



2006 Census DataPacks

Importing CSV data and digital boundary files in ArcGIS

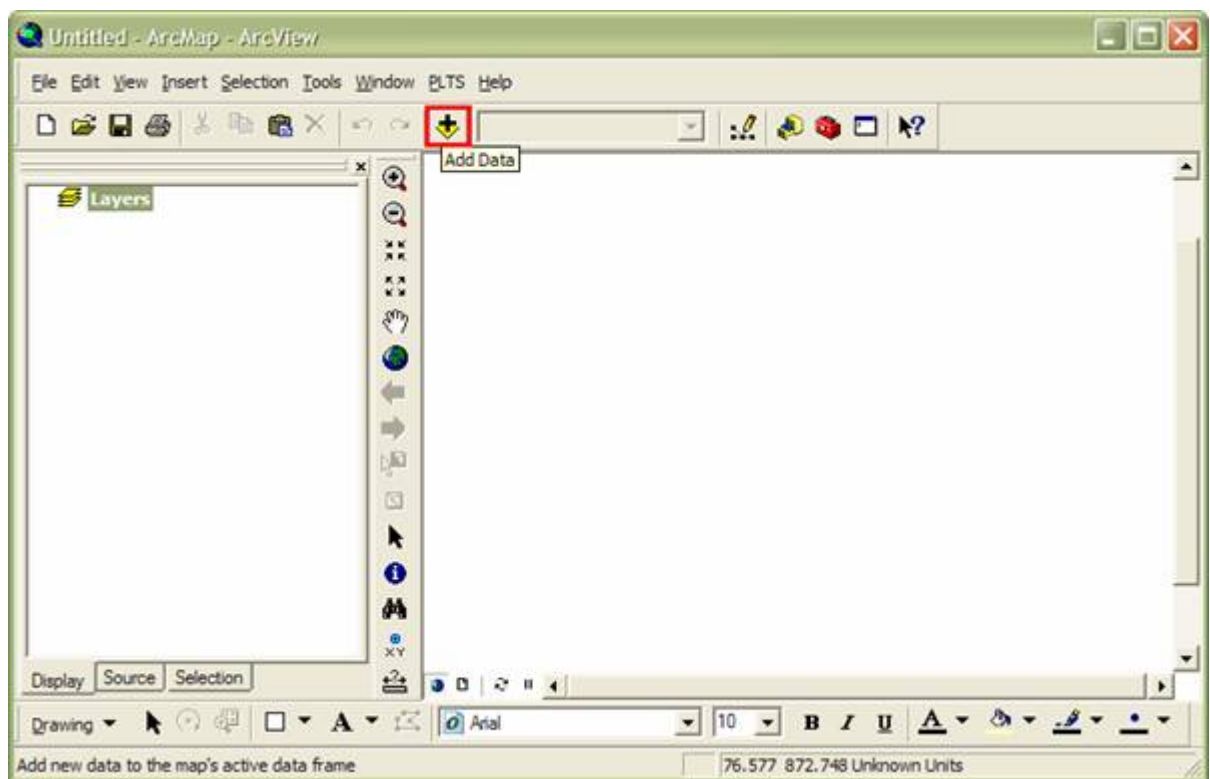
The following guide has been written using ArcGIS 9.2, ArcView license. Users with a release version of 9.0 or later will be able to follow the steps in this guide.

Step 1

Copy all data to your hard drive.

If necessary Unzip files using Winzip or similar software. Note location where unzipped files are placed.

In ArcMap click the Add Data button or Use the menu option File > Add Data.



Step 2

Browse to the shapefile containing the appropriate spatial units and spatial extent.

In this example the shapefile LGA_All_States_Territories_06.shp is used.

Step 3

Using the same Add Data button as in step 1, add the comma delimited file (CSV) containing the statistical characteristics to be thematically mapped.

ArcGIS treats comma delimited text files as valid tables. They do not need to be converted to be used in ArcGIS.

