Displaying Data

GIS I: Organizing Principles

Children's Environmental Health Initiative

Learning Objectives

- Familiarize with ArcMap interface
- Understand how to use different tools in ArcMap
- Symbolize and display data

Overview

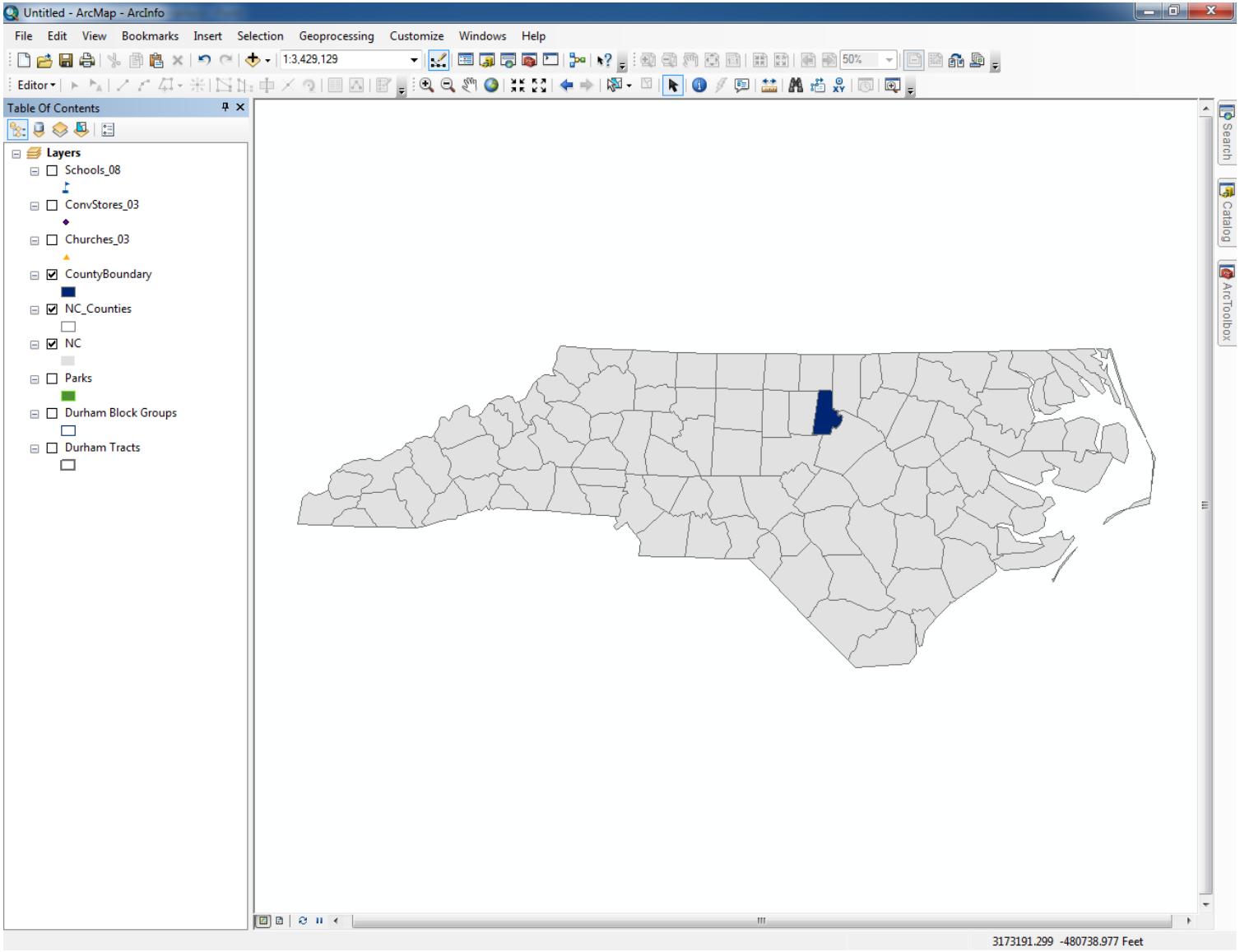
- Introduce ArcMap interface
- Displaying in data view
- Creating maps in layout view

ArcMap

- ArcMap is a tool for creating, viewing, querying, editing, composing, and publishing maps.

- ArcMap provides a number of powerful tools for creating visual displays of your data, querying, and creating presentation quality maps.

ArcMap Interface



Maps in ArcMap

- The map
  - Fundamental component in ArcMap
  - Stored on disk and managed with ArcCatalog

- In ArcMap, you can work with the map in two views
  - Data view
  - Layout view

Data vs. Layout View

- Data View
  - Display
  - Query
  - Edit
  - Analyze
- Layout View
  - Cartographic element
  - Finalize for print/publish

