DATA 608 Final Project Write-Up
CUNY, Fall 2020
Author: Philip Tanofsky
Date: December 9, 2020

The interactive visualization offers a view of the underlying socioeconomic make-up for Austin, Texas across several aspects including race, household income, poverty and employment presented as a bivariate choropleth map based on publicly-available data from 2017. The visualization also maps an overlay of community resources and recent officer-involved shootings to provide clarity into which segments of the population are afforded a greater percentage of the resources and which segments are potentially more likely to witness an engagement with law enforcement. A scatterplot of the two selected variables presents a simple analysis of the data to gauge any visual relationship across the 45 zip codes of Austin. The visualization also presents a single variable choropleth based on publicly available demographic data to highlight the change in Austin from 2011 to 2018 as gentrification creeps eastward across Interstate-35. The publicly available data visualization application is written in Python using the Plotly Dash framework and deployed on Heroku.

The data is publicly available demographic information and locations of public resources are provided by Travis County and Austin, Texas. The data set represents a geographic breakdown of Austin by zip code of demographic data from 2017 and a recent historical view of the demographic data from 2011-2018. Demographic data is common census data of population counts by race, income, sex, povery, and employment.

The data visualization attempts to show the inconsistent distribution of the population by race and income along with the uneven distribution of public resources. The public resource locations provide insight into the segments of the population with greater access to those resources. Important to note from the visualization, the distribution of resources does not favor everyone equally. To clearly see the non-uniform distribution of wealth compared to the distribution of race, select 'Race - Black or African American' and 'Income - $200,000 or more' on the Tab 'Austin: 2017' to see the higher counts of Black population in the eastern zip codes while the higher counts of greater household income are located on the west side of Austin. For identifying the trend of gentrification, see the white population from 2011 to 2018 moving eastward on Tab 'Austin: 2010s'. Another interesting note about wealth, on Tab 'Austin: 2010s', the household income greater than $200,000 becomes more diffuse across Austin west of I-35, for years 2011-2018.

Public app URL: https://pst-data608-final.herokuapp.com/

Recorded presentation: https://www.youtube.com/watch?v=cRlX3rr7U6U&t=1s