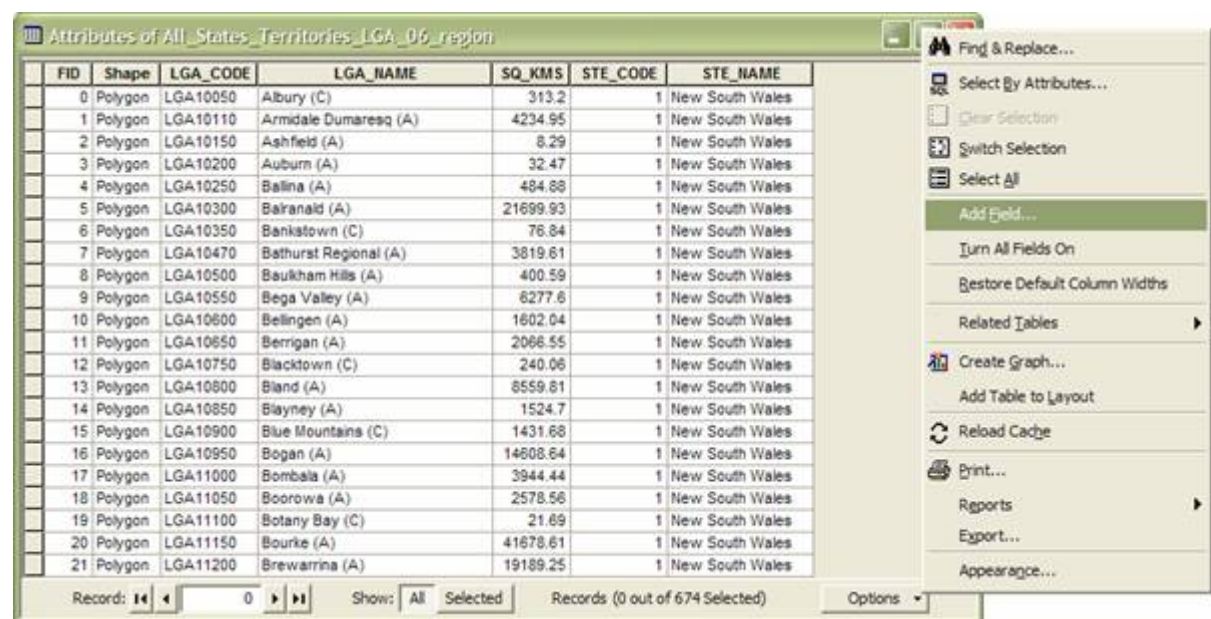
Descriptions of the Basic Community Profile tables and the fields in each table are given in BCP2006_cell_desc.xls found in the Metadata folder. Refer to this file when choosing field values to map. In this example LGA_NSW_B01.csv is used.

In order to map the values contained in the CSV file a join between LGA_All_States_Territories_06.shp and LGA_NSW_B01.csv is required. This will create one "virtual" table where all the BCP characteristics are attached to the spatial features in the shape file. The join uses the LGA code in LGA_All_States_Territories_06.shp and region ID in LGA_NSW_B01.csv. Although similar, they are not exactly the same so for the join to be successful the letters "LGA" must be stripped from the LGA codes.

Step 4

Open the attribute table for LGA_All_States_Territories_06.shp by right clicking the layer in the ArcMap Table of Contents and selecting Open Attribute Table.

Left click the Options button and from the menu select Add Field.



Step 5

In the Add Field dialogue name the new field "RegionCode" and make it of type Long Integer.

A screenshot of a software dialog box titled "Add Field". The dialog has a light beige background and a green title bar with standard window controls (minimize, maximize, close). It contains three main sections: a "Name:" label followed by a text input field containing "RegionCode"; a "Type:" label followed by a dropdown menu showing "Long Integer"; and a "Field Properties" section containing a "Precision" label and a text input field containing "0". At the bottom right, there are two buttons: "OK" and "Cancel".

