Crime Vs. Median Housing Trends by California Counties

MJ Teng, Ricardo Uspango-Hormiga, Gurpreet Singh, and Justine Owsik







Question #1

What is the trend in median housing cost in each county in California from 2016 - 2020?

Question #2

What is the trend in crime per capita in each county in California from 2016 - 2020?

Question #3

Does crime per capita have an effect on the median housing price?

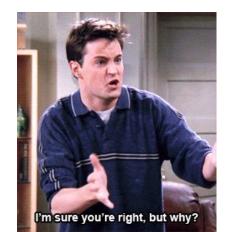
Why?

Motivation 1

We noticed the most crime was happening in major (really expensive) cities, and also increasing in those cities.

Motivation 2

We wondered if this was a trend in all of California.

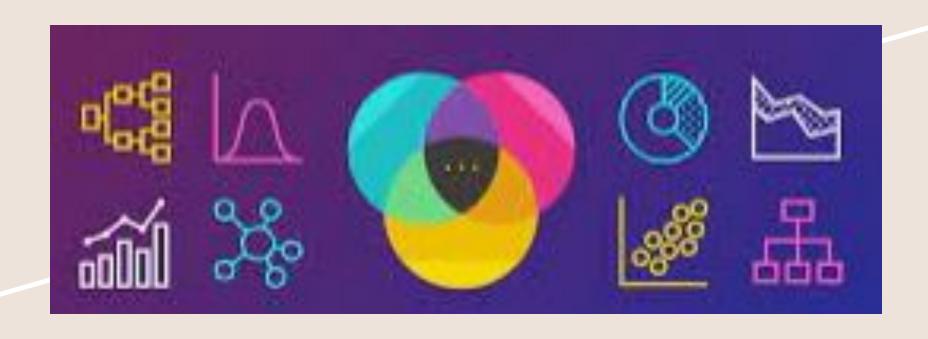


Motivation 3

We know home prices in cities like San Francisco and Los Angeles are not declining even though crime is increasing. We wanted to know how house prices were being affected throughout California

- → Crime per capita is decreasing in every county from 2016 - 2020
- → Median house price is increasing in every county from 2016 - 2020
- → Crime does not seem to have an effect on median house price

Visualizations and Analysis



Map 1 -

Average Crime per Capita by County in California

- The higher the crime per capita, the bigger the markers
- All counties fall within 1-4% for crime per capita
- San Francisco has the highest at 6.28%
- Sierra has the lowest at 1.04%









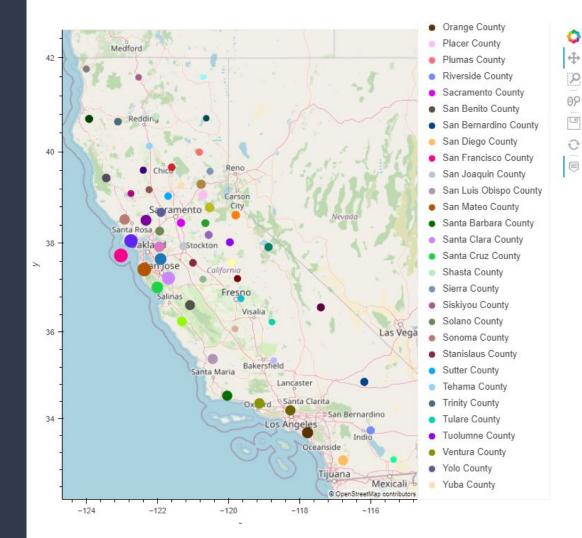




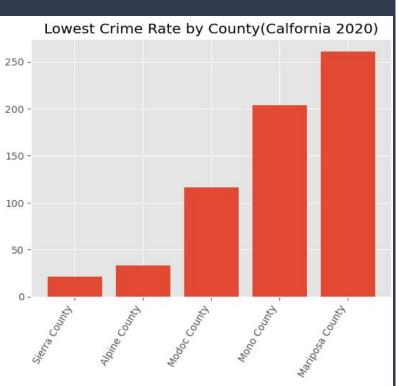
Map 2 -

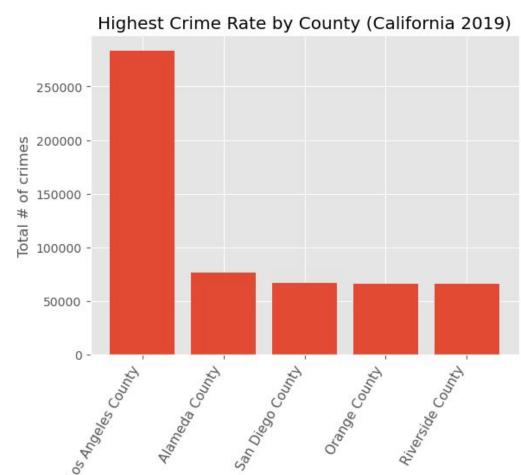
Average Median Housing Price by County in California

