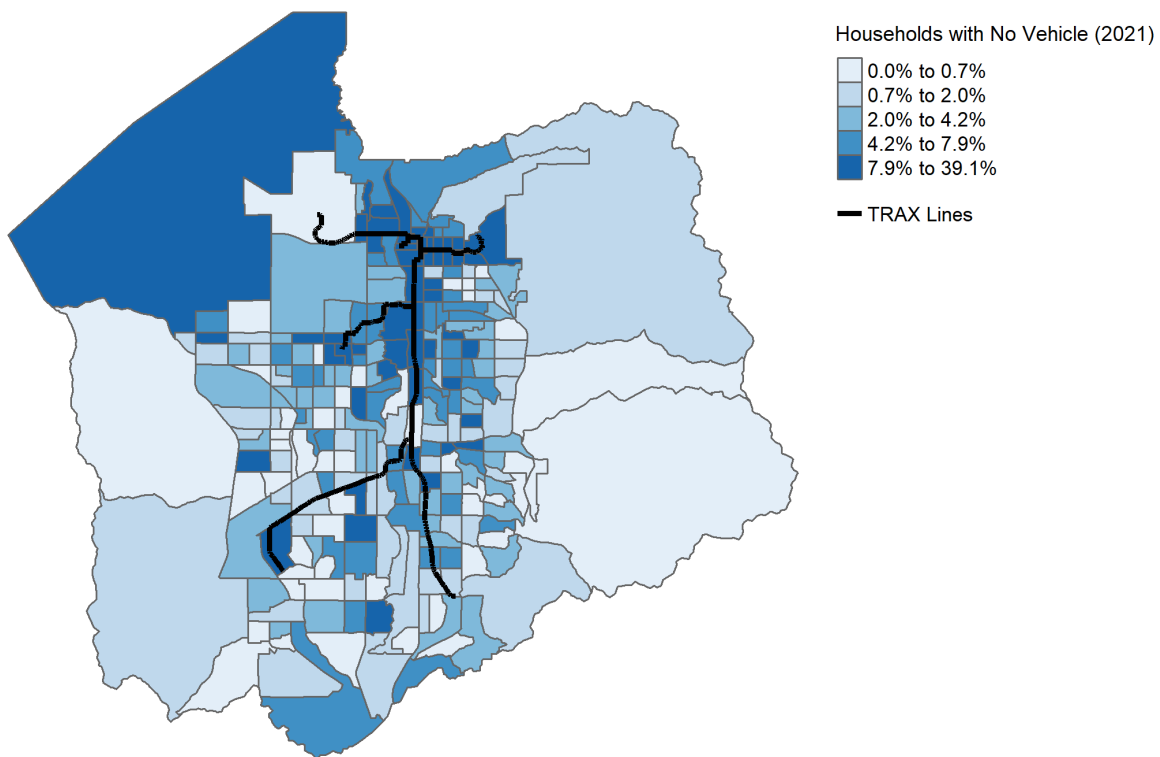


Daniel Ritter
GEOG 6165
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Week 4 Exercise: Color Theory

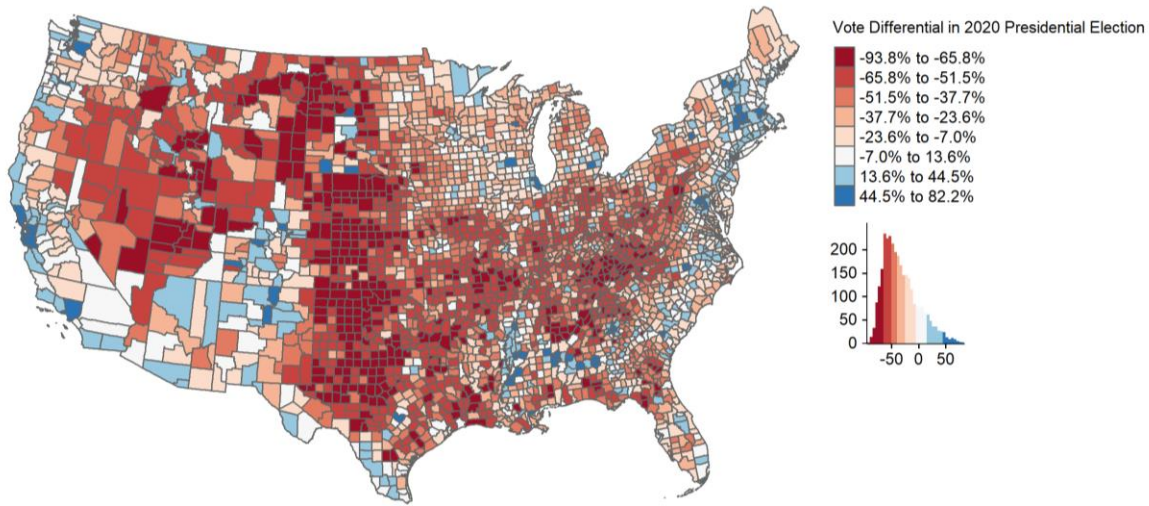
All code used is contained in the *GEOG6165_ColorTheory_DanielRitter.R* file and all data used is contained in the *Data* folder.