Add Field

Name: RegionCode

Type: Long Integer

Field Properties

Precision 0

OK Cancel

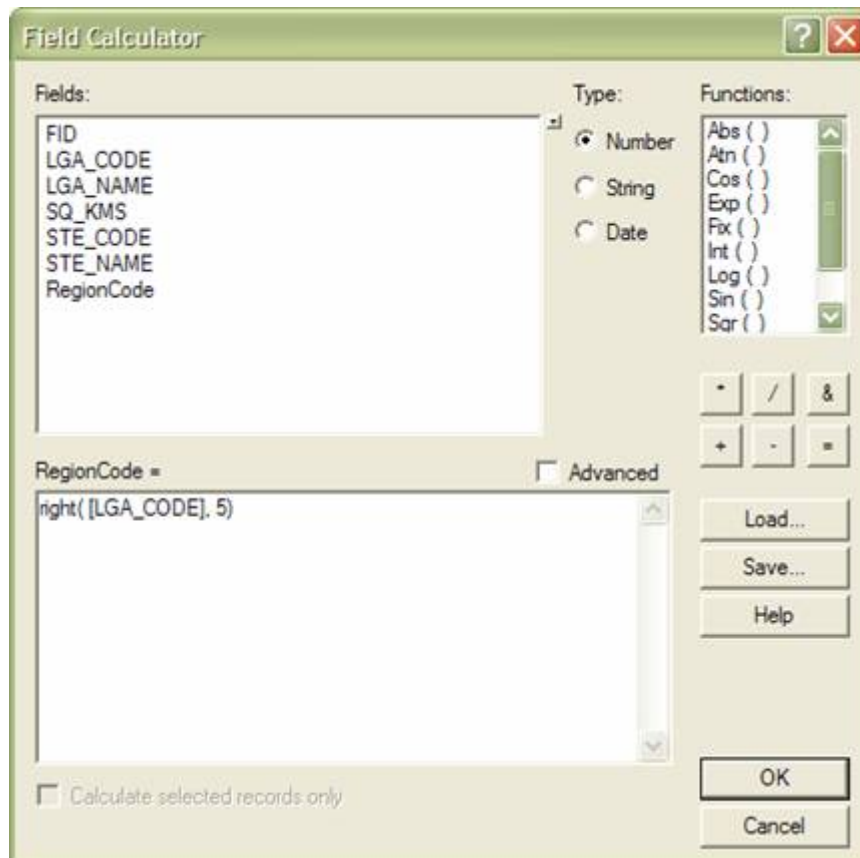
The field type must be long integer.

Step 6

Right click the new RegionCode field name at the top of the attribute table. In the context menu select Field Calculator.

In the expression field enter the following VB Script expression.

