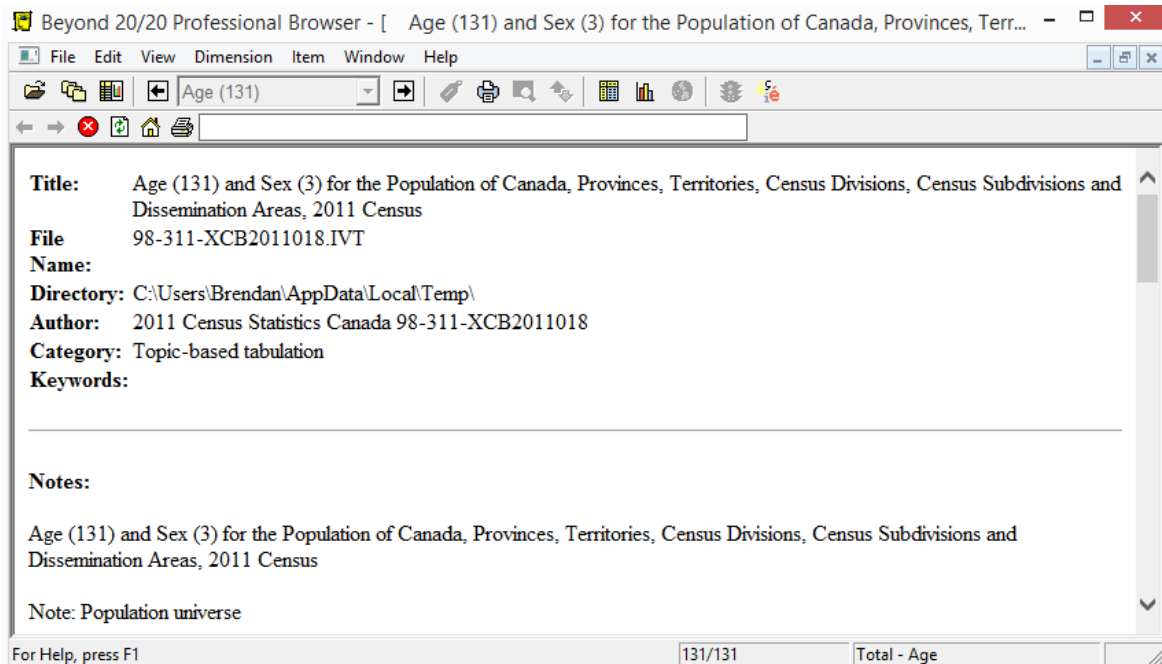
To leave the metadata page, select the small blue *X* button at the top right.

Looking back at the .ivt table, you'll notice that beside some variables there are blue circles with the letter *i* in the middle. These are information buttons that provide additional information about that specific variable.

