GIS Final Project Components

Presentation date: Tue 9 MAY 2017 @ 6:00- 9:00pm

- 1. **Compelling inquiry question** that you find relevant (to work, life, society, etc.) and interesting (e.g. Why do the state crash data suggest that more accidents actually occur on side streets rather than main arteries?)
- 2. **Working theory** about what you think is going on in the world . (e.g. more bike crashes occur on side roads because there are more obstructions to the sight of bikes by cars)
- 3. A defined **study area** with contextual data visualized in that area with data from the US Census and the American Community Survey. Choose a few ACS estimates that are relevant (occupation by industry, unemp. rate, etc.)
- 4. **Assembled data sets that speak to your inquiry.** If you have a *super duper source*, then a single data set is great. You may need a few different sets to throughly investigate your question. ('assembled' means cleaned, vetted, and loaded into a map and visualized in a rudimentary way)
- 5. **Visualization of a few analysis techniques** using your data which shed light on your inquiry question. (e.g. Buffer analysis with color-coded results; Spatial joins that involve doing some math on the combined features, etc.)
- 6. A **neat and tidy project directory** that includes:
 - a) A map file (.mxd) with only useful layers remaining, and the layers have logical names and symbol labels
 - b) A file geodatabase with all relevant data that is organized with descriptive filenames
 - c) A **work log** with detail sufficient to continue work on the project a year from now without tearing your hair out
- 7. **Some kind of written discussion of what your data say about the inquiry question.** This could be annotations on a map/poster, an online story map, or a formal paper. This component should reveal some solid thought flowing from spatial investigations. Feel free to raise more questions and—please--be completely straightforward about what conclusions cannot be drawn from the data. We aren't doing controlled trials or statistical analysis so drawing causal links will likely be hard. This doesn't have to be long, just thoughtful.
- 8. Some kind of **online display of the data**, using either ESRI online or CartoDB, etc.
- 9. A discussion of the core skills you developed while working on this project and some reflecting on how you worked through any challenges you encountered. Your audience is future GIS students! Once again—a paragraph is fine.
- 10. **Source notes/annotations** for your data and a few background sources. Please address what the licenses are on the data you used (for others who might want to use your data, too). Also, please list a few **secondary sources** (reports, articles, etc.) that discuss your topic and a sentence or two about why anybody would want to read that source.
- 11. **A prepared way to share your project and findings with the class**. Please avoid a slide deck at all costs (i.e. a PowerPoint). Bring some questions to discuss. Have your web product ready. Plan on 20 mins ish (discussion included).