Data View Tools

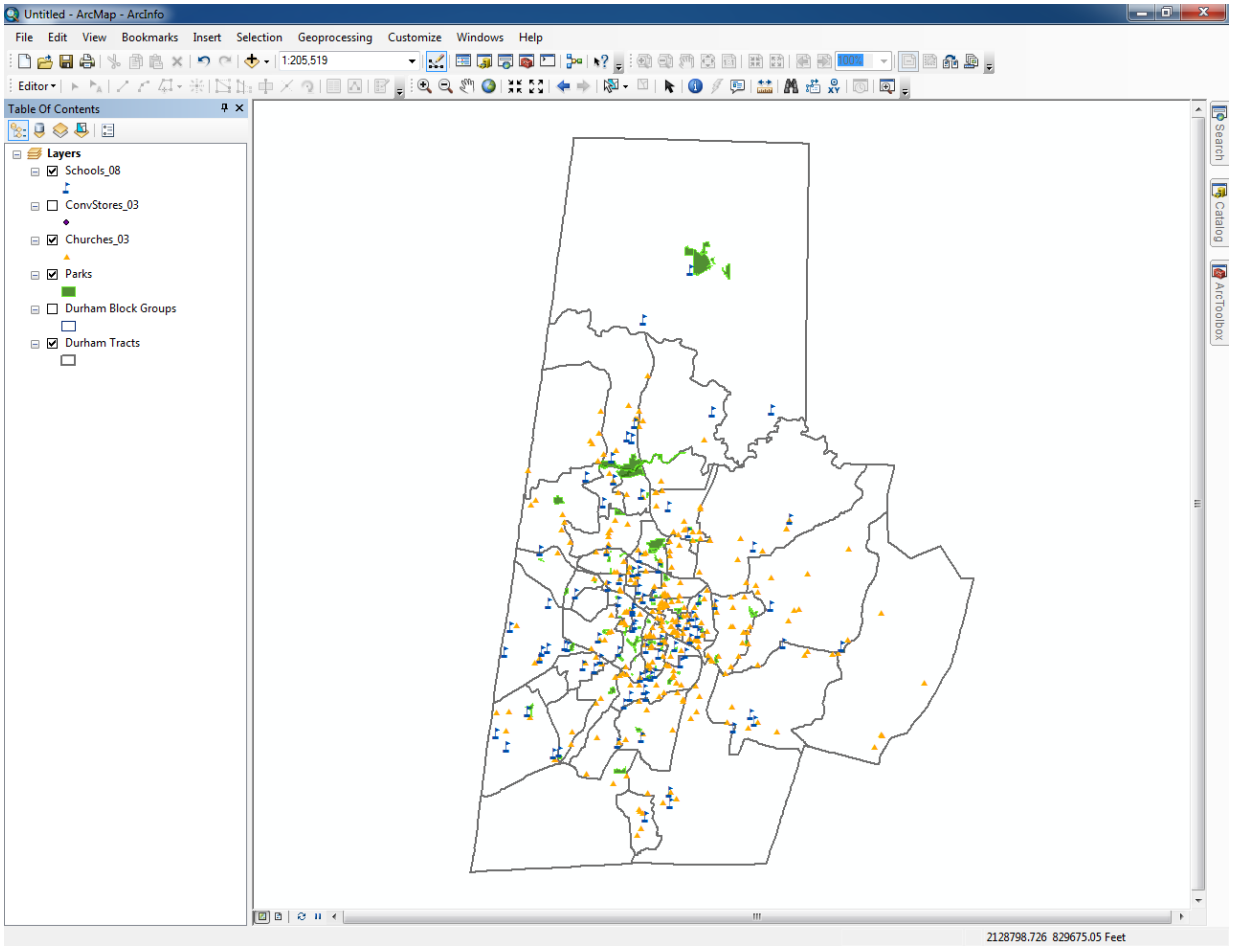
- Zoom in/out
- Pan across map
- Select features
- Identify objects
- Find objects
- Measure
- Create View Window

