

WORKING WITH 1996 CENSUS OF CANADA NATION SERIES TABLES

This exercise is constructed to illustrate the process of responding to the following hypothetical question:

Find the percentage breakdown of the visible minority population by gender in each of the following census metropolitan areas (CMAs): Montreal, Toronto, Winnipeg, Saskatoon, Edmonton, and Vancouver, preferably in dBase format.

One possible source for this information is the 1996 Census of Canada statistics.

University of Toronto's Data Library Service Web pages include both a searchable index to 1996 Census tables, as well as title lists for 1996 Census tables that are useful in identifying file names and for retrieving files from public releases, such as the Nation Series.

1. In either the Location field or from the File/Open menu sequence, enter the URL for the Data Library Service's 1996 census page:

<http://www.chass.utoronto.ca/datalib/cc96.htm>

2. In the Table of contents, click **Aggregate Statistics**, then **Search aggregate data tables**
In the **Census years** dialogue box, enter **1996**
In the Variables dialogue box, enter **visible minor**
Click on the **Search** button.

How many results did the search produce?

Which census series have files containing statistics on visible minorities?

How many files in the Nation series have statistics on visible minorities?

3. Alternatively, click on **Aggregated Statistics**, then on **Nation Series**, and finally, in the **Table of Contents** click on "**Ethnic origin and visible minorities**".
4. Find the title **Total Population by Visible Minority Population (14) and Sex (3)** with geography consisting of Canada, Provinces, Territories and Census Metropolitan Areas for the 1996 census.

What is the file name of this title?

Click on the link to the file.

If Beyond 20/20 is correctly installed on your workstation (see <http://prod.library.utoronto.ca/datalib/codebooks/utilities/index.htm>) the file should automatically begin downloading to your workstation, and should open in a Beyond 20/20 window.

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The table retrieved contains a national total, and totals for provinces and all CMA's. Thus, one of the first tasks will be to limit the geographic coverage to the six requested CMA's. Finally, the percentages will have to be calculated before the table is exported in the format that the patron has requested.

5. **Maximize window:** If the Beyond 20/20 browser hasn't been maximized (i.e., fills the screen), click on the 'maximize' button, the middle button of three in the upper right corner of both the browser and the table.
6. **File summary:** First check how Statistics Canada defines 'visible minority' for the purposes of this table. Click on **File** followed by **Summary**, in the top menu bar of the screen. Details about this table will be displayed. Close this sub-window by clicking on the X-button in its upper right corner (the lower X-button). [Make sure you don't click on the upper X-button in the top right corner, as that will exit the Beyond 20/20 browser!]
7. **Default table:** The initial table displays the categories (or 'Items' in Beyond 20/20-speak) for the variable (or 'Dimension' in Beyond 20/20-speak) Sex down the columns and the items for the dimension Visible Minority across the rows, the actual count of persons in each 2-item category in the cells, with Geography held constant for Canada. Begin by selecting the desired geography.
8. **Change displayed dimensions:** Click once on the tile containing **Geography: Canada (00000) 2000**, hold down the left mouse button, drag it on top on the Sex tile, and drop it (let go the mouse button). You should now see Geography making up the columns, and the top tile should read 'Sex: Total - Sex'.
9. **Select geography:** Using the scroll bar along the bottom, and holding down the control key, click on each of the cities, in the grey item title area. Each item (city) selected will become highlighted in yellow and black. The central window on the status bar at the bottom of the screen displays in brackets how many items are selected at any one time.
10. Click on **Item** on the menu bar and then **Show** from the list of options. This will narrow the table's geography to the six CMA's, and hide the items not selected. Use the bottom scroll bar to scroll left to display all six CMAs.

11. **Nest sex.** Now, click on the Sex tile, and holding down the left mouse button, drag it down under the Item titles in the Geography item title area, until the bottom border changes into two thick grey/black lines. Release the left mouse button. You will now see sex 'nested' under geography. Use the bottom scroll bar again to scroll left to display all six CMAs.
12. **Select subject:** Before calculating the percentage of the various visible minority groups, we must hide the categories that include totals or subtotals. For this table, it means hiding four categories: Total Population, Total Visible Minority Population, and All Others in the Visible Minority dimension, and Total - Sex in the Sex dimension. To hide these, click once on Total Population, which will highlight this item. Hold down the Control key and click once on Total Visible Minority Population, on All Others, and on Total - Sex under any of the CMAs Next, click on **Item** and **Hide** on the menu bar. Only eleven visible minority items should now be shown, as well as two sex items.
13. **Calculate percentages:** To calculate percentages, click on **View** and then **Distributions** on the menu bar. This will result in a Distributions dialog box with some options. Click on the check marks for Row Distributions and Total Distributions to turn these calculations off (i.e., these check-boxes should now be empty). Then click **OK**.
14. **Restore the table.** The table will have changed, to display Geography in the rows, Sex in the columns, and only one Visible minority. Restructure the original table by replacing Visible minority on the Y-axis (to form the rows), and nest Geography above Sex.
15. **Display percentages:** Click once on the tile entitled, 'Distributions: Value', to make it the active dimension (The dialogue box in the tool bar line will display the word 'Distributions'). Click on the large right-pointing arrow, located to the right of the dialogue box on the tool bar line, until the dimension tile shows 'Distributions: Col Pct'. The table cells now display the column percentages.

The table shows:

Visible minorities as a percentage of the total population?	Yes / No
Visible minorities as a percentage of the visible minority population?	Yes / No

Note: to display visible minorities as a percentage of the total population in Beyond 20/20, you would need to create a worksheet (View/Worksheet), select the dimensions, get rid of the redundant totals, create a new group (Item/Define group),

and calculate the percentages as the new group. Alternatively, save the table, including the redundant totals, in a .dbf or .wks format, and use MS Excel or similar spreadsheet software to calculate the percentages.

16. **Display the percentages with one decimal place.** To do this, on the menu bar, click on **View, Decimals, 1**, in that sequence.
17. **Save the table:** The patron has asked for the table in dBase format. Select **File** on the menu bar and then the **Save As** option. In the "Save As" dialogue box, there is a list of file types in a pop-down list in the lower left corner. Click once on the down-facing arrow. Scroll down the list until you see **dBase file (*.dbf)** and click on this file type. Ensure that you are on the C drive (or A drive if writing to a diskette) and using a proper directory name. Next, assign a name to the file: cma6vis.dbf and click on **OK**.

Notes:

- A. See the following characteristics of the available output formats. The sizes given are based on a subset of 10 geographic areas, and 100 items (1,000 cells), with geography in the rows, and characteristics (items) in the columns.

Extension	Size	Row remarks	Column remarks
.csv	9k	Full English description	Full English description.
.dbf	10.5k	Full English description	Truncated headers. No nested columns allowed.
.ivt*	84.2k	Full English desc & code	Full English desc & code
.txt	7.3k	Truncated English desc	None
.wk1	21k	Full English description	Full English description
.wks	21k	Full English description	Full English description
.tsd	NA	Only available for time-series data.	

* The .ivt format automatically saves the matrix with geography on the X-axis. This format also saves table, dimension, and item summary text.

- B. The .DBF format files written by Beyond 20/20 cannot automatically be imported into MapInfo. You will need first to load the table into Excel (or similar spreadsheet software) and save the table again as a .DBF file, before loading the file into MapInfo.
- C. Only the table being displayed will be saved. Hidden dimensions will not be saved.

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