

# Census Data: Beyond 20/20, Excel and MapInfo

The following procedure assumes the census data files have been downloaded and unzipped from the Statistics Canada FTP site. The step-by-step procedure will guide the user through various steps involved in using census data to produce thematic maps in MapInfo.

## Step 1: Using Beyond 20/20

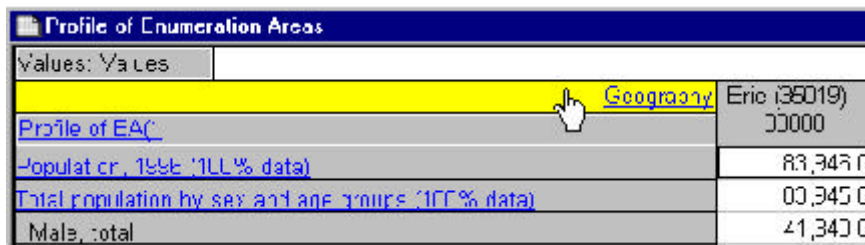


Run the Beyond 20/20 software by double-clicking on the shortcut icon found on the desktop.

Open the appropriate file in (\*.ivt) format.

Using the hand tool, click and drag the “Geography” dimension to the side axis.

Image showing the hand tool:

A screenshot of the "Profile of Enumeration Areas" window in the Beyond 20/20 software. The window has a blue title bar and a "Values: Values" dropdown menu. A hand cursor is positioned over the "Geography" dimension in the table. The table has two columns: the first column lists dimensions and the second column shows values.

Values: Values	
Geography	Eric (35019) 00000
Profile of EA(1)	
Population, 1996 (100% data)	83,946.0
Total population by sex and age groups (100% data)	83,946.0
Male, total	41,343.0

Image showing the new location of the Geography dimension:

A screenshot of the "Profile of Enumeration Areas" window in the Beyond 20/20 software. The window has a blue title bar and a "Values: Values" dropdown menu. The "Geography" dimension is now highlighted in yellow and is positioned on the left side of the table. The table has two columns: the first column lists dimensions and the second column shows values.

Values: Values	
Profile of EA(1)	Population, 1996 (100% data)
Geography	Eric (35019) 00000
Eric (35019) 00000	83,946.0
35019001 (35019001) 00000	1,099.0
35019002 (35019002) 00000	883.0

Navigate down through the geography field and select the required records. The enumeration area data are grouped according to “Forward Sortation Areas” (FSA). Therefore, it is necessary to know beforehand the FSAs that make up the geographical area of interest. After selecting the desired geography records, choose **File > Save as...** to save the selected data to a new “\*.ivt” file. Beyond 20/20 automatically opens the table.

☐ Navigate through the dimension and select the desired variables. Use the **Ctrl** key to select multiple variables.

☐ Before saving the selected set you need to put the “Profile” dimension back across the top. To do this without losing your selection, press and **HOLD** the **Ctrl** key while clicking and dragging the dimension to the top.

☐ Save the new set as an “\*.ivt” file. Since the software defaults to the Profile dimension in the right column you will have to *click and drag* it to the top once more before saving the file in DBF format.

## Step 2: Using Excel

☐ From the **Start** menu, run Microsoft Excel.

☐ Open the last file you saved with the “\*.dbf” extension. Look at the worksheet and make sure the first column is the “Geography” column. If it isn’t, then you need to go back to Beyond 20/20 to make it so.

☐ Save this file again as a “\*.dbf” file under a new name (you cannot overwrite the first name because the document is open already in Excel). This step is necessary since MapInfo doesn’t seem to recognize the “\*.dbf” format from Beyond 20/20. Until StatsCan updates the Beyond 20/20 browser, this step will be necessary.

☐ Be sure to EXIT out of Excel before proceeding to the next step.

## Step 3: Working in MapInfo

☐ Run MapInfo software.

☐ Using **File > Open table...** select DBF as the file format and open the file you last saved in Excel.