Layout View Tools

- Produce map products
- Multiple zoom functions
- Pan across layout

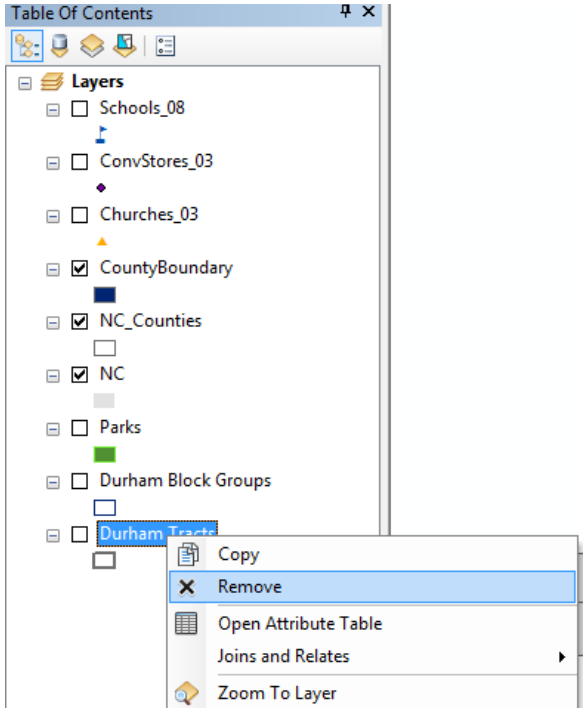
Layers, Data Frames and Maps

- **Data frames and layers are found in the Table of Contents (TOC).**



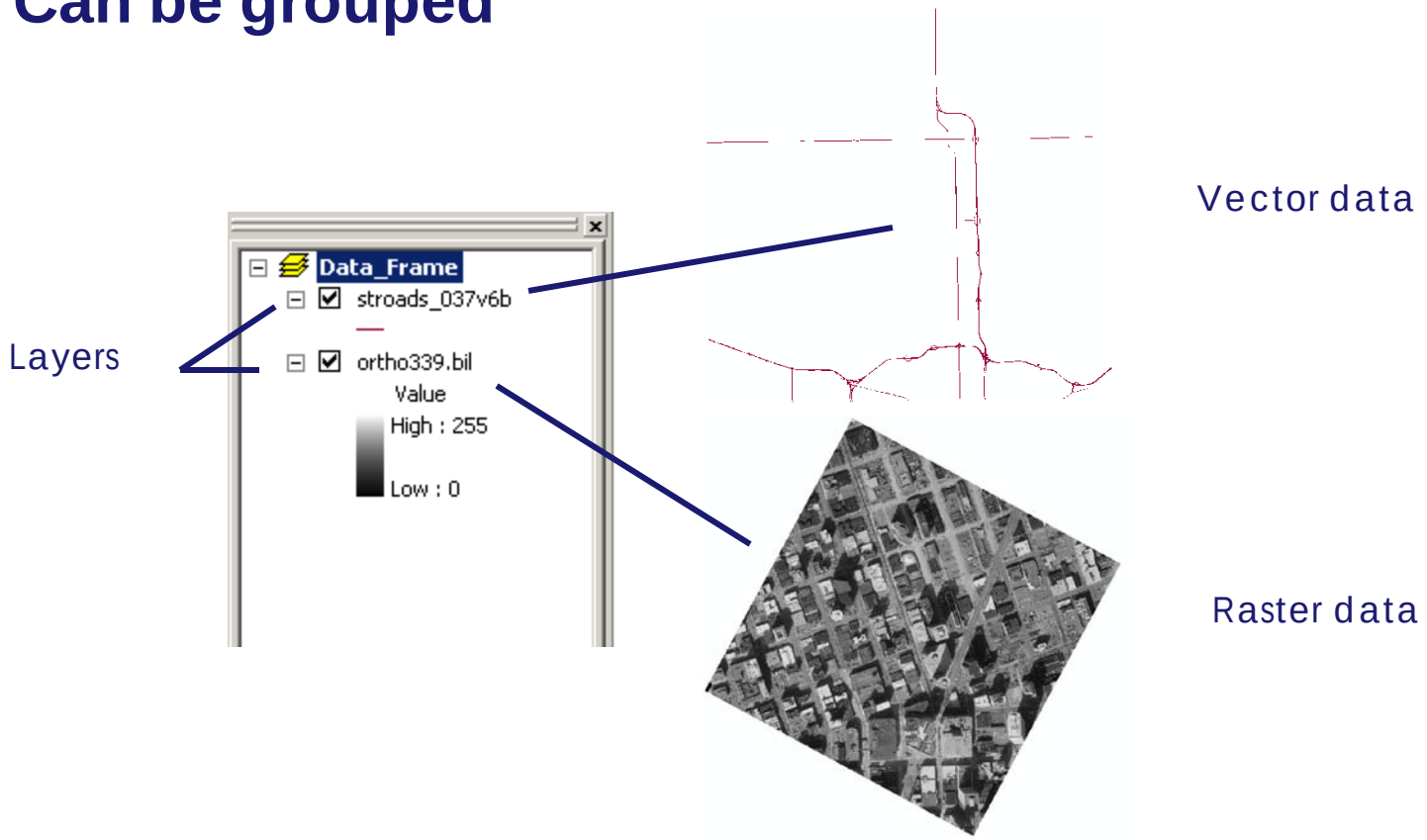
Managing the Table of Contents

- Table of contents (TOC) consists of data frames and layers
- Drag layers up or down to change display order