For example, if you select the *i* next to *Age (131)* you will notice that this page provides additional specifications related to the variable, *e.g.* definitions and explanations, warnings about the data, changes in the data from previous census years, as well as when and how the data was collected.
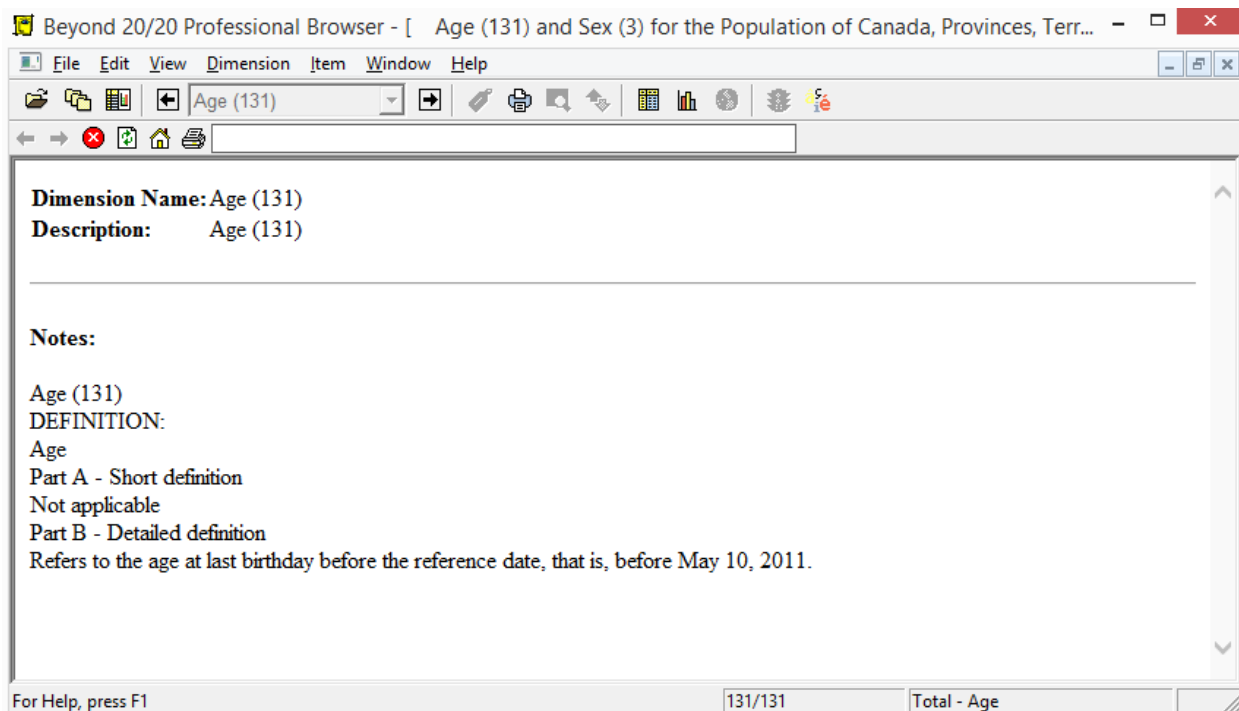
To leave the metadata page, select the small blue *X* button at the top right.

4. Identify dimensions and variables within dimensions

The simplest kind of table has two dimensions: rows and columns. In Beyond 20/20, there are rows and columns, as well as any number of additional dimensions.

Dimensions, such as *Sex (3)*, consist of groups of variables, *e.g. Total Sex*, *Male*, *Female*) that can be crosstabulated against one another.

By crosstabulated, we mean that it is possible to gather information about subsets of groups. For instance, in the case of our example table, *Age (131) and sex (3) for the population*, it is possible to uncover the number of people living within any given age bracket for the population at large, *as well as amongst males vs. females*.

Other examples of crosstabulations could be median income amongst owners vs. renters, educational attainment amongst immigrants vs. non-immigrants, etc. In our example table, however, there are only two dimensions that can be crosstabulated against one-another for any given geographic unit: *Age (131)* and *Sex (3)*.

Note that *Geography* is another dimension, and individual geographic units, *e.g.* Simcoe County, are variables in their own right. These geographic units can be crosstabulated against both *Age (131)* and *Sex (3)*. For example, we could uncover the number of females aged 55 to 64 *in Simcoe County*. So in a sense, our example table actually has three dimensions: *Age (131)* and *Sex (3)*, as well as *Geography*.

Tables with more than two dimensions will have extra dimensions sitting above the column headers. In the case of our table, the third dimension (*Geography*) is sitting above the column dimension *Sex (3)*:

Many dimensions contain nested sub-variables, which are always indented. For example, in the *Age (131)* dimension, there are 15-year age ranges, 5-year age ranges, and 1-year age ranges. When we look at the *0 to 14 years* variable, we'll see a number of variables nested below it: *0 to 4 years*, *5 to 9 years*, and *10 to 14 years*. Nested within each of these ranges are the single-year ranges within them: *under 1*, *1*, *2*, *3*, *4*, then *5*, *6*, *7*, *8*, *9*, and finally *10*, *11*, *12*, *13*, *14*.

