

David Phillips

Project Proposal

Question

The question I hope to answer is How does an area change over time due to gentrification? I want to look at the income level and racial demographic to see the effect of gentrification. Another way to look at this would be to look at property values rather than income level to solve the problem

Area of Focus

The area I want to focus on is Oakland, CA because it is one of the many areas in the US that has a lot of gentrification going on.

Literature:

[Non-academic](#)

[Academic](#)

Potential Sources of Data

I would use census data to pull demographic information which would get me the overall race and income distribution of the area, but I may not see where exactly the distributions lie. This means I would need to find another source to find where a group of individuals tend to live. As for property values I use realtor websites to pull the data but the limitation of this data is that it may not go back as far as I need since websites such as Redfin and Zillow only go back 5 and 9 years respectively.

Python Tools

I plan on using segregation for the income values, when making the maps using the racial data I might use the animation methods to show the changes over time more easily.

Challenges

Some challenges I expect to face are not finding enough data to show a significant trend, not understanding python well enough to do exactly what I want, accessible data not showing how the variables I'm looking for are distributed in the area in the sense that not only do I want to see how the total population is distributed in the area but also I also want to see where exactly do certain groups tend to live.

Exploratory Data Analysis

Since I want to show clustering I think using the G-function, F-function, or K- function would be useful however I am unsure what would be the most appropriate at this very moment. Looking at the trends in the population, income, or property value changes and testing the correlation between them could also prove useful for this project.