  - Layers draw in the TOC, bottom-up
- Remove or rename data frames
- Remove or rename layers
- Display, Source, Selection, Visibility tabs



Layers

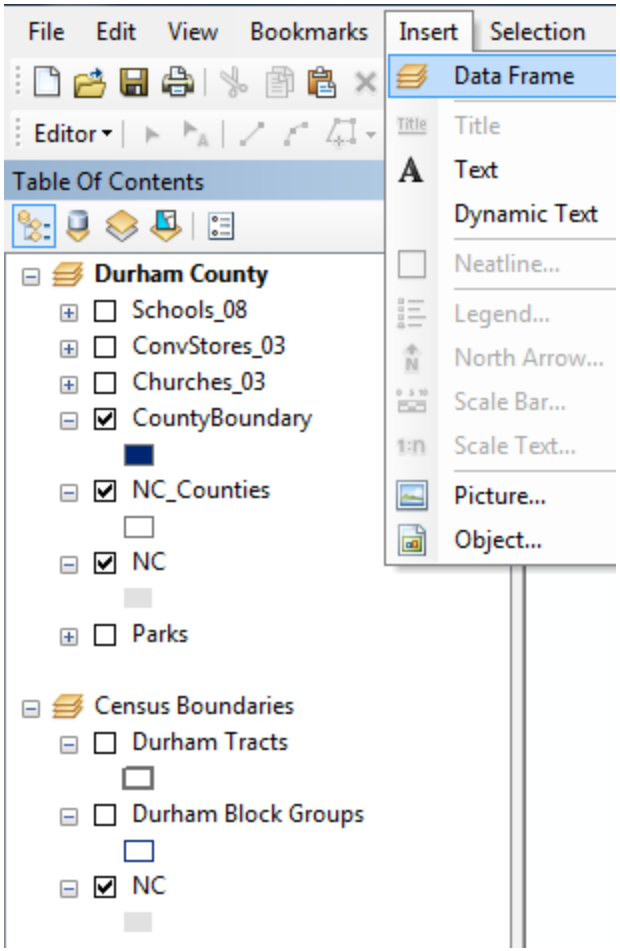
- Reference data sources
- Represent symbolized feature classes
- Can be grouped



Data Frames

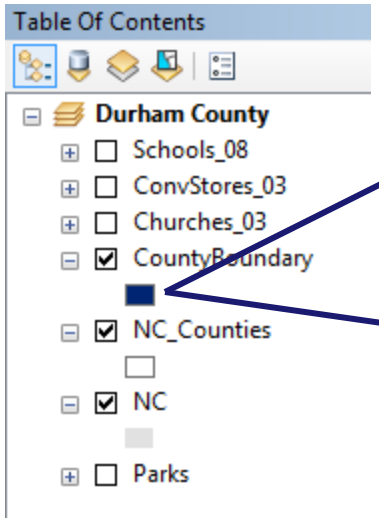
- Mechanism to organize layers
- Can have multiple data frames
- All data frames added in layout view

