

# ps4: using gis tools

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due in 2 weeks: 4/5

1. use at least **5 different tools** from advQ.pdf (say geocode, spatial join, dissolve, SQL, and centroids) or some tool we did not cover. By tools I mean tools found under menus: Vector, Raster, Processing. (From MMQGIS: Spatial Join and Geocode qualify as well). Also some Plugins would qualify as a “tool” (Basemap like OSM map won't qualify). Ask if in doubt. The idea is that you use some gis processing, that is, you'll transform data in some way or produce some new data.
2. prove (typically with maps) that you have used the tool—say show a map with original and dissolved polygons; a map showing counties that satisfy some sql query and original map; or say produce a csv of places that lie within a mile from a hwy, etc

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general notes (binding from ps1) and progressively more important in later ps: focus on making the map(s) interesting and pretty; tell a story; answer the 'so what?' question (see below for elaboration)

general notes (**always the same**):

always submit:

- the maps(s) (pdf), can be combined in one file with “metadata” and “journal”
- all data: raw gis data (e.g. .shp .dbf and .shx and others if any), and any other data (e.g., .csv, .xls) that you used to produce a map
- “metadata” (pdf or txt) containing at least: what is U/A; # of obs; data source name, including url; can combine with “journal” if you like
- “journal” (pdf or txt) that briefly enumerates (and perhaps explains) steps you've taken, any problems you've encountered; also can use it to ask questions!

general ideas:

- the map needs to be “pretty” (syllabus: pretty.pdf): must have legend, title, cut decimal points, make fonts small, etc)
- the map must be “interesting” (syllabus: pretty.pdf, final\_project.pdf): ask yourself the “so what?” question; essentially, you need to tell a story with your map
- in addition to submission, you will usually (depending on how we do on time) present the map in class (max 5-7min (depending on class size); i will cut you off!)

tips:

- start early; start tomorrow or the day after tomorrow or tonight! otherwise you'll forget it...and then, next week polish it
- use your (gis) data—again, if you do not have dataset, have a look at data\_sources.csv from the class, or email me
- you cannot use the data I used in the class (or that I am using in the slides posted on the website for the future classes)
- assignments are due by the beginning of the class in Sakai's dropbox
- the only allowed format for output is pdf and txt (no ms word etc)
- if you choose to work in a group, write down the names of people you worked with; otherwise we'll subtract points
- do not use exclusively variables from datasets that i have done in class
- that is, you cannot just submit something that i have done in class

basics:

- for big files (that do not fit into email) use something like wordpress or dropbox and give us the link
- do not double-zip (zipped file in a zipped file)
- per url's give exact addresses, not just generic (e.g. <http://census.gov>)- i must be able to find it; sometimes there is no generic URL—then give steps: what I need to click