Adding Excel Data to ArcMap

- **Preparing Your Data**

Before you can import tabular data into ArcMap, you must make sure it is in a file type and a format that ArcMap can recognize. First we will format our data fields, then we will save it correctly.

Formatting Tabular Files

Both latitude/longitude data and addresses must be correctly formatted in order to display correctly in ArcMap

- Lat/Long
    - o Use numerical values only (**DO NOT** include text like E, East, N, North, degrees, etc)
    - o When appropriate, use negative (-) signs to indicate hemisphere
    - o Make sure your data is in decimal degrees, not degrees-minutes-seconds
    - o Latitude and Longitude must be in two separate fields – If you name these fields "latitude/longitude" or "X/Y," ArcMap will automatically recognize them
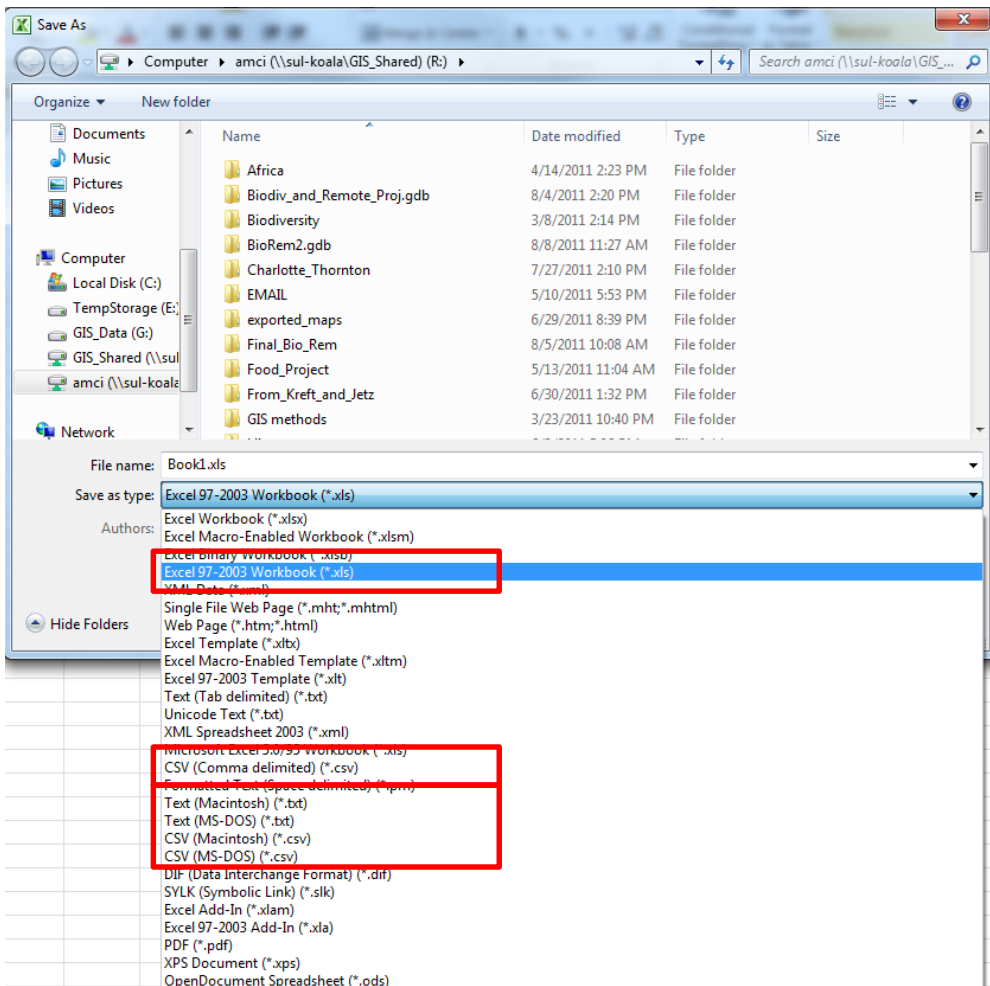

- Addresses
    - o Divide your data into the following columns: Address, City, State, Zip. Enter the corresponding data into each column.
    - o If you are missing data from one of these categories, you do not need to include that header
    - o **Enter your data carefully** – mistakes and typos can lead to errors in finding the address!