Age (131)	
Total - Age
0 to 14 years
0 to 4 years
Under 1 year
1
2
3
4
5 to 9 years
5
6
7
8
9
10 to 14 years
10
11
12
13
14
15 to 24 years
15 to 19 years

5. Move dimensions

The most advanced functionality of Beyond 20/20 involves the ability to move dimensions. For more information on dimensions, **see above**. Let's take a look at our example table, *Age (131) and sex (3) for the population* (catalogue no. 98-311-x2011018) again:

In 98-311-x2011018, we have three dimensions:

1. *Geography*: all of the geographic units available in the table
2. *Age (131)*: 131 different age groups
3. *Sex (3)*: contains total (both sexes), as well as a breakdown of males and females

The *Geography* dimension is tucked away on the Dimension bar. That is to say, it's placed above the columns and rows.

So all of the cells that are visible in the table are showing data for Canada as a whole. In addition to the *Geography* dimension sitting above the columns and rows, you might be able to tell this from the fact that *Total - Sex* and *Total - Age* show 33,476,690, which is the population of Canada.

If like us you prefer to see geographic units as rows, you can swap the position of any given dimension. For example, you can click on the *Geography* dimension and drag it to where the *Age (131)* dimension is located:

Voilà! *Geography* is now displayed as rows, and *Age (131)* is tucked away in the Dimension bar:

What you are looking at now is the population, by sex, for every given geographic unit, regardless of age.

You can swap any dimension into any position: row, column, or Dimension bar. For example, if you now swap *Age (131)* with *Sex (3)* you'll see *Age (131)* as columns, and *Geography* as rows:

What you are looking at now is the population, by age group, for every given geographic unit, regardless of sex.

6. Stack dimensions

In addition to swapping dimensions, it is also possible to stack multiple dimensions in the row and column positions.

Let's say, for example, that we want to know how many people of each sex are found within any given age range, *while still displaying all geographic units of Canada as rows*. Going back to the original table, we have *Age (131)* as rows, *Sex (3)* as columns, and *Geography* in the dimension bar.

First, we'll want to move *Geography* to the row position.

Geography is now displayed as rows, and *Age (131)* is tucked away in the dimension bar.

Now, you can drag *Age (131)* to just above *Sex (3)*. You'll see a dark line appear above the *Sex (3)* variables:

When you release, you will see *Age (131)* appear in blue above *Sex (3)* but not in the dimension bar.

Now you can see how many males and females comprise each age group, for each geographic unit. Let's take a moment to explain what we're seeing. In the screenshot above, you can see that in Newfoundland and Labrador, there were 250,565 males of all ages (*Total – Age*) and 263,970 females of all ages in 2011.

Congratulations! You can now stack dimensions to further crosstabulate variables. Now let's talk about finding the specific geographies you're interested in.

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7. Find geographies

Most .ivt tables have data for all of Canada. It's up to you to find your region, city, or neighbourhood of interest.

(Note that some tables are split by clusters of regions. For these you have to open the table that will contain the geographies you're interested in. For example, if you're looking for Dissemination Areas in Vancouver, you may need to open the BC or Western version of a table if it has been split geographically. When there are regional splits, the .ivt tables for all regions are zipped together. For this reason, you'll never have to select your region when downloading tables from the **catalogue**.)

Let's walk through the two primary ways of finding geographic areas of interest. For this exercise, we'll pretend that we're looking for municipalities (Census Subdivisions) in Simcoe County (a Census Division). You can substitute your geographies of interest when following along.
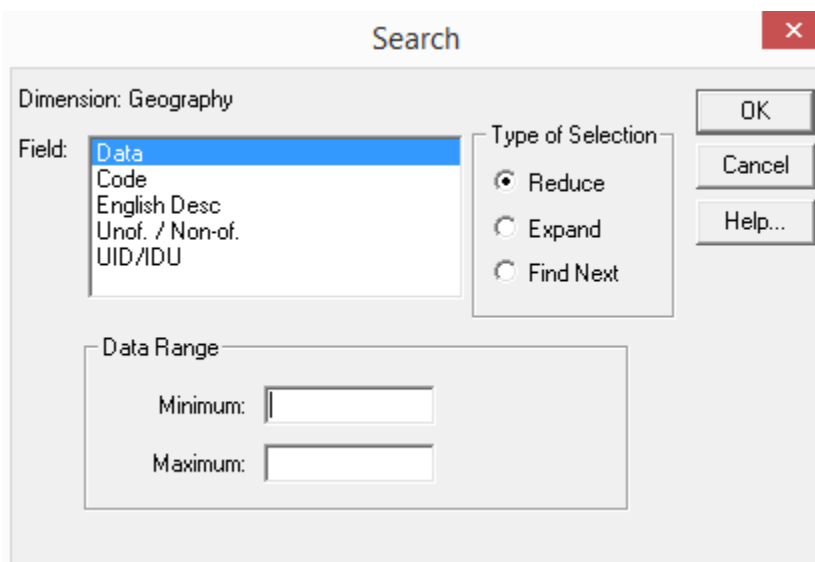
7.1 Search by text