- The higher the median housing price, the bigger the markers
- San Francisco and San Mateo have the highest median housing at \$1,000,000+
- Modoc has the lowest median housing at \$156K



top 5, bottom 5 crime





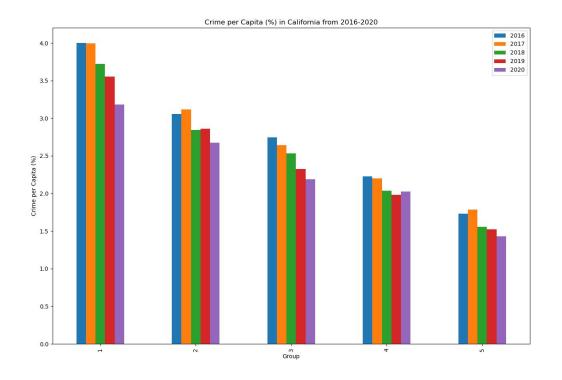
top 5, bottom 5 housing





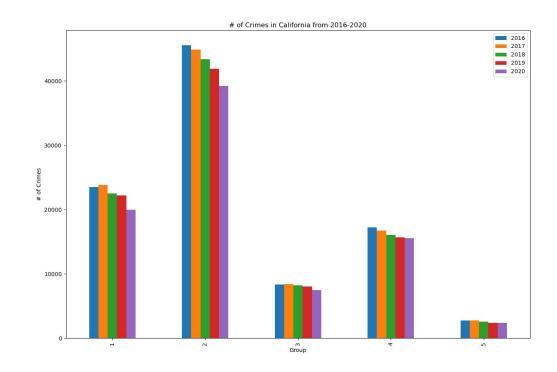
Crime per capita by grouped counties

- Grouped by the average crime per capita in California
- Consistently, between groups, it appears to be a drop in crime per capita in 2018-2020 in comparison to 2016-2017 between all groups



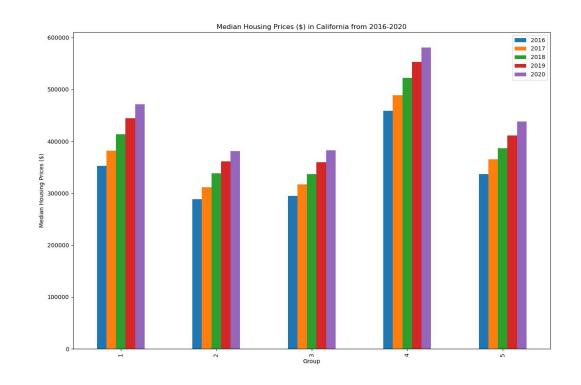
of Crimes by grouped counties

- Grouped by the average crime per capita in California
- Represents the necessity to equalize data by population



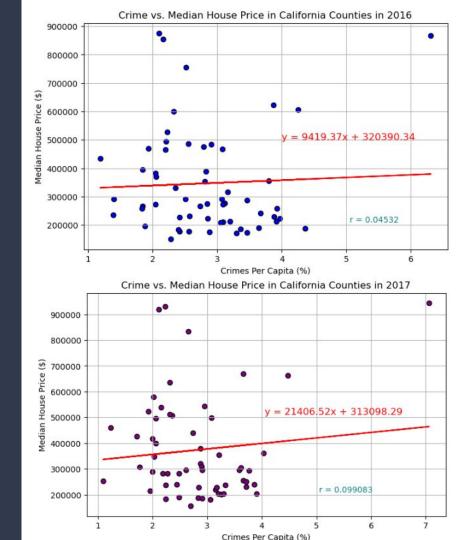
Median house price by grouped counties

- When grouped by severity in crime per capita, the average median house price is highest in group 4
- There does not seem to be a trend between crime per capita and housing
- Only trend lies in that between 2016-2020, crime per capita increases



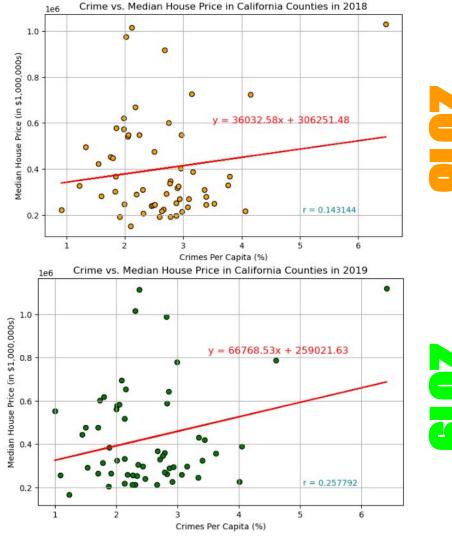
Crime does not seem to have an affect on housing prices.

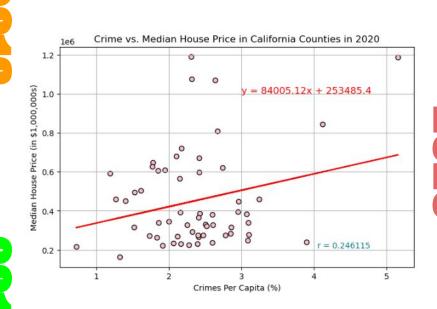
- ★ Correlation coefficients are very low (lower than 0.5), meaning a very weak correlation between crime and housing prices
- ★ The data is very spread out. There is no clear sign of a strong positive correlation



2016

2017





Sources

Housing-https://data.census.gov/table?t=Housing+Value +and+Purchase+Price:Renter+Costs&g=040XX00US06 \$0500000

Crime-

https://openjustice.doj.ca.gov/exploration/crime-statistics/crimes-clearances

Population by (County)-

https://www2.census.gov/programs-surveys/popest/data sets/2010-2020/counties/totals/

County boundaries-

https://public.opendatasoft.com/explore/dataset/us-count y-boundaries/export/?disjunctive[...]ad&disjunctive.stusa b&disjunctive.state_name&q=california