Introduction to Geographic Information Science
Lab 11

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Directions

Once you are done, submit copies of all requested maps, the Stata do-files, and the Stata log files in a single .zip file. This should be submitted by Wednesday, March 2nd at 4:20pm.

1 Cleaning and Mapping National Stroke Rate Data

1. Using a well organized and annotated set of do-files in Stata, clean and merge the stroke data with the list of county FIPS codes provided. These do-files should be called by a master do-file. Make sure to replace all values of '-1.0' (missing) with Stata missing data values (a period).

2. Use the following code- `generate geoid = string(FIPSCode, "%05.0f")` to generate a version of the FIPS Code variable that contains a leading zero. After running this command, use the data browser to get a sense of the difference between `geoid` and `FIPSCode`.

3. Drop the variable `_merge`.

4. Export the remaining data as an Excel file.

5. In ArcMap, join the stroke data with the county feature class found in the `United States.gdb` geodatabase. Once you have verified that the join worked correctly, create a new feature class. Use this feature class for the rest of the assignment.

6. Create a well formatted and designed choropleth map showing county-level stroke rates for the United States. Use inset maps for Alaska and Hawaii. Include Canada and Mexico as ground layers. Be sure to use the appropriate projections for the main map and inset maps. Export this map as a `.pdf` file at 300dpi.

7. Using the selection tools in ArcGIS, create a well formatted and designed choropleth map of the State of Missouri's stroke rates. Include surrounding state boundaries as ground layers. Be sure to use the appropriate projections for the map. Export this map as a `.pdf` file at 300dpi.