

LOS ANGELES

LA CRIME / ARRESTMENT

2020-2022

CRIME



BACKGROUND & PROBLEM



LA CRIME

Los Angeles, CA is known for its high crime rates. According to the latest statistics, the violent crime rate in **Los Angeles is 29.1 compared to the US average of 22.7**. Similarly, property crime in **Los Angeles stands at 35.8** which is slightly higher than the **US average of 35.4**.

- **Population Density**
- **Economic conditions** (median income, poverty level, and job availability)
- **Cultural factors** (educational, recreational, and religious characteristics)
- **Effective strength of law enforcement agencies**

LA CRIME ANALYSIS



SOLUTION

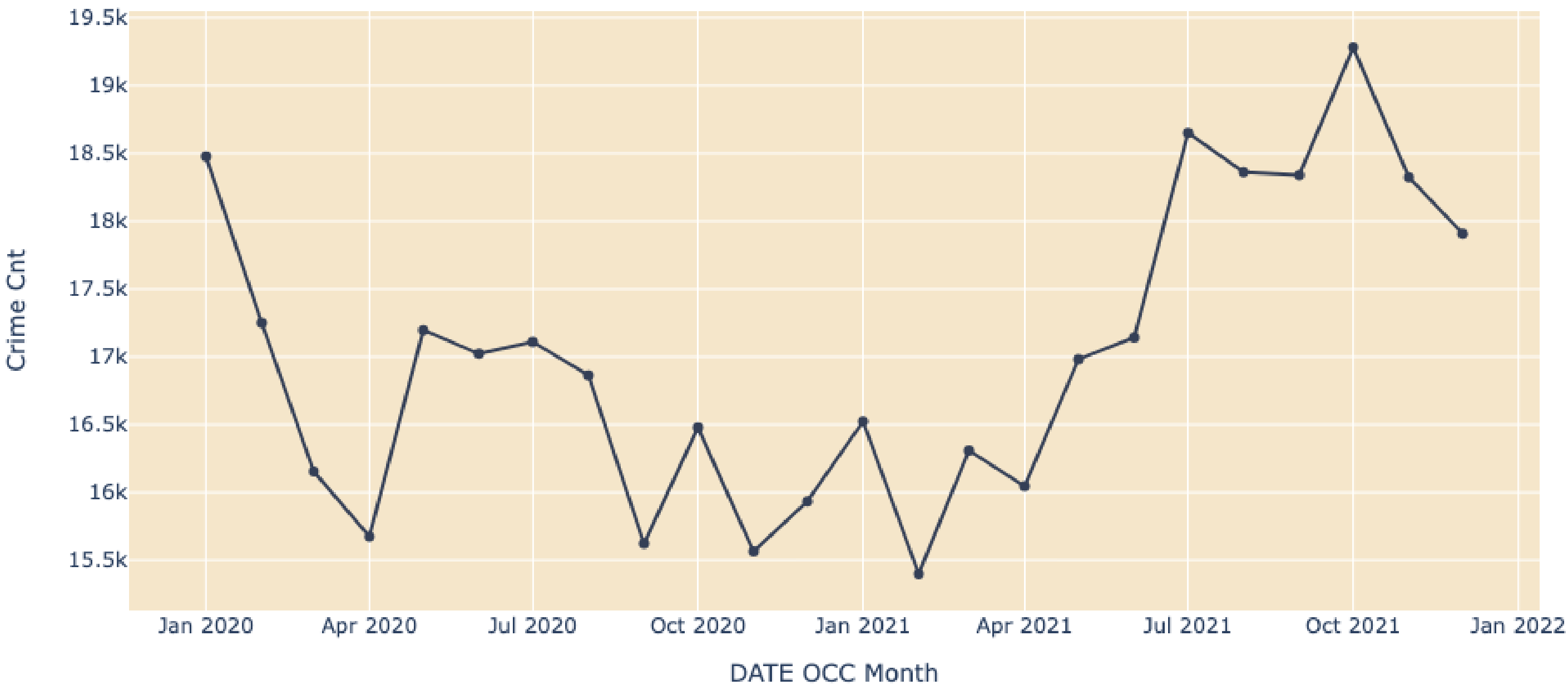
An informative data product that helps residents and travelers navigate the city safely with ease.

