



# Introduction to GIS: Exporting A Map Document

## The Map Document

- Cartographic Elements

## Navigating ArcMap

- Use Layout View To Arrange the Map Document
- Exporting To A File

This tutorial will build on your ArcMap skills and teach you how to use the Layout tools in ArcMap to turn your digital map on the screen into a finished map complete with standard cartographic elements which you can use in a paper, report, or website. Put your skills to the test and create a map from scratch and then export it to a PDF document.

Data for this tutorial are stored in the Data subfolder of the IntroToGIS folder, which you should have saved on your local machine. The file path referenced in this tutorial is assumed to be D:\IntroToGIS\Data.

## Create A Map From Scratch


1. Open ArcMap to a blank map. If ArcMap is already open, go to File > New and select Blank Map.
2. Use what you have learned from the previous tutorials to add a basemap and some data. Try to choose at least 2 layers of different types (e.g. lines and polygons). In the D:\IntroToGIS\Data folder, there are several geodatabases (Charleston, Clemson, Greenville, Tutorial) with many data sets to choose from. Explore the data and find a few data sets which interest you to use in your map.
3. Use the Symbol Selector and Layer Properties to change the symbology of the layers. Don't worry about making a useful or attractive map -- just have fun experimenting with the symbology tools!

Once you have created a map you are content with, we will add standard cartographic features, such as a title and legend, and then export the map into a usable form.

## Using Layout View To Arrange the Map Document

So far, we have only worked in the Data View, which provides a geographic window for exploring, displaying, and querying the data on your map. You work in real-world coordinates and measurements in data view.

In layout view, you work with the map layout elements, such as titles, north arrows, and scale bars, along with the data frame, all of which are arranged on a page. In layout view, you work primarily in page space (typically, inches or centimeters) except when you are interacting with a data frame in your layout.


1. Switch to the Layout View by clicking the button  on the bottom of the ArcMap window.

The view changes to show how the current data frame positioned on a Letter size sheet (8.5 x 11 in), the current default. Notice the rulers around the edge of the window and the Layout Toolbar, which are other visual clues that you are setting up a document.

2. Click on your map contents in the middle of the page. Notice that a dashed border and blue squares appear around the edges. You can use these blue squares to resize the map on the page.
3. Hover your mouse over a blue square and notice the cursor changes to a dual-headed arrow. Click on the blue square in a corner of your map and drag it to resize the map frame.



Figure 1. Notice the blue squares around the edges of the data frame. Use these to resize and reposition the data frame on the page.

4. Click on Insert > Title to add a title text box to the map. Double click in the text box and rename your map something like (My name)'s First GIS Map. Click the Change Symbol button and change the font size to 36. Click OK and OK to close the title properties.
5. Click Insert > North Arrow. Scroll through the options and select one to your liking. Click OK to add it to the map.
6. Click Insert > Legend to open the Legend wizard. The first dialog shows you all the available layers in your map document on the left side, and allows you to choose the items which will display in your legend, which comprise the list under Legend Items. You don't need the basemap in the legend, for instance, so let's remove those items.
7. One by one, select each items associated with your basemap and click the  arrow to remove it from the list. (Notice the option to select the number of columns in your legend, but keep the default (1)). Click Next.
8. In the next window, you can rename your legend and set the font properties, justification, etc. Accept the defaults and click Next.
9. The next window allows you to set up a border and background to your legend. Because my example map has very dark colors, I will set up a border and background. Click the dropdown under Border and select 1.0 point, and select White for the background.
10. The next window lets you modify the symbol used in the legend for each of your layers. We will accept the defaults and click Next.
11. The next window lets you modify the spacing between elements in the legend. We will accept the defaults and click Finish to add the legend to the map.
12. Reposition the title, legend, and north arrow to your liking.

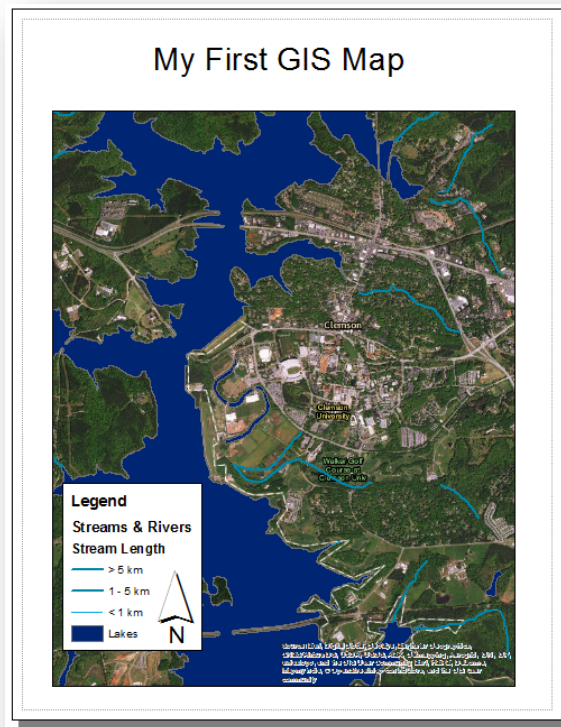


Figure 2. The finished map, ready for export, has a title, north arrow, and legend.

13. Click File > Export Map to open the export dialog. Navigate to D:\IntroToGIS and set the Save as Type to PDF. Name the map (MyName)'s\_First\_Map.pdf and click Save.

Congratulations, you made your first map! You have also completed the Introduction to GIS workshop! You are now familiar with many of the tools and features ArcMap offers you for creating maps of geospatial data, customizing the symbols to represent attributes, navigating through the ArcMap interface, and creating a map suitable for use in a report or presentation!