Project GIS 2

Due Date: March 1

Purpose
The objective of this project is to ease you into building maps in ArcMap. To build the appropriate map and database, you will download several TIGER maps. You will also use many ArcMap features to answer questions about the area around Norton.

Problem Instructions

- Go to:

  www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html

  Read about TIGER/Line shapefiles. Then under **Download**, click on `Web interface`.

- You can now download appropriate map data from the 2010 census, in zip format. You will need data for Massachusetts, including:

  - The county that Norton is in
  - All roads in the county
  - Places
  - Point and Area Landmarks
  - All Roads
  - Military Installations
  - Linear (rivers) and Area (lakes, ponds) Water

  Save all of these files in **one** folder. This will make it much more convenient for subsequent operations.

- Unzip all of the files and store them all in the folder (depending on how you unzip, you may get another set of folders; that's OK, but everything should still be in the original folder).

- In ArcMap, add the folder you created above to the catalog.

- Create a map with all of the items listed above for Norton's county, MA. Note that one or more items may overlap with other counties in MA. Be sure the layers are such that the user can see all of them. Make the layer colors appropriate to their function (the defaults are not usually the best choice).

- Create a Word (or similar) document, called *yourLastName*`.doc` or `.docx`. In this document, answer the following questions:

  1. How many lakes/ponds are registered in the county?
  2. What is the area of Peacock Pond?
  3. What is the average area of water bodies in the county?
  4. What is the **exact** location of Peacock Pond (latitude/longitude)?
  5. The streams/water behind Haas flow into which river?

6. What is the largest area landmark?

7. What is the third largest area landmark?

8. What is the name of State Highway 24 (Rt. 24)?

9. In miles, how long is Rt. 24 within the county?

10. What is unusual about the smallest area landmark? What is it?

11. What is the point landmark that is closest to Wheaton College?

12. What is the southernmost point landmark in the county?

13. Why is the shape of the state of MA so strange? Explain.

14. What is the area of Attleboro?

15. How many military installations are in the state?

16. How many military installations are in the county?

17. What is the largest military installation in the state?

18. In which county is the largest military installation?

- Save all of your maps in a file called *yourLastName*GIS2.mxd.

Submitting

Email your completed map (the mxd file) and your Word document to me at mgousie@wheatonma.edu before midnight on the due date. Hand in a printed copy of the Word document in class on Friday, March 2. Include a signed Honor Code statement on this copy.