# ps4: using gis tools

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### due in 2 weeks (fall2019 due to one class missed: due in 3 weeks)

- 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

## general notes (always the same):

#### broad idea:

- it will be cumulative: ps will accumulate into a final project
- it will be also collaborative: you will see what others are doing

#### submission guidelines:

- note! extra credit! submit in your wikipage at https://maps-dppa.camden.rutgers.edu usr: gis, psswd: ilovegis, if off-campus vpn first https://wiki.td.rutgers.edu/wiki/Category:VPN or in Sakai's Resources folder: must be in pdf, you will just have one pdf, and then keep on adding to it; whether wiki or sakai: don't delete what you have already submitted—for each subsequent ps, just add a new section with section titled ps1, ps2, etc; in fact i don't care where you post it! can be google drive, facebook, instagram, whatever! NOTE: put in on wiki early and send email to listery with the link to your submission and ask for comments and ask any questions—the surest way to get the ps right!
- just email me (unless it's our wiki or sakai and your name is on it) where your stuff is located so i can find it and grade it! say: https://maps-dppa.camden.rutgers.edu/index.php/Affordable\_Housing\_in\_Philadelphia or Sakai/Resources/ineqalityInBostwanaCounties.pdf
- each ps section will have a map (make it big with nice resolution, but not too big, say each map should be at least half-page if not much detail or full page if detailed and <1mb) and brief description of a map, say few sentences; also list any problems you've encountered and can ask questions!
- exact links to all of the source data (so that i could create the map myself); note: exact links, eg do not say census.gov, but give full url to the data—i must be able o find it; sometimes there is no generic URL—then give steps: what I need to click to get the data!; or upload data say to your dropbox or google drive and provide link to there; so there must be all 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; in rare circumstances if you use confidential/private data that cannot be shared, please contact me (and still do provide links to all the other data you're using)
- in Sakai's Resources folder I will have one text file with comments on your ps
- in addition to submission, you will usually (be ready every class! depending on how we do on time) present the map in class-can just show map(s) (max 4-8min (depending on class size): i will cut you off!

to reiterate, for each ps the following must be always submitted as an added section to the same pdf file:

- the maps(s) with short description and problems and questions
- very specific links to all data
- and prepare for presentation

as soon as possible (and definitely once we cover pretty.pdf, final\_project.pdf) :

- 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 as story with your map

#### 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)
- $\bullet \;$  assignments are due by the beginning of the class
- if you choose to work in a group, write down the names of people you worked with; otherwise i'll subtract points