VISUALS

- Crime Statistics of Los Angeles
- Victim Demographic Statistics (Ethnicity, Gender, Age Group)
- Interactive Visuals/Dashboards
- Crime Map
- Other Factors

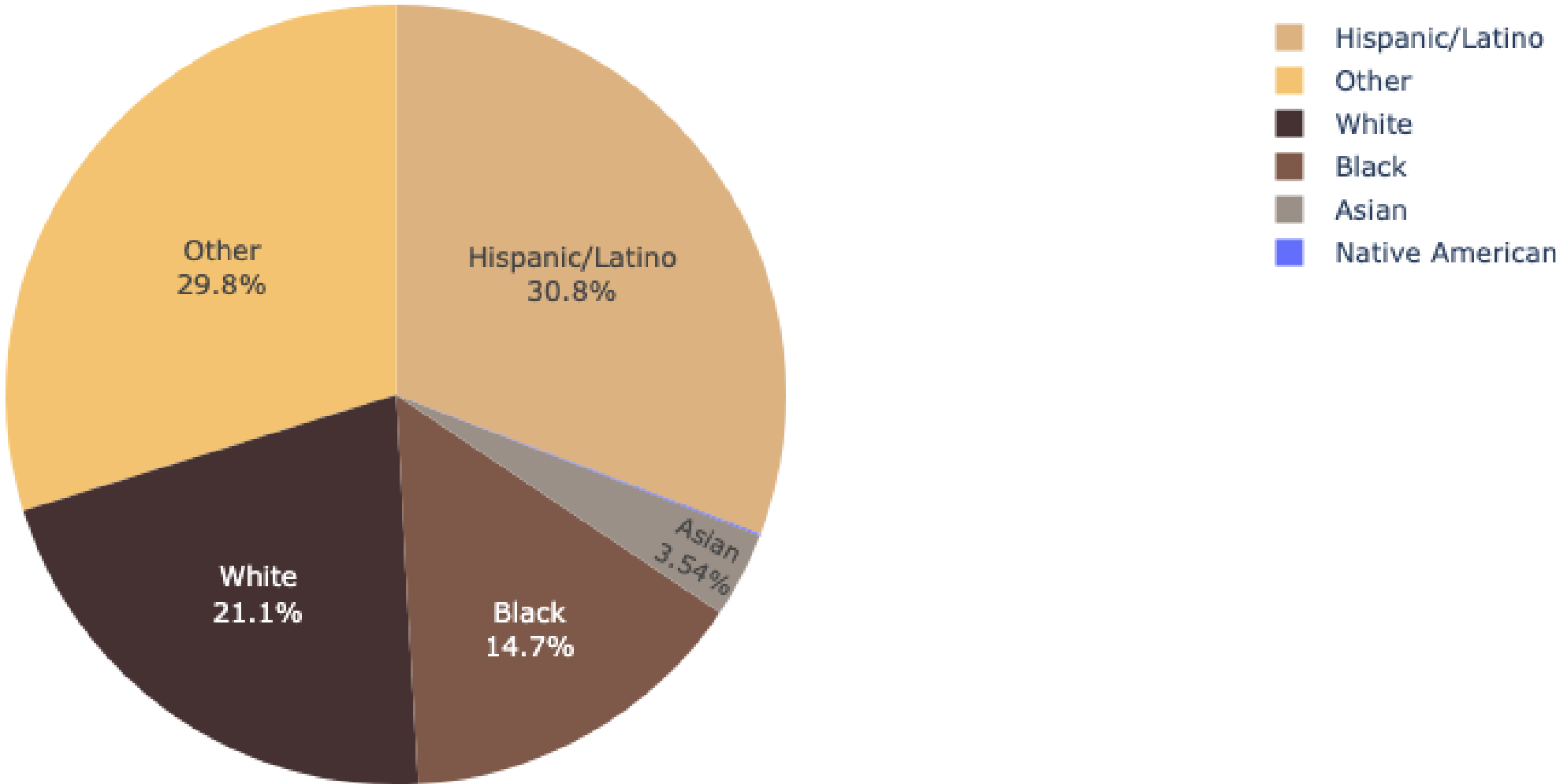
GENERAL STATISTICS

Los Angeles Crime Cnt From 2020-2022