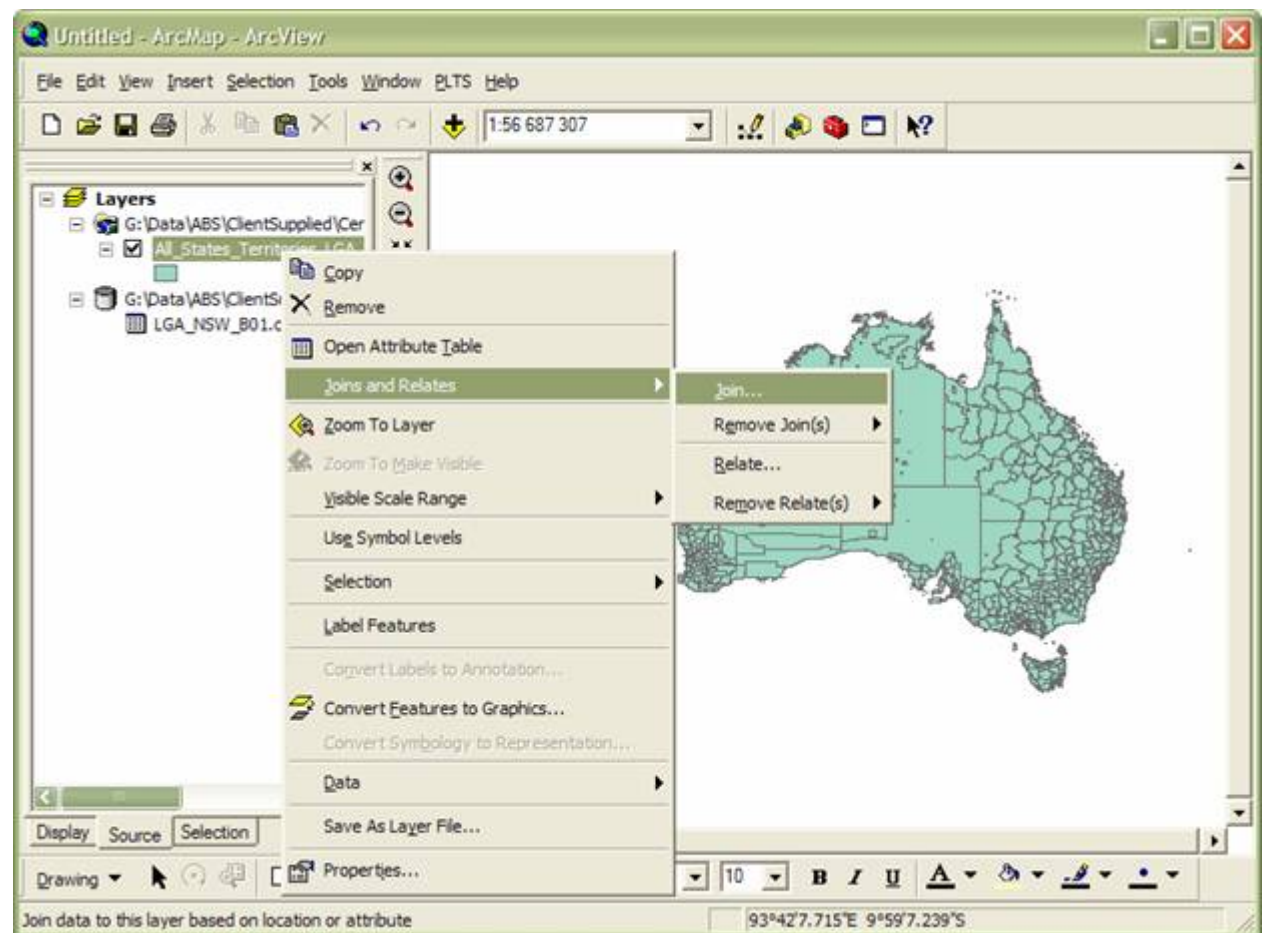
`right ([LGA_CODE], 5)`



Step 7

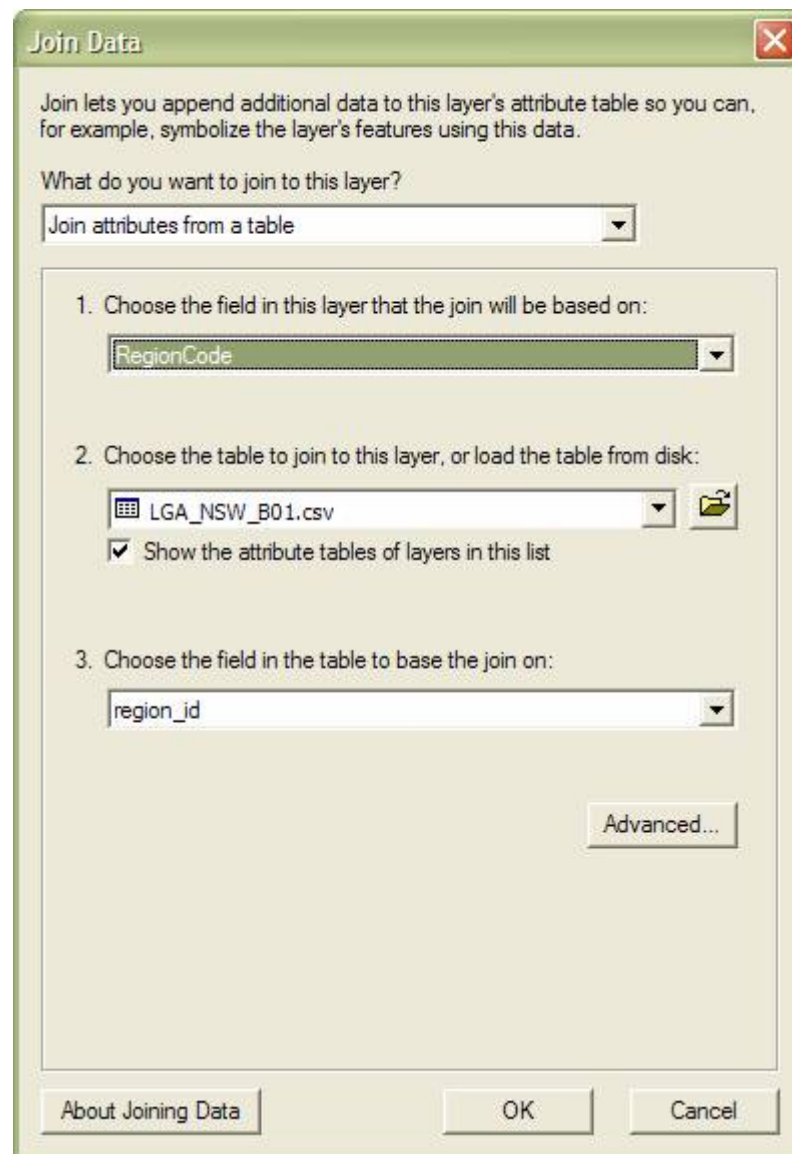
Now a join can be made between LGA_All_States_Territories_06.shp and LGA_NSW_B01.csv.

Right click LGA_All_States_Territories_06 and select Joins and Relates > Join.



Step 8

In “Join Data” select “RegionCode” as the Join field in this layer, LGA_NSW_B01.csv is the table to join to and region_id is the field to base the join on in LGA_NSW_B01.csv.



