

## HOW TO USE ARCVIEW

### A. Importing An Arc Export File

1. *Download* the **\*.exe** file ( Eg. **gct\_535b.exe**).
2. *Double-click* the **\*.exe** file to *extract* it. Once it has finished *extracting* *quit* the DOS window.

You will now use **ArcView Import71** program translate data from an ArcInfo export file into an ArcView readable format.

3. *Double-Click* on the **Import71** icon or *select* **Start > Programs > ESRI > ArcView GIS 3.2 > Import71**

4 (a). The **Import71 Utility** window will *open*.

4 (b). In the **Export Filename** *select* **Browse** *locate* the **\*.e00** file in the directory you downloaded it to, and *select* it, then *select* **Open**. (Eg. **C:\esri\tordcflgct\_535b.e00**).

4 (c). In the **Output Data Source** *select* **Browse** then *select* **OK**. After the last **back slash (\)**, *type* in the **output file name with no extension** (Eg. **C:\esri\tordcflgct\_535b**). Now *select* **OK**. Another window will *appear* tell you that **Import Complete** then *select* **OK**.

### B. Opening The ArcInfo Coverage In ArcView

5. *Double-Click* on the **ArcView GIS 3.2** icon or *select* **Start > Programs > ESRI > ArcView GIS 3.2 > ArcView GIS 3.2**.
6. In the **Welcome to ArcView GIS** window *select* **with a new View**, then *select* **OK**.
7. In the **Add data** window, it asks you **Would you like to add data to the View now**, *select* **Yes**.
8. In the **Add Theme** window, *change* the directory to **C:\esri\tordcfl** then *select* on the left side to **gct\_535b**. Then *select* **OK**.
9. Now *maximize* the window titled **View1**, then *maximize* the window titled **ArcView GIS 3.2**.

10. *Select* the little grey box left the word **gct\_535b** .

What you now have is a layer of all the Toronto CMA by census tracts, in ArcView this layer is called a **theme**, and this theme is titled Torct.

### C. Opening The Data File In ArcView

11. *Select* the **Open Theme Table** button (5<sup>th</sup> button, middle row, left of the binoculars button).

12. Now *minimize* the **View1** window. And *reduce* the **Attributes of Gct\_535b** window.

13. From the **Untitled Menu** *select* **Tables** then *select* **Add**. From the **Add Table** window *select* the **\*.dbf file (torage.dbf)** that you want to join.

14 (a). From the **Main Menu** *select* **Table > Start Editing** (make sure **torage.dbf** is active, the header will be blue if it is active).

14 (b). From the **Main Menu** *select* **Edit > Add Field**.

14 (c). From the **Field Definition** window *change* the **Name** to **ct\_name**, the **Type** to **String** and the **Width** to **7**.

14 (d) The new field **ct\_name** should be *highlighted*, if it not then *click* on it.

14 (e) From the **Main Menu** *select* **Field > Calculate**. From **Fields** *double-click* on **Geograph**; From **Type** *select* **String**; From **Request** *scroll down* to **Left** and *double click* on it; Finally **between the brackets** in the **equation box** *put* **7**. *Select* **OK**.

This will convert 0001.00 (5351012) 00000 into 0001.00

14 (f). From the **Main Menu** *select* **Table > Stop Editing > Yes**.

### D. Preparing The Files To Be Joined

15 (a). Make the **torage.dbf** window active.

15 (b). *Click* on the field labelled **ct\_name**. Now sort datafile records in ascending order (3<sup>rd</sup> last button in the middle row).

15 (c). Make the **boundary file (Attributes of Gct\_535b)** window *active*. *Click* on the field labelled **Ctname**, to which the datafile will be joined. Sort boundary file records in ascending order.

15 (d). Make sure that the **boundary file (Attributes of Gct\_535b)** is file is *active*. From the **Main Menu** *select* **Table > Join**. The **\*.dbf file** should *disappear*. *Scroll* along the *boundary file* to see if the **\*.dbf file** data fields are present.

## E. Converting From An ArcInfo Coverage To An ArcView Shapefile

16. From the **Untitled Menu** *select* **Views > Open**. Now *maximize* **View1**.

17. Make sure that **Gct\_535b** is *active*. From the **Main Menu** *select* **Theme > Convert to Shapefile**. Put the **\*.shp file** into **C:\esri\tordcf**. And give it a name (**Eg. Torctage.shp**) (this will be the new file with the combined boundary file and data file). *Select* **Yes**, when asked to **Add shapefile as theme to the view**.

18. Make **Gct\_535b** *active*, and from the **Main Menu** *select* **Edit > Delete Themes > Yes To All**.

19. Now make **Torctage** *active* and put a **check** in the **little grey box** beside the **Torctage.shp** name.

20. *Select* the **Open Theme Table** button (5<sup>th</sup> button, middle row, left of the binoculars button). You should see the combined **\*.dbf file** and **boundary file**. Now let's close this table.

Now let's make a map, we will map the **Total Population By Census Tract**.

## F. Mapping The Data From The Newly Created Theme

21. Now *double-click* anywhere on **Torctage.shp** theme, and a **Legend Editor** window should appear.

22. In **Legend Type** *change* it from **Unique Value** to **Graduated Colour**, by *scrolling up*.

23. In the **Classification Field** *change* it from **None** to **Total\_po**. By default ArcView has broken down the data into 5 ranges. Now *select* **Apply**. Then *select* the **X** in the top right hand corner of the **Legend Editor** window, to close it.

Now we have a theme displaying the **Total Population By Census Tract**.

24 (a). If you are not satisfied with the colour schemes or the ranges, then *double-click* anywhere on **Torctage.shp** theme, and a **Legend Editor** window should appear again.