Useable File Extensions

Once you have formatted your data, you will save it using a file type that ArcMap can recognize. The following file types can be used in ArcMap. All of these file types can be read by Microsoft Excel:

- o .csv
- o .txt
- o .xls (97-2003 **ONLY** - .xlsx will not work)

• Importing Your Data

The way you import your data will depend on whether you are using latitude/longitude or addresses. In either case, the first step is to add your tabular data to the map document.

<u>Before adding your data</u>

- Make sure the field names you have chosen are not too long and do not have *spaces* or other problematic characters (eg: *, &, !, #, etc)
- Save and close your excel document. Leaving it open may interfere with other operations later.
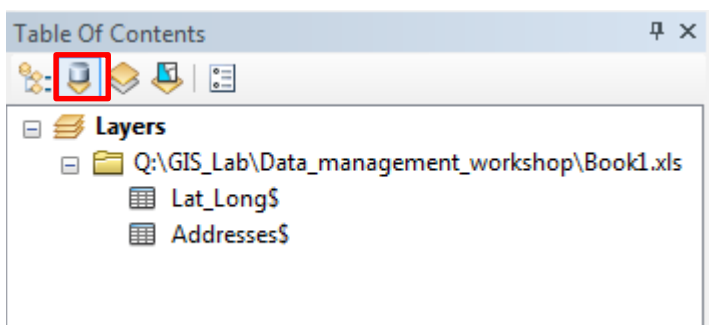
<u>Adding tabular data to the map document</u>

You can drag and drop from ArcCatalog or use the add data button in ArcMap. You will have to select the **specific worksheet** if you are using an excel file.
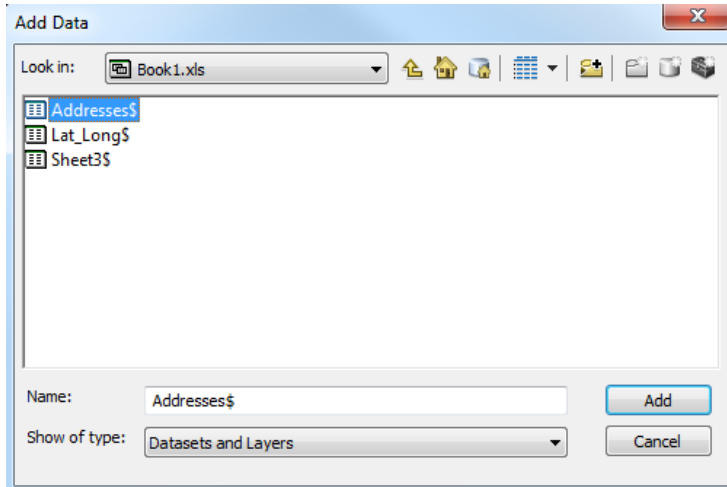

Selecting the appropriate worksheet from an excel file

The data you add will only appear in the table of contents when you are in **"List by Source"** view.

Latitude/Longitude: "Display XY Data"

You are now ready to display your data. Note that with lat/long data, initially you will **only be displaying data**, and an additional step is necessary to create a new, permanent file