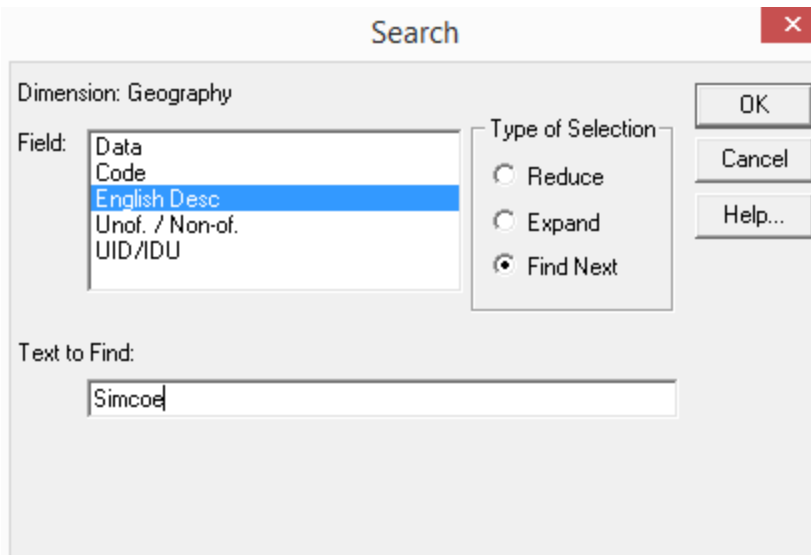First, click once on the *Geography* dimension. It will turn black.

Then select the *Search* button (located next to the print button).

You'll see this prompt open:

Under *Field*, select *English Desc*, then enter the text you wish to search in the *Text to Find* box.

Under *Type of Selection*, you can either select *Reduce* or *Find Next*. *Reduce* will hide all non-matching rows. *Find Next* will simply find the first instance of any geographic unit containing the word "Simcoe". We use *Find Next* for this exercise, but *Reduce* may be more useful for you. When you're ready, select *OK*. You'll see the first instance of the search term. In our case, we're seeing "Simcoe (3543) 00000". This is the Census Division of Simcoe County. Below it are listed all of the municipalities (Census Subdivisions) and Dissemination Areas within the Census Division of Simcoe County. Each Sudbdivision within Simcoe County will begin with "3543". For example, "Adjala-Tosorontio (3543003) TP" is the first Census Subdivision listed below the County of Simcoe. (For more information on Census geographies, check out our **Guide to Using Community Data 2.3, Part 1**.)

To view other Census Subdivisions within Simcoe County, you'll have to scroll down and find other places that begin with "3543". The last one will be "Midland". You can select multiple Census Subdivisions using the Ctrl key. To show only selected rows, right click and select Show.

Searching by text can be problematic if a name has multiple possible spellings, e.g. Saint vs. St. vs. St-. For this reason, we recommend the second way to search: by geographic identifier.

7.2 Search by geographic identifier

Each Census geographic unit has a unique identifier. To find out what the geographic identifier is for a given geographic unit, we recommend using **GeoSearch**. GeoSearch allows you to view all Census geographic units within Canada from an interactive map. It's clunky, but it works. If you need help using GeoSearch, **let us know**.