Sequential Map



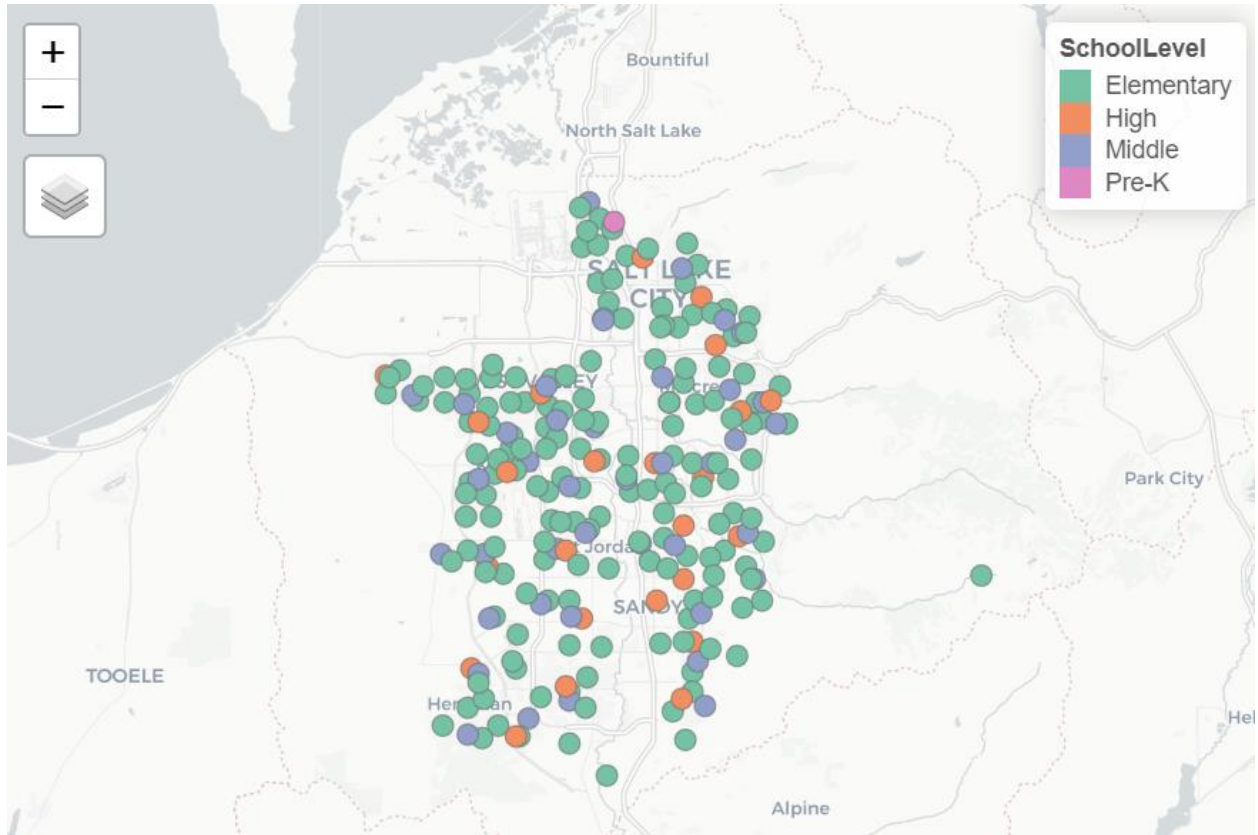
This map depicts the percentage of local households that do not own a vehicle. The enumeration unit is Census tracts in Salt Lake County and the underlying data comes from the American Community Survey 5-Year Estimates (2017-2021). UTA's light rail routes are overlaid on the map to provide geographic context and hint at a potential relationship between the presence of transit and vehicle ownership. I used the quantile method for class breaks and chose a blue color palette where darker colors indicate more non-vehicle-owning households.

Diverging Map



This map depicts the difference in vote share between the Republican and Democrat parties in the 2020 presidential election. The enumeration unit is counties and the underlying data comes from the MIT Election + Data Science Lab. The values represent the difference between the percentage of Democratic votes and the percentage of Republican votes. A -45% value, for instance, means the Republican vote share was 45 percentage points higher than the Democratic vote share. I used the Fisher method (which is similar to Jenks but faster for large datasets) to determine class breaks since there is significant variation across the United States.

Qualitative Map



This map depicts public schools in Salt Lake County by their grade level. The underlying data comes from the Utah Geospatial Resource Center. There are noticeably more public elementary schools in the county, including one in Little Cottonwood Canyon. I used a lighter color scheme because the darker color scheme looked harsh with so many values. The HTML map is included in my submission. Rather than creating a Leaflet widget, I exported it directly from the RStudio viewer because it doesn't require a folder with miscellaneous files, just the HTML file.