

Tufts GIS Tip Sheet
Working with Excel Files in ArcGIS 9.2
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The great news is that ArcGIS in its 9.2 incarnation can read Excel files! Your life as a GIS user just became a lot easier.

To use Excel files effectively and with as little pain as possible, there are some important things to remember:

First, read the ArcGIS 9.2 Help page about working with Excel files

http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=Working_with_Microsoft_Excel_files_in_ArcGIS

Adding an Excel file to ArcMap:

When you add an Excel file in ArcGIS, click down to the worksheet level! If you try to add the file marked .xls, you will get an error message. Instead, click on the .xls file and then you'll see the individual worksheets

You can have an Excel sheet open in Excel and add it to ArcGIS but if you make changes in the Excel file, you will not see these in ArcGIS.

But before you add an Excel file to ArcMap, read the following!

The first 8 rows of data values will determine field type when brought into ArcGIS.

If there is a mix of numbers and text, the field type will become TEXT in ArcGIS. In some census data tables, there is an (x) to indicate missing numeric values – if this occurs in the first 8 rows, the entire field will be typed as text in ArcGIS and you will not be able to map it. Modify your data accordingly. I suggest deleting the (x) value – it will then appear as NULL in ArcGIS. If you type 0 instead of deleting it you are implying the actual value is 0 and this will affect statistical analysis accordingly. (Note: you can use the Edit-Replace function in Excel to look for all values of (x) and replace it with nothing)

After you have added the Excel file to ArcGIS, right click on it in the table of contents and choose Properties, then the Fields tab to check that all fields are the correct type (text or “double” which is a kind of numeric data type). If the field did not import correctly, exit from ArcMap and open the Excel file and look at the first 8 rows again. Make sure they are the correct type of data for your field. Also make sure the first row are field names and the second row is data (e.g., Excel files from the census typically have two rows of field names and descriptors – one of these has to be deleted. Modify, save, and then re-open ArcMap and add the Excel file again to check it.

Getting the field type right is CRITICAL for proper joins later on. If you are, for example, joining a census tract SF3 data table to a census tract geography data set, and the ID fields on which you will join are of different field types, the join will not work. They both should be text or both numeric (text for IDs usually).

Modify field (column) names in Excel before adding the worksheet to ArcGIS

Life will be much easier for you if you modify field names in Excel before bringing the file into ArcGIS. Field names should:

- Be 10 characters or less (the ArcGIS Help says 64, but if you later want to export the Excel file to be part of a shape file or .dbf file, you'll need to have the field names be 10 characters or less, so just do this from the beginning!)
- Start with a letter
- Use only letters, numbers or underscore (_) – do not use spaces or special characters or periods

Do not modify the table in Excel while it is open in ArcMap!

Modifying Excel files while they are open in ArcMap, or even if you have had them open and then removed them from ArcMap will start messing things up.

Best practice:

- exit out of Excel before adding an Excel file to ArcMap
- exit out of ArcMap before you modify an Excel file that has been open in ArcMap

Also, if you have an ArcMap session open with an Excel file in it, then remove the Excel file, change it, and try to add it again, you may not see your changes to the Excel file. I've found that I actually have to close my ArcMap session and restart it to see the changes in the Excel file.

Working with tables is not easy!

All sorts of things can go wrong when you are working with tables of different types in ArcGIS. Fields don't import properly, they won't join, data disappears, etc. You are not an idiot. Tables are tough. Deep breathe and see if starting from the beginning again works. Pay attention to all the little details, especially field name constraints and values in the first 8 rows!