We happen to know that the geographic identifier for Simcoe County is "3543". We also know that any Census Subdivision within Simcoe County will start with the same four digits. For more information on Census geographies, check out our **Product Profile 2.3 (Part 1)**.

In Beyond 20/20, click once on the *Geography* dimension. It will turn black.

Then select the *Search* button (located next to the print button).

You'll see this prompt open:

Under *Field*, select *UID/IDU*, and under *Text to Find*, write "3543". In this case we'll select *Reduce* to illustrate what happens when choosing this option. Finally select *OK*.

(Note: In some tables, there may be multiple UIDs, e.g. *CDuid*, *CSDuid*, *CTuid*, etc. Select the UID associated with the geographic scale that you're trying to find. For example, if you're looking for Census Tracts, select *CTuid*. If you're looking for Census Subdivisions, select *CSDuid*.)

You should see a list of geographic units that have "3543" within them. In this case, there are two geographies that are outside Simcoe County:

35203543 (35203543) 00000

59153543 (59153543) 00000

We know they're outside Simcoe County because they don't start with "3543". To hide them, right click on them and select *Hide*.
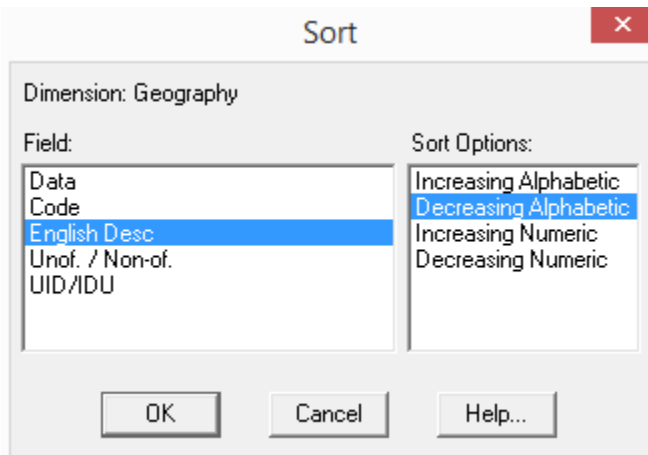

Now, because we're not interested in DAs, we can sort Geography in reverse alphabetical order, placing all DAs (which have names that are numbers) at the bottom. To do so, click once on the *Geography* dimension. It will turn black.

Then select the *Sort* button:

Now select *English Desc* under Field and *Decreasing Alphabetic* under *Sort Options*.

You should see something like this:

Geography	Total - Sex	Male	Female	Total - Sex	Male
Wasaga Beach (3543064) T 00200	17,540.0	8,635.0	8,900.0	2,160.0	1,
Tiny (3543068) TP 00001	11,235.0	5,710.0	5,520.0	1,395.0	
Tay (3543071) TP 00000	9,735.0	4,890.0	4,845.0	1,390.0	
Springwater (3543009) TP 00000	18,220.0	9,165.0	9,060.0	3,285.0	1,
Simcoe (3543) 00000	446,065.0	218,975.0	227,090.0	76,345.0	39,
Severn (3543015) TP 00000	12,375.0	6,135.0	6,240.0	1,780.0	
Ramara (3543019) TP 00000	9,275.0	4,735.0	4,535.0	1,210.0	
Penetanguishene (3543072) T 00000	9,110.0	4,520.0	4,595.0	1,270.0	
Oro-Medonte (3543023) TP 00000	20,080.0	10,120.0	9,960.0	3,290.0	1,
Orillia (3543052) CY 00000	30,585.0	14,365.0	16,225.0	4,540.0	2,
New Tecumseth (3543007) T 00000	30,235.0	14,880.0	15,350.0	5,275.0	2,
Mnjikaning First Nation 32 (Rama First Nation 32) (3543050) IRI 01000	870.0	430.0	440.0	215.0	
Midland (3543074) T 00001	16,575.0	7,830.0	8,735.0	2,275.0	1,
Innisfil (3543017) T 00000	33,075.0	16,590.0	16,490.0	5,705.0	2,
Essa (3543021) TP 00000	18,505.0	9,470.0	9,035.0	3,585.0	1,
Collingwood (3543031) T 00200	19,245.0	8,935.0	10,300.0	2,765.0	1,
Clearview (3543005) TP 00000	13,735.0	6,835.0	6,900.0	2,400.0	1,
Bradford West Gwillimbury (3543014) T 00000	28,080.0	13,925.0	14,150.0	5,405.0	2,
Barrie (3543042) CY 00000	135,710.0	65,675.0	70,035.0	26,255.0	13,
Adjala-Tosorontio (3543003) TP 00000	10,600.0	5,475.0	5,125.0	1,835.0	
35431372 (35431372) 00001	345.0	185.0	160.0	80.0	
35431371 (35431371) 00001	645.0	310.0	330.0	165.0	
35431370 (35431370) 00001	1,010.0	495.0	515.0	310.0	
35431369 (35431369) 00001	1,635.0	830.0	805.0	520.0	
35431368 (35431368) 00001	740.0	365.0	375.0	130.0	
35431367 (35431367) 00001	430.0	205.0	220.0	90.0	
35431366 (35431366) 00001	740.0	375.0	365.0	135.0	