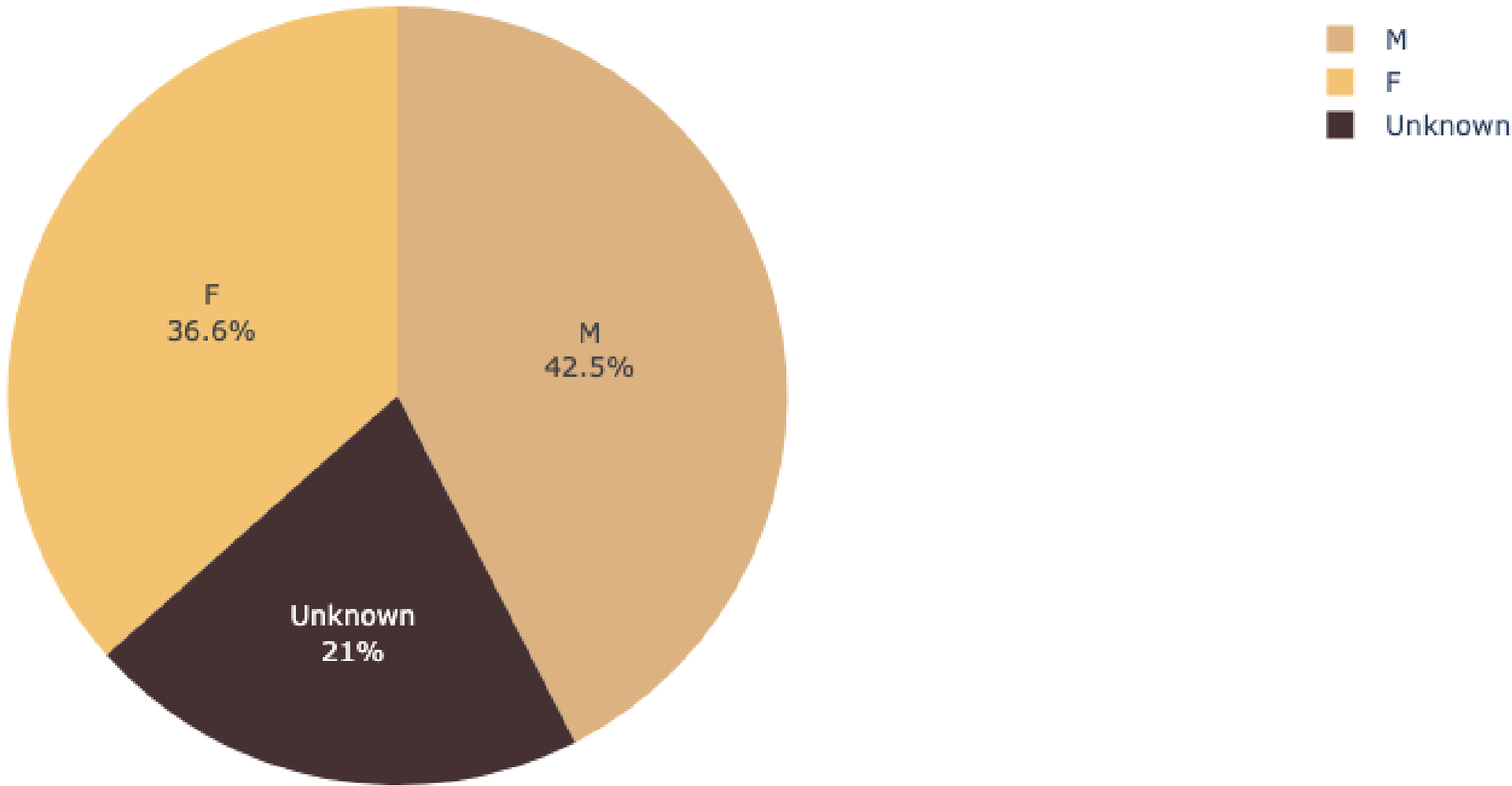
GENERAL STATISTICS

Victim Ethnicity Distribution



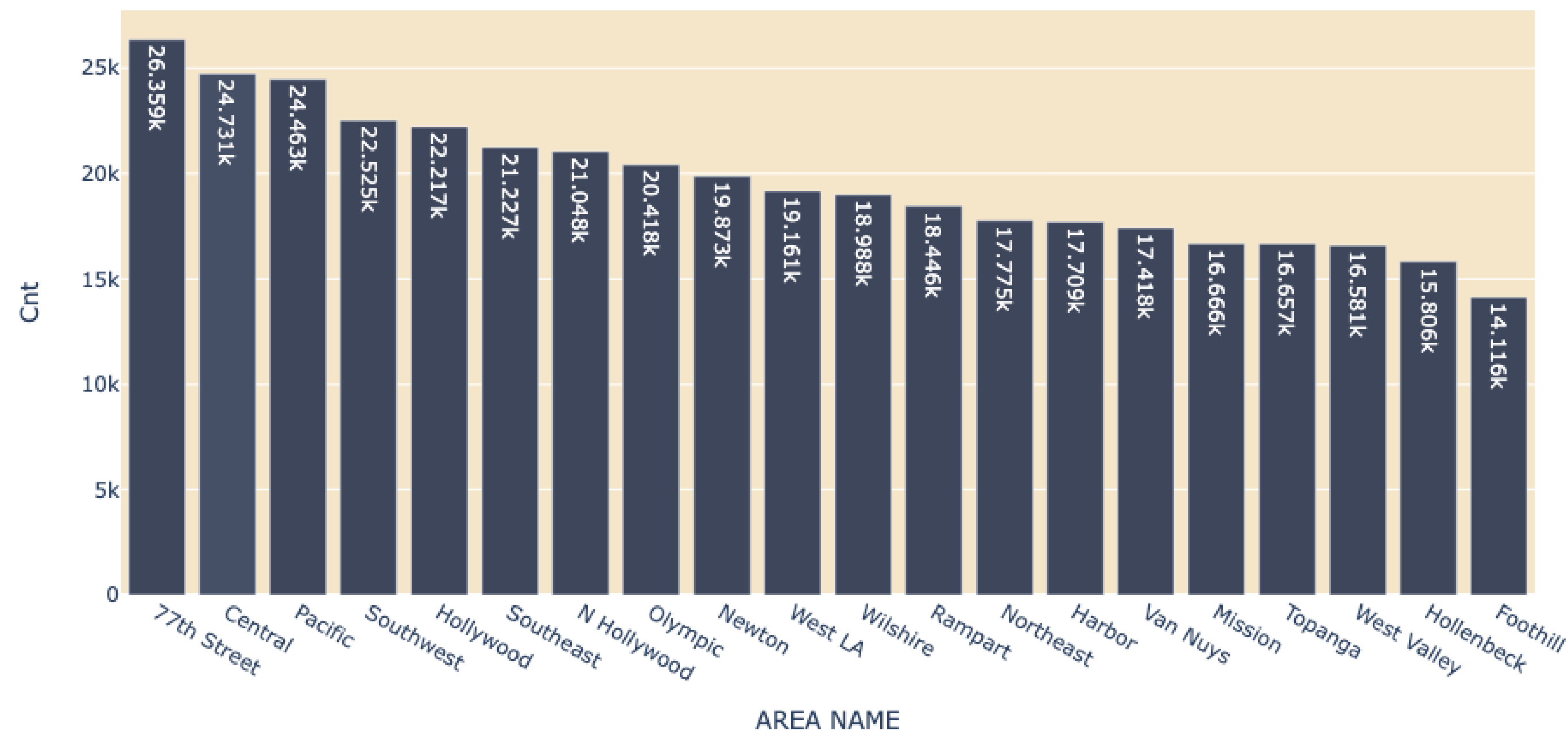
GENERAL STATISTICS