Data Frames

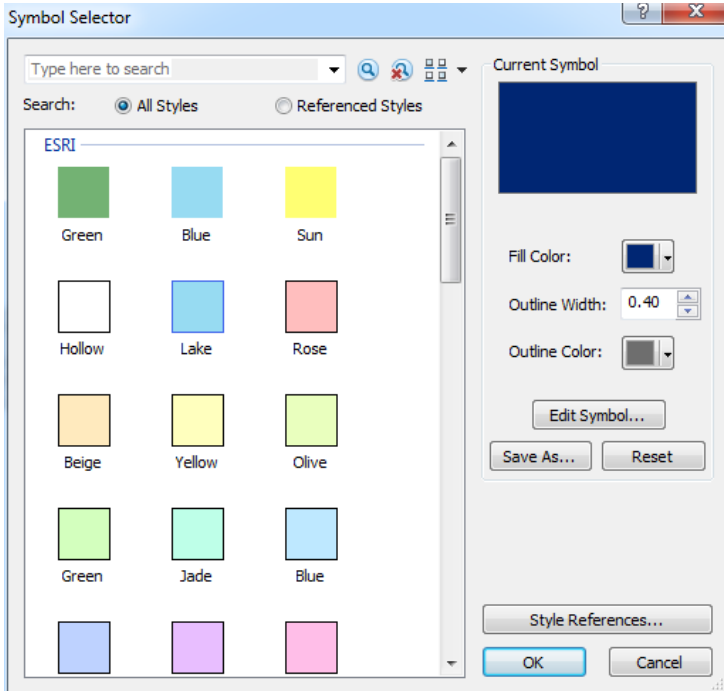


Changing Symbol Properties

- Use color or patterns
- Change fill or outline colors
- Modify outline width



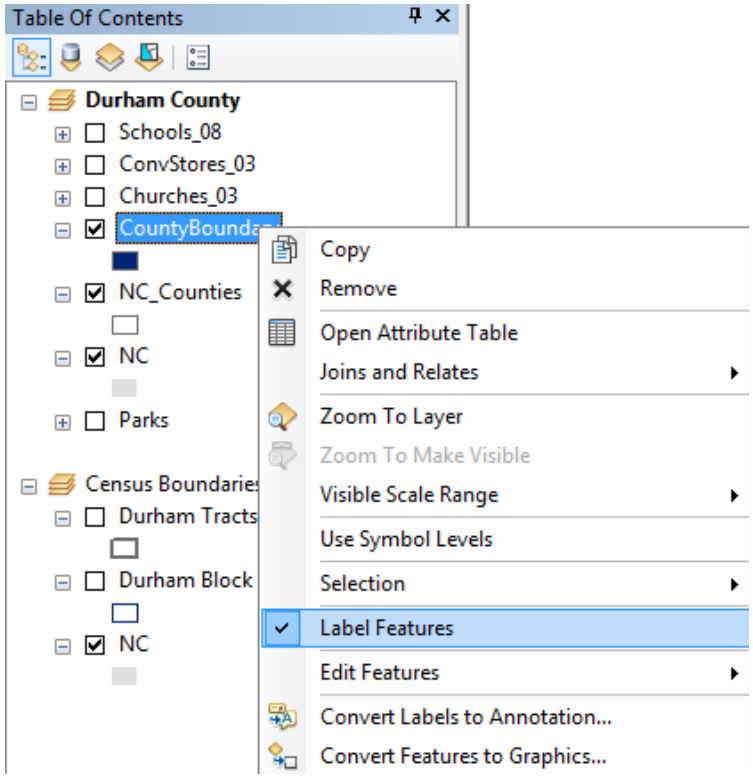
Left-click



Right-click

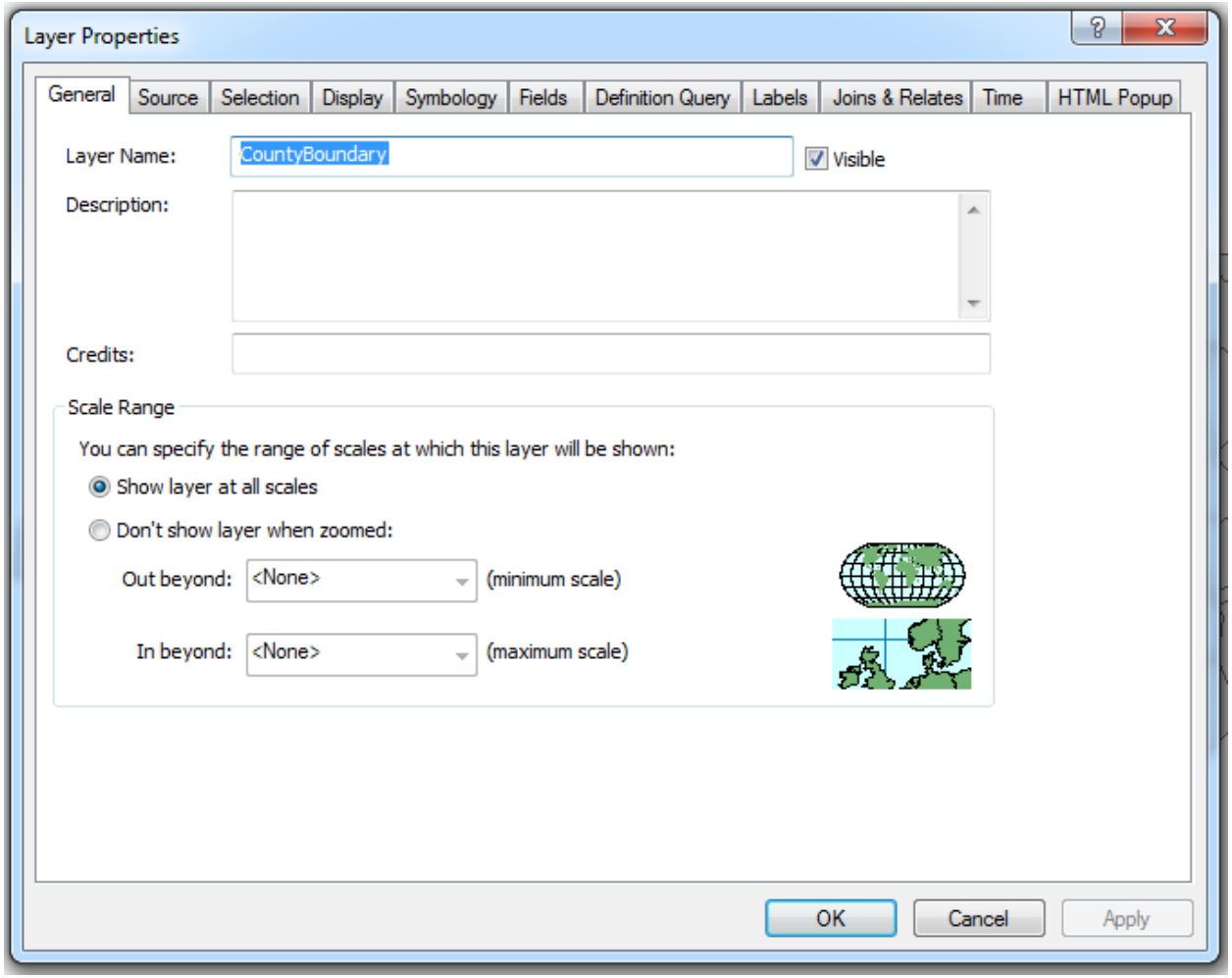
Labeling Features

- Adding text to a map
  - Layer properties
- Labels to annotation conversion
- Label symbology
  - Font, size, type, etc.
- Maplex (ArcView Extension)
  - Used for more control