This second way to search for your geography might seem more time-consuming, but it makes life much easier when trying to find Census Divisions (CD), Census Subdivisions (CSD), and Dissemination Areas (DA). This is because each CSD and DA has the same first four digits as its parent CD. So when you search using a CD geographic code, you'll also see all the CSDs and DAs that fall within it.

So far so good! If you have any questions, **let us know**. Otherwise, let's talk about changing labels.

8. Change labels

Sometimes, especially in the *Geography* dimension, the labels will not appear as you want them to appear. For example, they may show a name, when in fact you want to see a geographic code. To change any dimension's label, select the dimension in question (typically *Geography*), and then select the *Change Label* button.

You'll see the geographic labels change:

8.1 Everything

Geography	
Wasaga Beach (3543064) T 00200	
Tiny (3543068) TP 00001	
Tay (3543071) TP 00000	
Springwater (3543009) TP 00000	

8.2 Name

Geography	
Wasaga Beach T	
Tiny TP	
Tay TP	
Springwater TP	

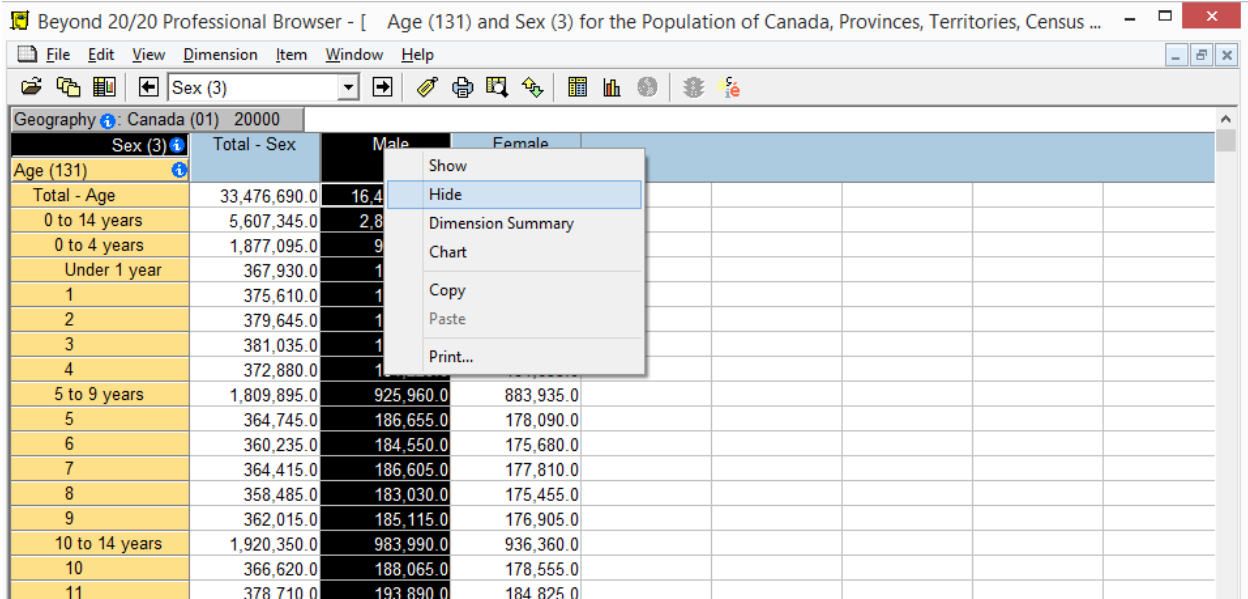### 8.3 Geographic identifier

Geography	
3543064	
3543068	
3543071	
3543009	

Congrats! Now you know how to view only the geographic label that you need. Let's continue with hiding rows and columns.

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9. Hide rows and columns