- Right click on the worksheet containing lat/long data
- Click "Display XY Data…"
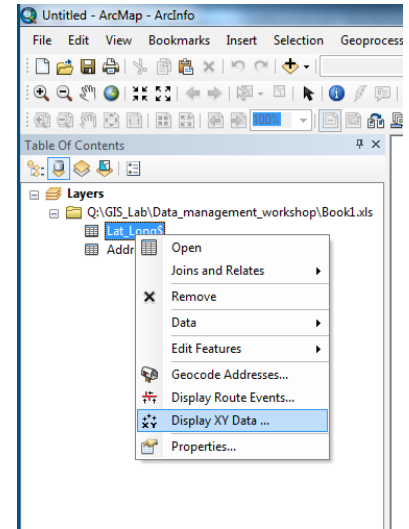
- If you named your lat/long fields "X/Y" or "Latitude/Longitude," the resulting dialog box will automatically fill in these field names for "X field" and "Y field." If not, enter these field names manually
- If you do not have elevation data, leave "Z field" blank.
- Enter the projection information for your data by clicking the "Edit" button at the bottom of the box.
- Most GPS data uses a geographic coordinate system called WGS 1984. Be sure to enter the correct projection information for your data to ensure that it displays correctly
- Click OK
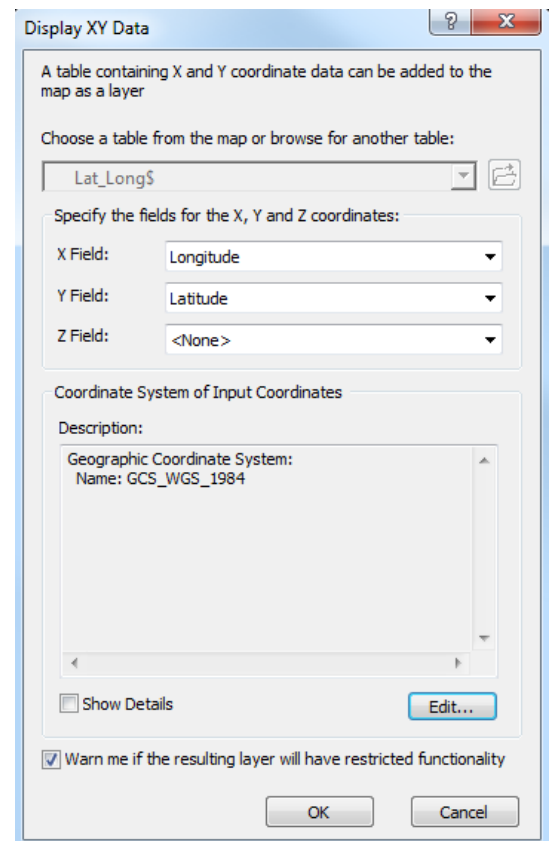
- The following pop-up will appear. Click OK, but let this remind you that this data is only being **temporarily displayed** on the map. The next step will make this data permanent.
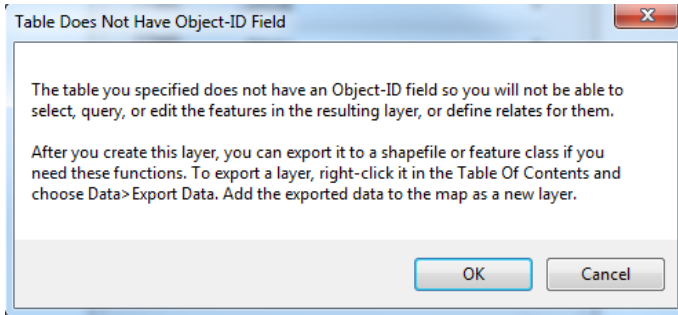
Your data should now be proudly displayed on the map. To make this display permanent, you will export it.

- Right click on the displayed data, which should have the word "Events" after it.
- Click "Export data"
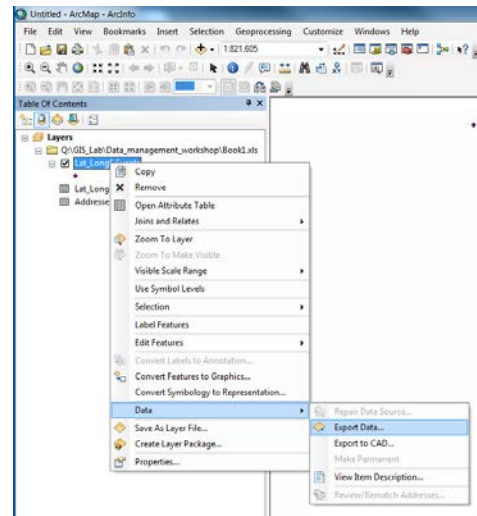
- In the resulting dialog, you will use the same coordinate system as the layer's data source, since you already correctly selected that coordinate system
- Select a location and file type (shapefile or feature class) to create by clicking on the folder icon next to the pathname
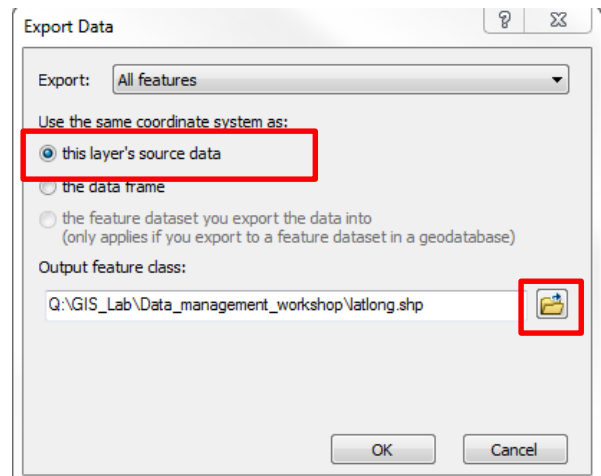
Congratulations, you are a **tiger** of a datamaker!