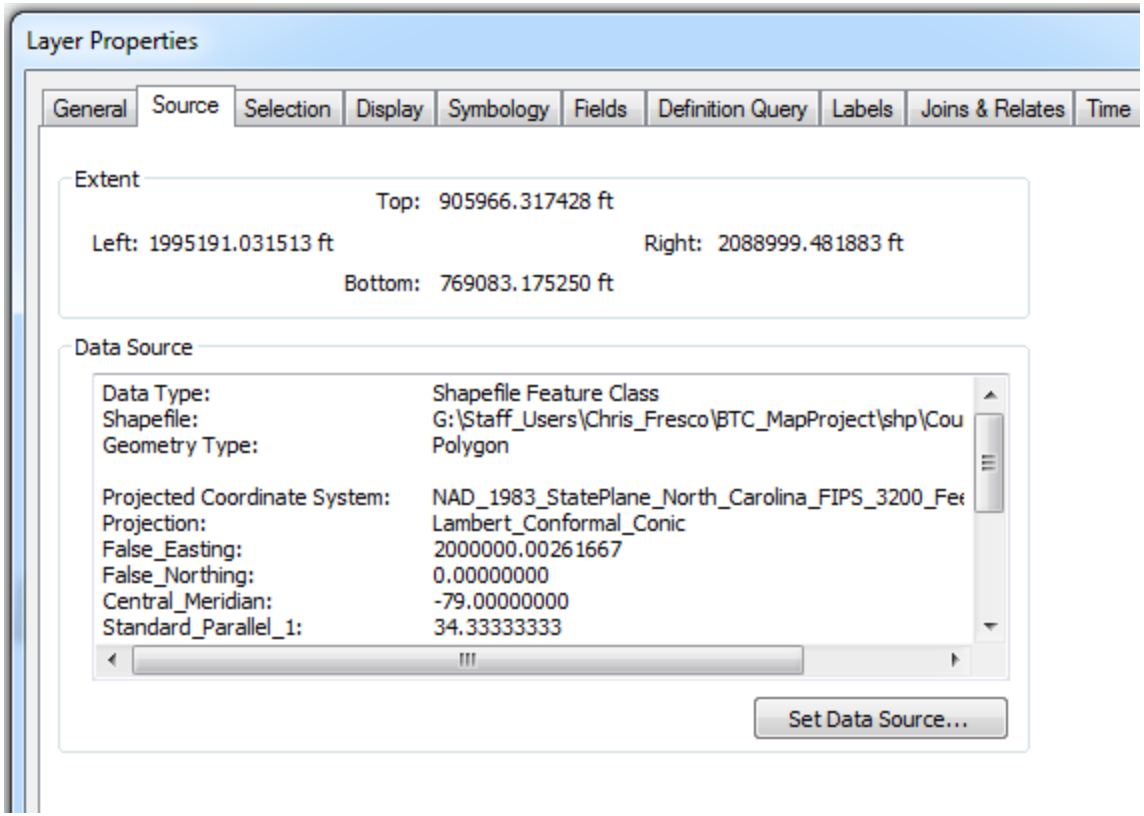
Layer Properties

- **Tabs and tools to control the selected layer**



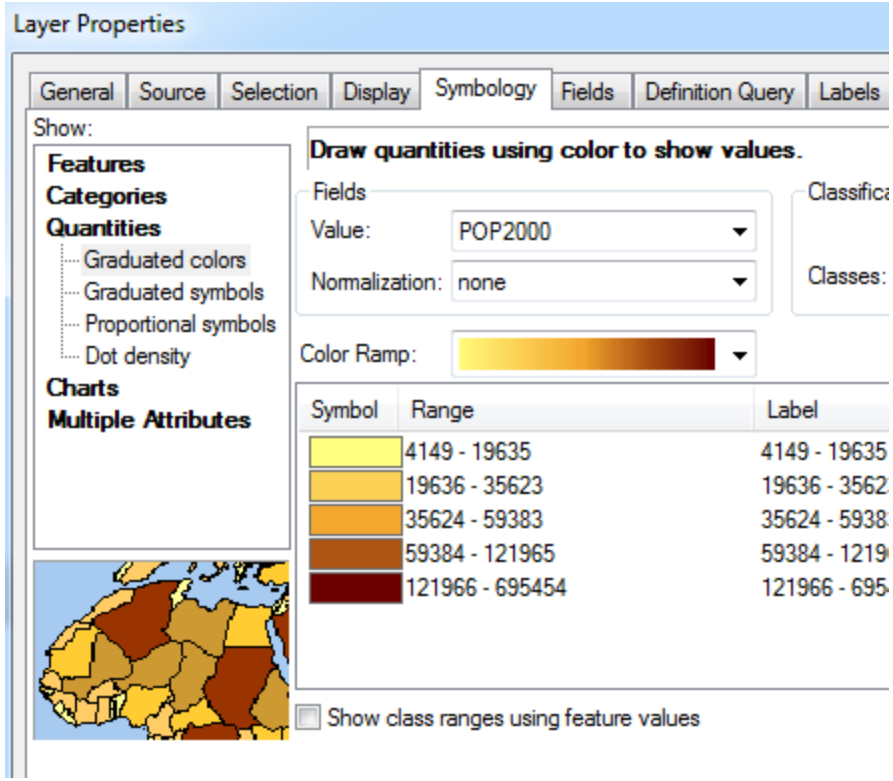
Data Source for a Layer

- Set or change the data source for a particular layer
- Setting data source for drawing errors



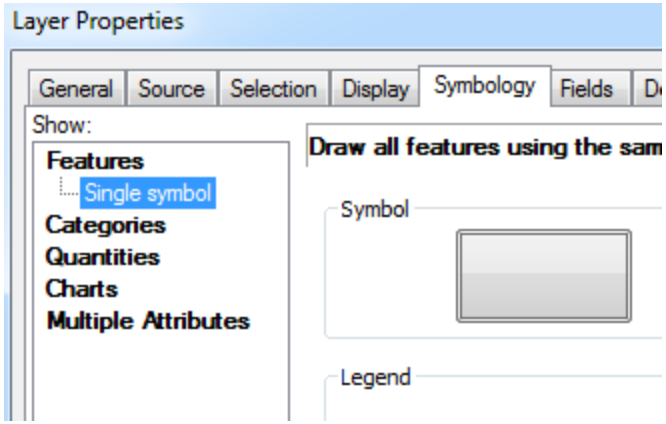
Layer Symbology

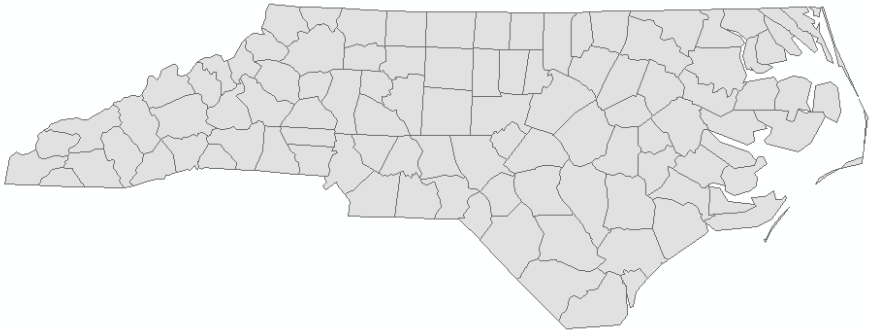
- Qualitative
  - Features
  - Categories
- Quantitative
  - Quantities
  - Multiple attributes



