SOC 4650/5650: PS-01 - Opportunity Zones in the City of St. Louis

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Directions

Using data from the `data/ps-01` subdirectory available in the `lecture-04` repository, create several maps using ArcGIS Pro. Your entire project folder system should be uploaded to GitHub by Monday, February 18th at 4:15pm.

Part 1: Analysis Development (Review from Lectures 01 and 02)

The goal of this section is to create a self contained project directory with all of the data, code, map documents, results, and documentation a project needs.

Download Data

a. **Clone** the `lecture-04` repository from GitHub using GitHub Desktop.[1]

Create a Project Folder System (Review)

b. Open ArcGIS Pro and choose `Map` under `New project`. Name the project `Lab-03`, un-check the option to create a new folder, and and select the `ProblemSets/PS-01` subdirectory of your assignment's repository.

c. Reduce ArcGIS Pro for a moment. On the Windows File Explorer app, add new folders named `data/` and `results/` to the project directory.

d. Drag tthe lab data from `lecture-04/data/ps-01/` into your ArcGIS Project's `data/` subdirectory. Verify using ArcGIS Pro that all of these data are accessible from within your project.

Part 1: Create a Map of Opportunity Zone Tracts in St. Louis

The goal of this section is to be able to create a reference map that shows census tracts *proposed* to be opportunity zones (and thus avail-

[1] If you are not sure where your GitHub Desktop data has download to on the computer, you can right click on the repo's entry in GitHub Desktop and have it take you to the repo in Windows File Explorer. By default, this should be within your `Documents/` directory.

able for a particular set of economic development incentives) and those that were actually designated as opportunity zone tracts.

You will have add the opportunity zone data twice to your Contents and execute queries on each layer. The layer for proposed tracts will have to be queried using the ELIGIBLE variable, selection tracts where ELIGIBLE is equal to TRUE. The layer for designated tracts will have to be queried using the CREATED variable, selection tracts where CREATED is equal to TRUE.

Feel free to pick an appropriate basemap of your choice, and layer the map so that the proposed tracts are *under* the designated tracts. Pay particular attention to how you symbolize both layers.

Part 2: Create a Demographic Map

The goal of this section is to create a demographic counterpart to your opportunity zone map. This should be created in a new map associated with your project. Feel free to select either the race or the poverty data. If you select the race data, map the proportion of African Americans living in each census tract. If you select poverty, map the proportion of individuals living below the poverty line. *Both variables are already normalized because they are proportions.* Use the same basemap you used in Part 1.

Part 3: Create a Map Layout

The goal of this section is the produce a single map layout that contains both your economic development map and your demographic map. Be sure to add other layout elements (scale bar, legend, title, etc.) as you see fit. Export the map layout as a pdf file at 500 dpi to your project's results/ subdirectory.