24 (b). If you want to change the colour schemes, then at the bottom of the window *change* the **Color Ramps** from **Red monochromatic** to what ever colour scheme you want, by *scrolling down*. After you have chosen your colour scheme then *select* **Apply**.

24 (c). If you want to change the number of ranges, then from the **Legend Editor** window, *select* **Classify > Number of classes** change it from **5** to what ever value you want, by *scrolling down*, then *select* **OK**.

## G. Preparing The Layout For Printing

25. The first let's prepare the legend. From the **Main Menu Bar** *select* **Theme > Properties**. A **Theme Properties** window should *open*. *Change* the **Theme Name** from **Torctage.shp** to **Population**, then *select* **OK**. This doesn't change the name of the file on disk, it just changes it for the purpose of this View.

26. Again from the **Main Menu Bar** *select* **View > Layout > Landscape > OK**.

Now in the window titled **Layout 1** there are 5 objects: Title, Legend, North Arrow, Scale Bar and the Theme.

27 (a). First lets *double-click* the words **View1**, then *type* **1996 Total Population of the Toronto CMA By Census Tract**.

27 (b). To *change* the size of the font, *press* **Ctrl** and **P** at the same time. Then *change* the **Size** to **36**. Then quit the **Font Palette**. Now *centre* the title between the blue border.

28 (a). Now *select* the **theme (map)**. To *enlarge* the **theme** *grab* any one of the **four black square dots**, and then *drag* them.

28 (b). Once you have made the **theme** larger, then you must *centre* it on the **layout**.

28 (c). Once you have *centred* the **theme**, then *right click* any where outside the borders of the **layout**, and *select* **Refresh View Frames**.

29. Next you will *double-click* on the **scale bar**. A **Scale Bar Properties** windows will *open up*. *Change* the **Units** to **Kilometers**, by *scrolling down*. *Change* the **Interval** to **50**. Finally, *change* the **Left Divisions** to **0**. Now *select* **OK**. Now *centre* the **scale bar** on the bottom of the **layout**.

30 (a). *Double-click* on the **North Arrow**, a **North Arrow Manager** window will *appear*. You might want to *select* a simpler **north arrow**, like the first one on the second row, now *select* **OK**.

30 (b). Now *move* the **north arrow** to the top right of the **layout**. This **north arrow** appear to be to large, so we will have to *reduce* it. *Select* the **north arrow**, now *grab* one of the **four black square dots** and *reduce* the **arrow** by *bringing* the **dots** *closer together*.

31. Now *select* the **legend**, and *move* it down to the bottom right corner of the **layout**.

32. You might want to *align* the **legend** and the **north arrow**. First *select* the **Legend**, now *hold down* the **shift key** on the **keyboard**, and *select* the **north arrow**. Now *press* **Ctrl** and **A** at the same time, and *select* **align centre (>|<)** at the top.

33. Now you are ready to print. **File > Print > OK**.

## H. To Jazz Up Your Map Or Correct Mistakes

1. From the **Main Menu Bar** *select* **Window > View1**.

Suppose you want to get rid of some census tracts

2 (a). From the **Main Menu Bar** *select* **Theme > Start Editing**. *Select* the **Pointer Tool (Black Arrow)**. Now *draw* a box that encapsulates the census tracts that you want to remove. This is done by *selecting* an blank area left of the census tracts then *dragging* the box down and right so all the census tracts you want removed are in the box. Now *release* the button, and *select* **delete**.

2 (b). Now we will save our edits. **Theme > Save Edits As**. We will save it to the **C:\esri\tordcf** directory as **torctage-new.shp**. **Theme > Stop Editing > Yes**.

2 (c). Lets *zoom-in* to this new **theme**. This is easily done by *selecting* the **Zoom To Active Theme(s)** Tool (in the middle row the 10<sup>th</sup> tool button, look like an arrow pointing down with 2 white pages, with a grey one in between).

2 (d). Make sure the **torctage-new.shp theme** is active. The **active theme** is the one that appear is be raised. If you select any where on the **Population theme**, then it is now the **active theme**. Since we are not going to use this **theme** any more we can *delete* is by making it **active**, and *selecting* **Edit > Delete Themes > Yes**.

2 (e). So let's *select* **Theme > Properties**. *Change* the **Theme Name** from **torctage-new.shp** to **Population**. Then *select* **OK**.

3. From the **Main Menu Bar** *select* **Window > Layout1**.

Now your new theme has been added into your old layout, even the scale bar has changed for the new theme. When you last printed you noticed that the blue border you saw on the screen did not appear on the map. This is your layout border so you your working area.

4. To add a border *select* the **Neatline Tool** ( 3<sup>rd</sup> last tool on the second row, looks like a white rectangle. A **Neatline Settings window** *opened*, *select* **Inset from margins**. It's up to you if you want to *change* any of the other **Appearance settings**. If not, then *select* **OK**.

5. Now you are going to have to make sure that all 5 object are inside your border (inside black border).

6. When it you are trying to move objects around you will notice that they don't move to the exact point where you want them. To change this *select* **Layout > Properties**. Then *un-select* **Snap to Grid**. Now you can move your object around freely.

7. Another point, sometimes in the layout when you move an object around it appears that it has not moved or part of it was left behind, you can either *right-click* and **Refresh View Frames**. Or you and go to **Window > View1** and the back to **Window > Layout1**, and everything should be cleaned up.

8. If you have deleted your north arrow by mistake and want to add another then *select* the **Frame Tool** (last tool on the bottom row). *Hold down* the **tool** while you move down to the **north arrow icon**. You will know the **north arrow** has been *selected* because it will be the icon on top. Then just create a box in the **layout** and that's where your **north arrow** will appear.