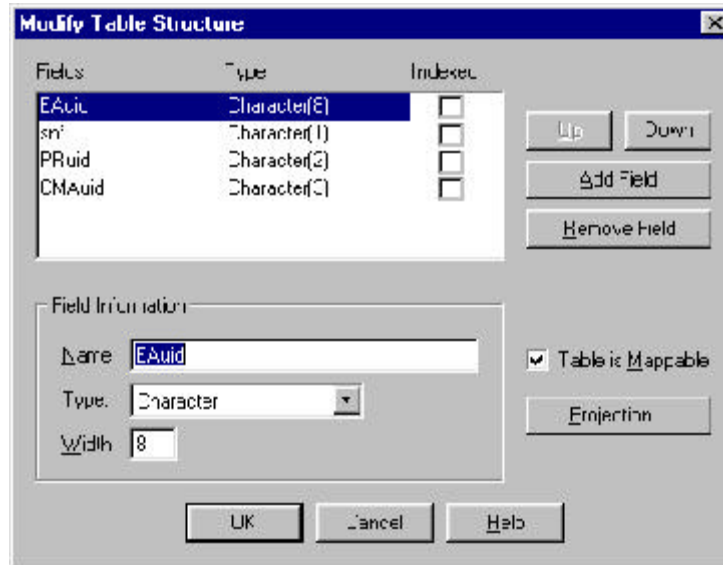
☐ When prompted with the following dialogue, click **OK**.



☐ The table opens into a MapInfo “browser”. The structure of this table must be modified in order to join the data with the geography file.

☐ Open the geography boundary file (enumeration area or census tract).

Go to **Table > Maintenance > Table structure...** Select the geography table to view the structure of the associated data. The following dialogue will appear.



Take note of the various **Fields** within the table and the data **Type** defined for those fields. The field we are most interested in is the first one: “Eauid”. Note that it is “character” type and the width is “8”.

Click “Cancel” since we are not changing the structure of this table.

View the table structure for the census data table.

With the first field highlighted, make the following changes under the “Field Information” section: change the **Type** to “character” and the **Width** to “8”. You can also change the name of the field so that it matches the name of the field in the geography table (i.e. “Eauid”), but this change is not necessary.

Click **OK**. The table will be modified and automatically closed. Re-open the table.

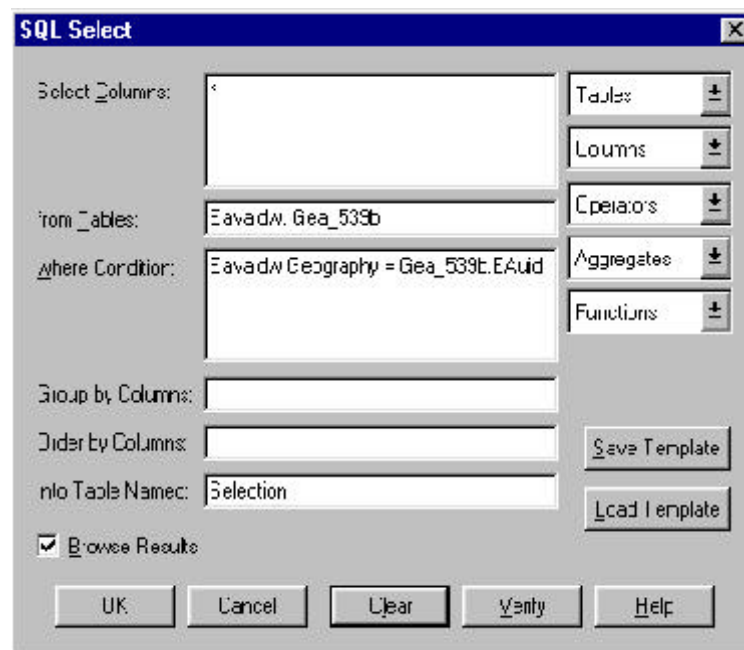
#### Step 4: Joining the tables

With the 2 tables open, choose **Query > SQL Select...**

From the Tables drop down list, select each table.

In the “where condition...” section, create the expression that tells MapInfo the 2 columns describing

the geography should be equal. To create this expression, select the “geography” column from the variables table (chosen from the Columns drop down list); then choose the “=” sign (from the Operators drop down list); then choose the “Eauid” column from the geography table. See the following diagram for details.



Click “Verify” to check the syntax of the query. It should be ok. If there is a problem, go back to the table structure to be sure they match.

Click **OK**.

The result is a query table showing the 2 tables joined together. This query must be saved as a separate table in order to preserve the join. Select **File > Save copy as...** and define a new table name.

Close all open tables and open the new table. A map window should appear showing the geography.

View the associated browser to confirm that the census data is actually joined with the geography.