Project GIS 5

Due Date: May 4

Purpose

This is more open-ended than previous projects, and will give you a chance to be more creative. The theme of the project is to pull together data from different sources to answer one or more questions. To complete this you will need to look at multiple maps, do spatial joins, and use much of the functionality of ArcMap to produce a nice visualization(s) of the result(s). The goal is to write a *green paper* (look it up!) that states your particular concern and shows data that supports your position on the issue.

This project is worth 8% of your grade, the same as projects one through three.

Problem

The "problem" is **up to you**! Peruse the data available on the `nationalatlas.gov` Web site. There are map layers available for a large variety of uses, such as hazardous waste, crime, infrastructure, climate, etc. Come up with a question/position about one or more of these topics; for example: "Have the number and intensity of tornadoes increased over time?" Then set about manipulating the data set(s) to create maps that clearly answer the question or support your position.

Data

You should download one or more layers of data from `nationalatlas.org`. Everything is fair game *except* for the election results that we have already looked at. If you need *additional* information, let me know beforehand from where you plan to download such data.

Specifics

You are to write a short green paper regarding a topic of your choosing. The paper needs to be only 2-3 pages (or longer, if necessary), but, more importantly, should include maps that support your position. Additionally:

- The paper should clearly state the problem or your position on some topic.

- One or (probably) more maps should support your position.

- The text of the paper should refer to the maps and clearly explain *how* the maps support your position.

- The map(s) *must* contain at least one spatial join.

- The map(s) should use multiple methods of displaying information, not just using colors. For example, you might use pie charts, dot density maps, pin maps, etc.

- Grading will be based on how well you answered your question or otherwise proved your point, the thoroughness of your map(s), the neatness of the report, and **the amount of effort put into creating the maps; that is, the number of ArcMap features used** *properly* **to support your argument.**

Submitting

Email your completed map images (`tif` files), your word-processed document, your shape files, and a list of the map layers you used to me at `mgousie@wheatonma.edu` before midnight on the due date. **Be sure that all of the file names include your last name** and GIS5. No need to hand in a hard copy of this project, although if you could print out a color version, that would be appreciated.