To ensure the join was successful open the attribute table for LGA_All_States_Territories_06 and check all fields from LGA_NSW_B01.csv are present.

Step 9

To thematically map the BCP statistics, right click the LGA_All_States_Territories_06.shp layer and select properties.

Select the Symbology tab.

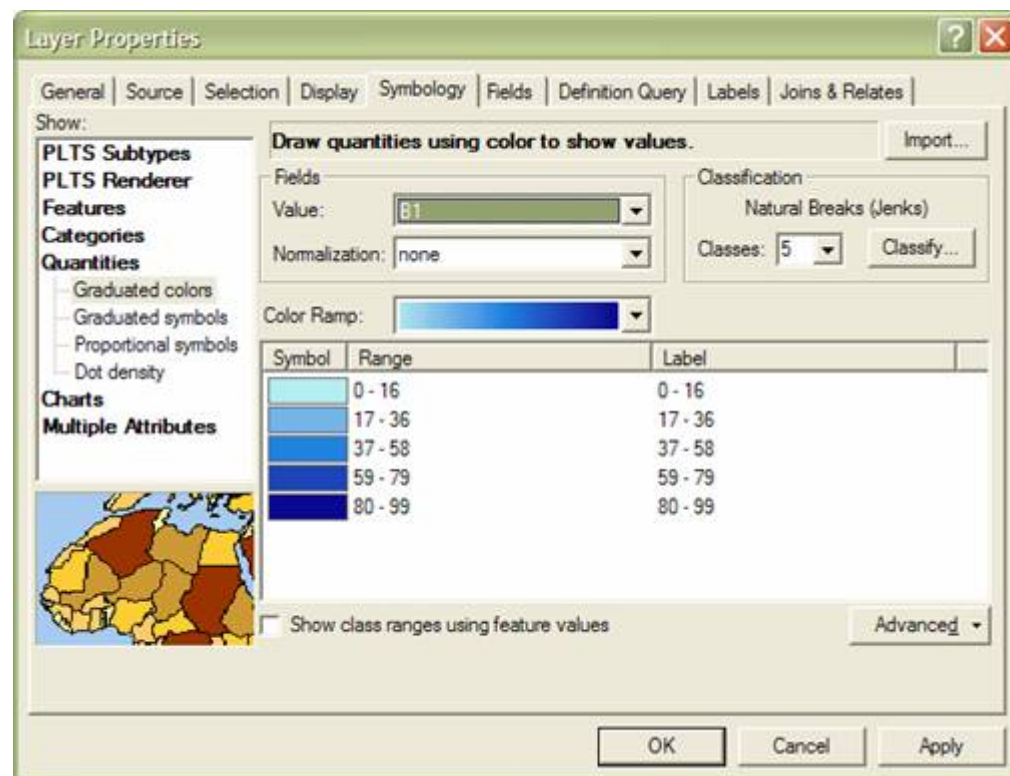
Choose Categories, Quantities or Charts depending on how you want to map the statistics.