Often, a table will display many more rows and columns than we need. Examples include geographic units that we don't care about, unimportant variables that exist within the table, and so on. To hide any row or column, right click on it, and select *Hide*.

Unfortunately, there's no "unhide" button, so you'll have to select *Show All* to unhide everything.

Conversely, if you want to hide everything *except* for the rows or columns that you've selected, you can right click and select *Show*.
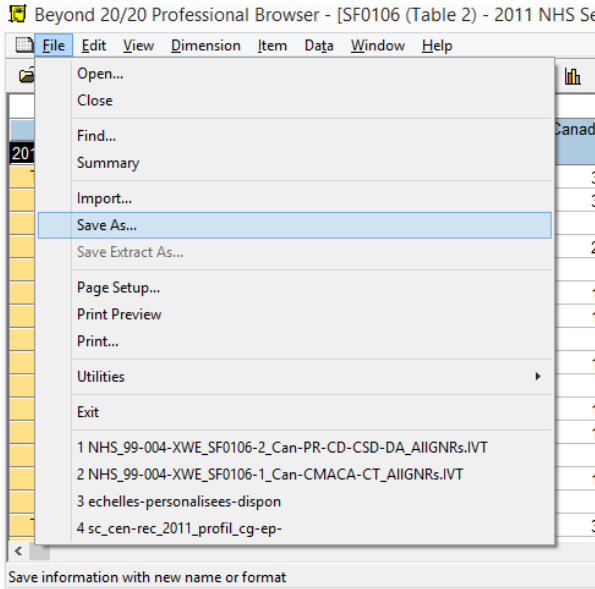
That's it, easy as pie. Lastly, let's talk about getting Beyond 20/20 data into other formats.
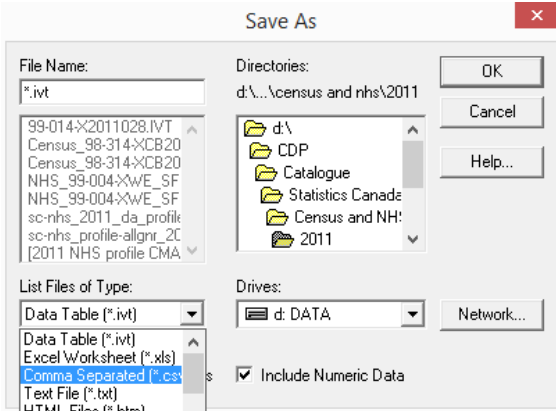
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10. Export data to Excel

Most people (ourselves included) want to get out of Beyond 20/20 and into an application we're more familiar with, *e.g.* Excel, SPSS, ArcGIS, R, etc.

To export an .ivt table, select *File* > *Save As*.

Then, under *List Files of Type*, select *Comma Separated*. (You can also select any other format if you wish.)

Under *File Name*, change the name of the file, and under *Directories*, change the location of the file you wish to create. Then select *OK*.

Important note: You can't export multiple dimensions beyond columns and rows. So remember to set up the table the way you want it to look, and then export.

11. Next steps

Hopefully you better understand how to use Beyond 20/20 Professional Browser. If there's something not covered in this Guide that you want to know more about, don't hesitate to **get in touch with us**. We're always happy to help out.