

## **Week 14 Cookbook**

### ***Finishing the MassGIS Project***

#### **Week 14 Overview**

- 14.1) Printing the Map
- 14.2) Land Use Legends
- 14.3) Land Use Change Analysis using MS Excel
- 14.4) Making Pie Charts in MS Excel

This week you'll find more tips and tricks to help you with the MassGIS Project. There are a series of Jings in the Week 14 folder that illustrate some of the important land use change analysis steps using MS Excel.

#### ***Please don't forget!***

- The final map and report are due next Wednesday (12/08/2010). Please refer to the MassGIS Project Description in the Week 12 folder for more details.
- I'm happy to review your project and make suggestions for improvements (map and report) before the final due date. Whether or not you take advantage of this offer is up to you, but you need to send me your draft map and report no later than Friday (12/03/2010) to give me sufficient time.

*Consider printing this cookbook for your convenience*

## 14.1) Printing the Map

Your final maps will look stunning – especially when printed in large-format on a great color printer. I have this type of printer in my office, so let's get together to print your map. That usually only takes a few minutes and you have a nice visual product from this project.

### *Best times for me:*

- Office Hours: MWF 12:00 to 13:00, Bates 217
- Or, send me a PLATO Mail / Email and we can schedule a time that works for both of us.

## 14.2) Land Use Legends

I included a couple of Jings in the Week 13 folder to show you how to use the legend files from MassGIS to display your land use data.

For the final map you need to include a legend. The legend is fairly large as it has to include the 21 land use categories and the town lines. Space on your map is limited, so you need to figure out how to include your legend without taking up too much space.

One way to save space is to include only one legend for the two land use data frames. That's an appropriate thing to do, since both data frames show the same data using the same symbology. But, you need to make sure that your legend is indeed meaningful for both land use data frames.

→ There is a Jing in the Week 14 folder that explains this issue in more detail!

## 14.3) Land Use Change Analysis using MS Excel

There is a multi-part Jing in the Week 14 folder to explain the land use change analysis using MS Excel.

- Table set-up, column width, column headings.
- Select By Attributes.
- Check your analysis by calculating sums and differences.
- Calculate percentages and change decimal places.
- How to copy the table into ArcMap and more layout tips.

Now, every version of MS Excel is a bit different and there was definitely a big change from MS Excel 1997-2003 (the 'old' version) to the current versions (MS Excel 2007 or MS Excel 2010).

That makes it somewhat difficult to provide universal instructions!

However, please realize that only the menus and layout = the Graphic User Interface (or GUI) have changed, not the basic functionality of the software.

## 14.4) Making Pie Charts in MS Excel

A simple Google Search will yield 1,000s of tutorials on how to create pie charts in MS Excel – here are a few examples:

<http://www.youtube.com/watch?v=48zCCrE8UU>

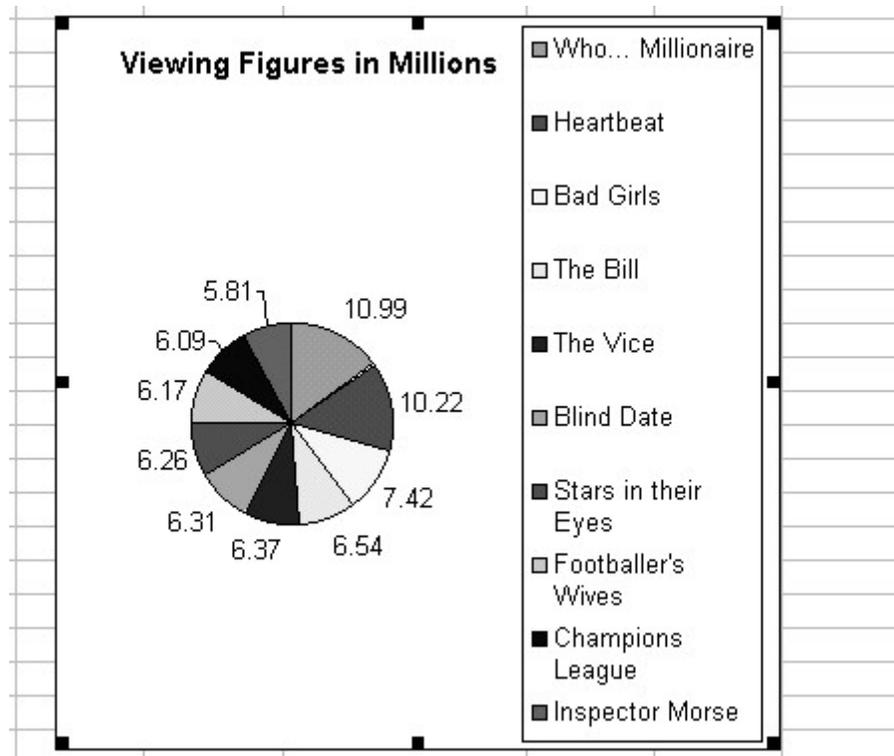
<http://www.youtube.com/watch?v=pzSBKrV8C4c>

**This website has tutorials for MS Excel 2003 and 2007:**

[http://spreadsheets.about.com/od/excelcharts/ss/pie\\_chart.htm](http://spreadsheets.about.com/od/excelcharts/ss/pie_chart.htm)

<http://www.homeandlearn.co.uk/Me/mes4p6.html>

<http://www.homeandlearn.co.uk/ME/mes4p7.html>



Your pie charts should look similar to the one shown above with a meaning legend, a title, and the percentages shown for each pie slice.