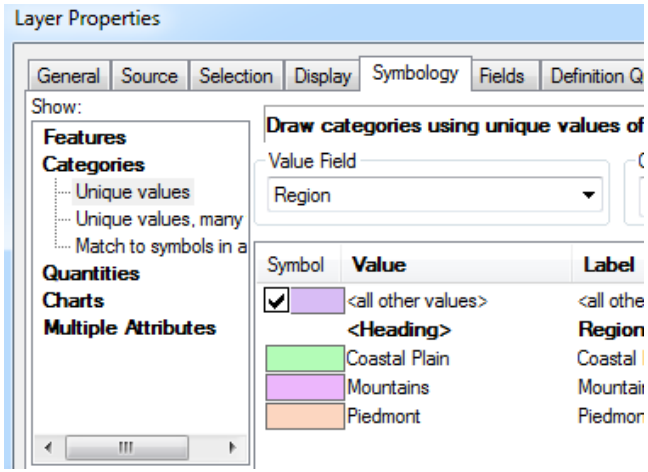
Qualitative Symbology

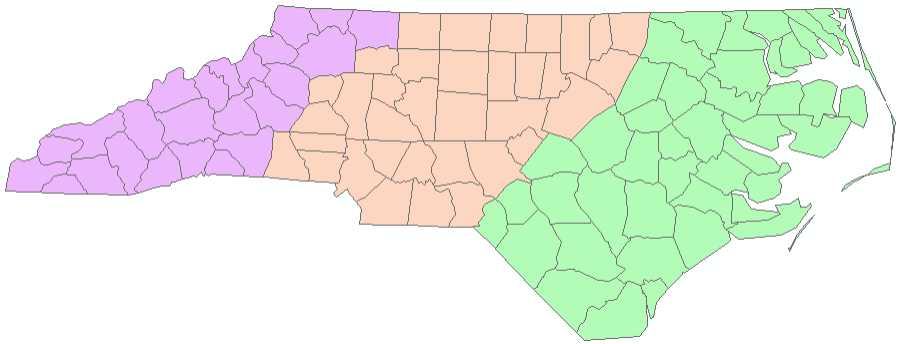
- **Single symbol**





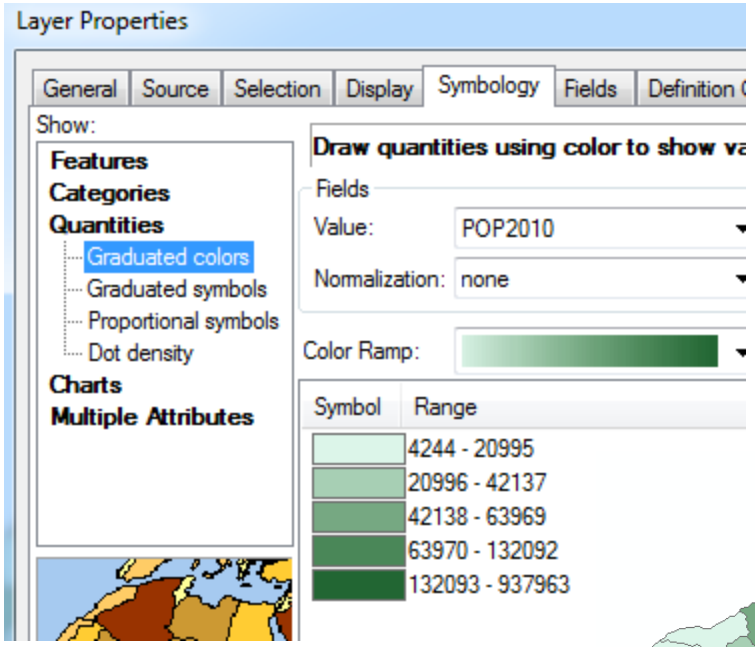
- **Multiple symbol**

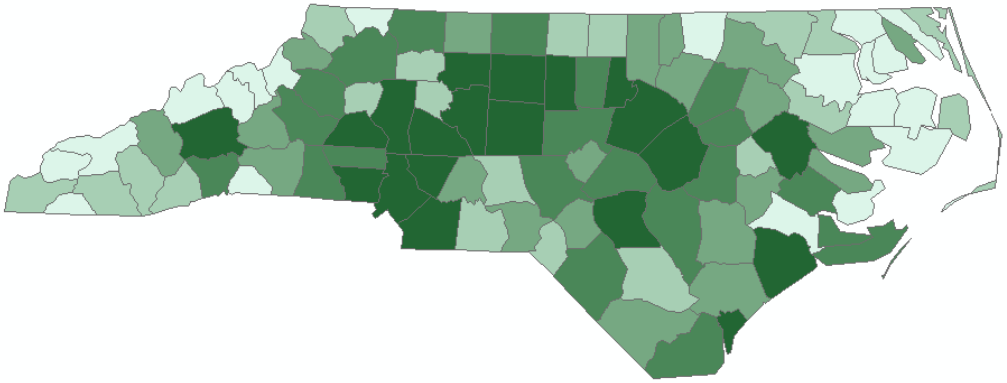




Quantitative Maps

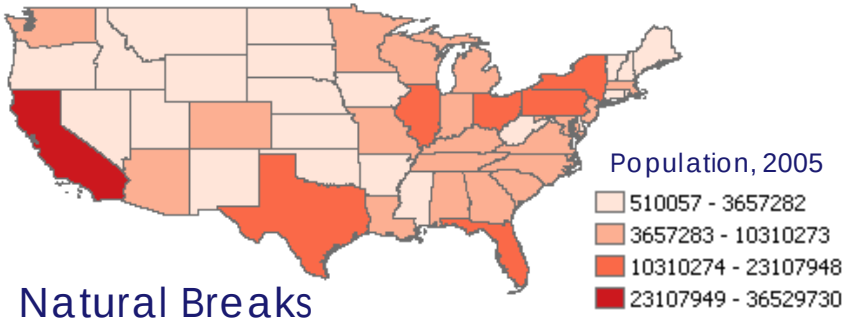
- **Graduated colors or proportional symbols**

