

SOC 4650/5650: Lab 3-3 - St. Louis County Council Districts

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Directions

Using data accessed from the module-3-dissolve repository, create the maps below related to the boundaries of St. Louis County Council Districts. Your entire project folder system, including data and ArcGIS Pro output, should be uploaded to GitHub by **Monday, March 28th** at 4:15pm.

Analysis Development

The goal of this section is to create a self contained project directory with all of the data, map documents, results, and documentation a project needs. Please ensure **all** required elements are present. You will need both shapefiles included in the data/lab-data/ subfolder in the module-3-dissolve repository.

Part 1: Data Preparation

The goal of this section is combine two separate shapefiles of St. Louis County Council precincts, dissolve these precincts into districts, and then remove any holes created by the dissolve process. Using ArcGIS Pro, complete the following steps:

1. Make sure your data are properly projected in the same, appropriate coordinate system.
2. Merge the newly cleaned unincorporated precinct data with the pre-existing incorporated precinct data. You may have to align or drop columns that have conflicts with each other. For the purposes of this assignment, the goal is to successfully merge the features themselves.
3. Dissolve precincts into the seven County Council Districts. Preview these data to see if they contain holes as a result of the dissolve process.

4. If needed, remove holes from the dissolved data and then preview them again to ensure they display correctly.
5. Calculate the centroid for Council District 3 and then calculate a buffer of 1,000 meters around it. Preview this change to make sure it appears correctly.
6. Produce a simple map that shows the merged data, the centroid point, and its buffer and export it from ArcGIS Pro.