In this case a simple graduated colour map is created.

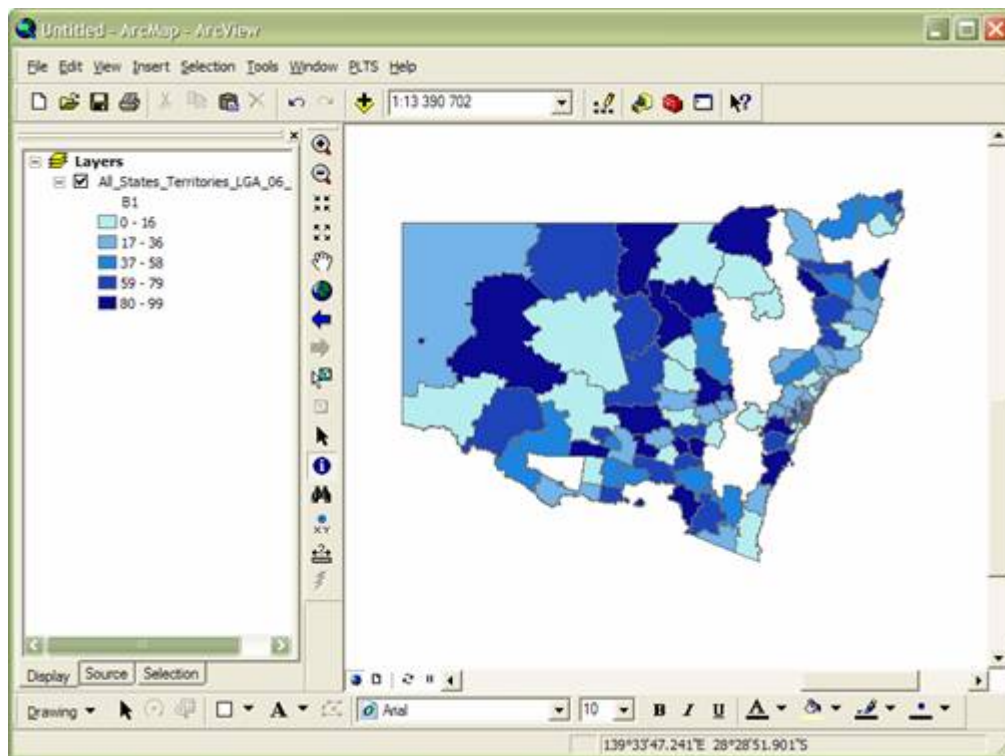
Select Quantities > Graduated colors.

For Value select the appropriate Field. In this case B1 is selected.

Change the color ramp if required.



Click OK.



Notes:

The following can enhance the maps created using the Datapacks data in ArcGIS.

- Rename the layer name in the ArcMap Table of Contents to better reflect the classified value.
- Rename the field name in the ArcMap Table of Contents or delete it.
- Import the CSV files into database table(s) to reduce display times when drawing maps in ArcMap.