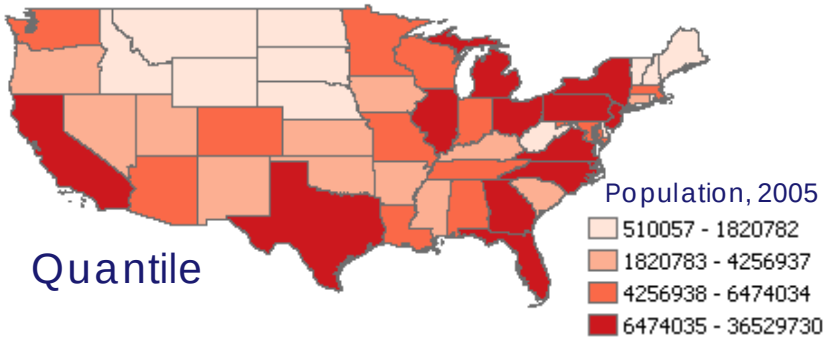


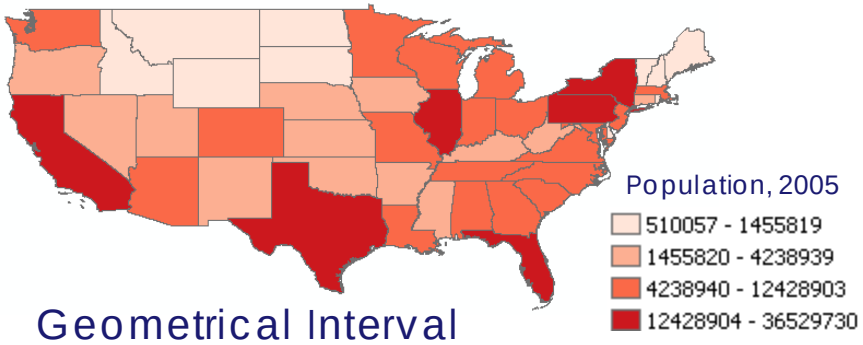


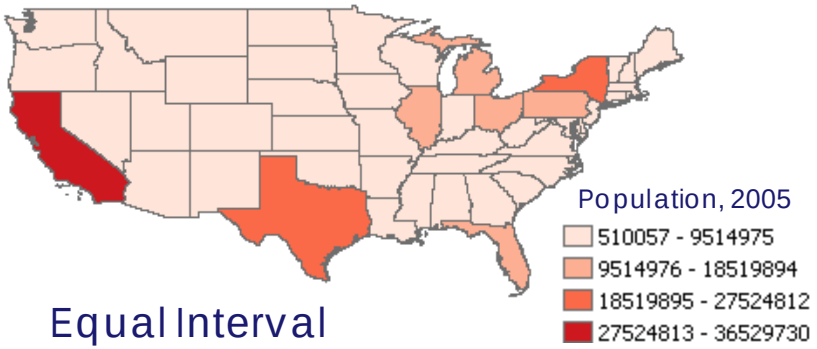
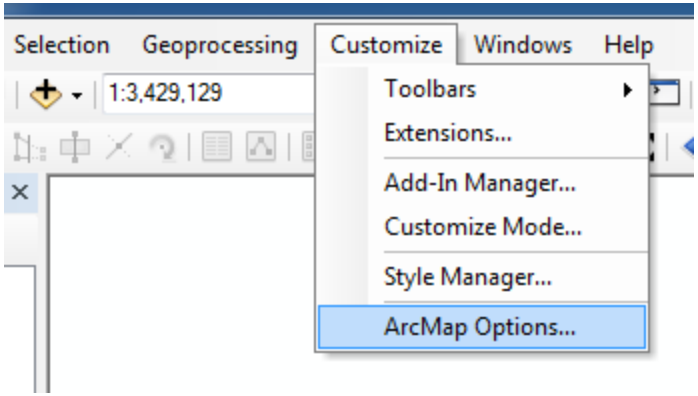
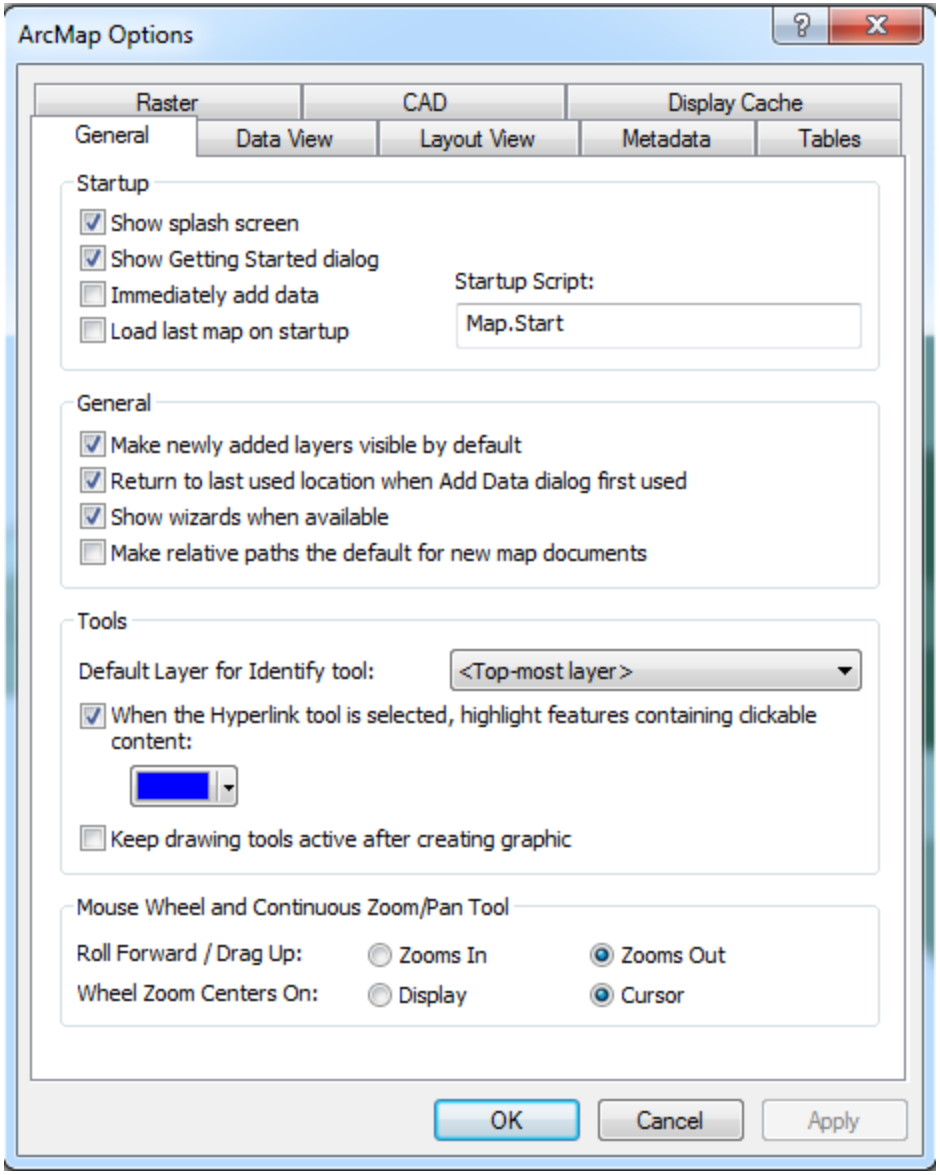
Classifying Data

- **Classifying will change the display of your data**









Setting ArcMap Options