Victim Sex Distribution



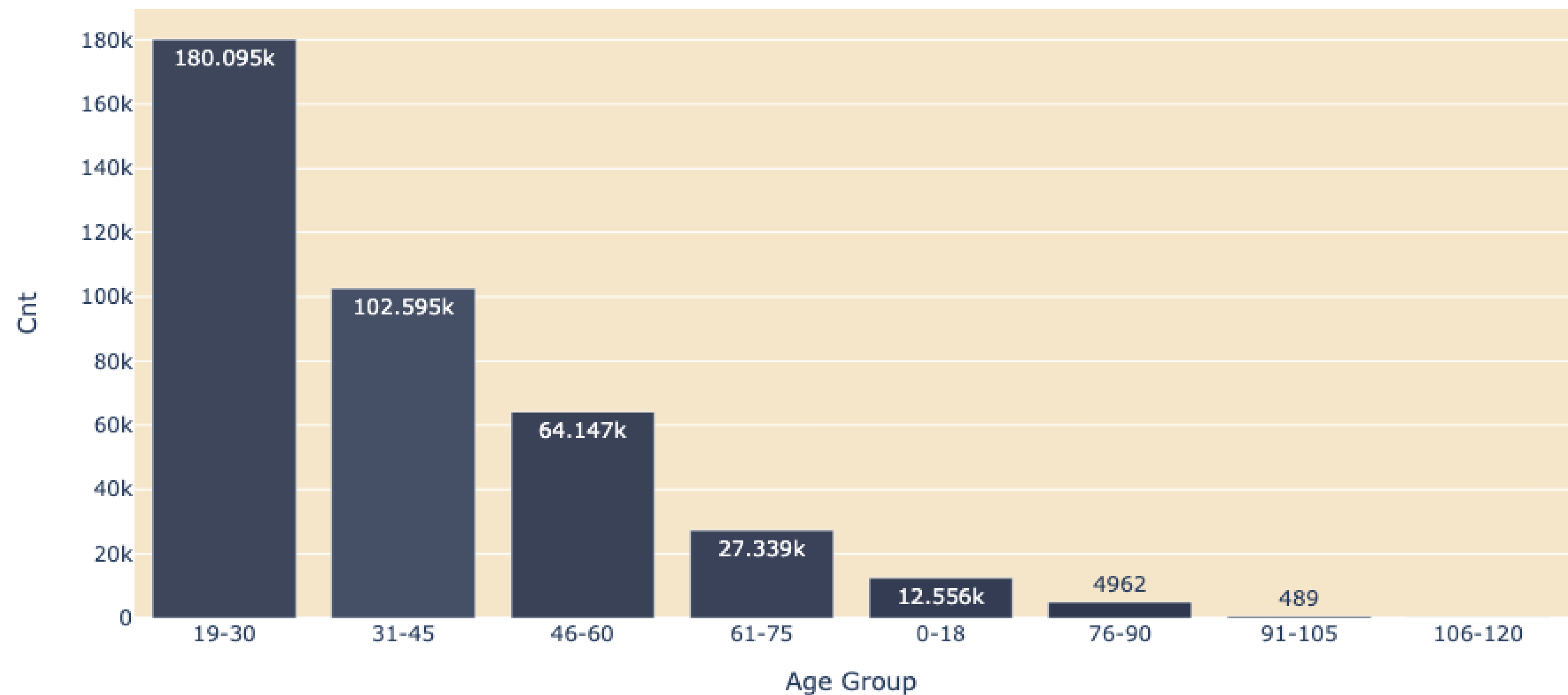
GENERAL STATISTICS

Total Crimes Cnt in Los Angeles between 2020 - 2022



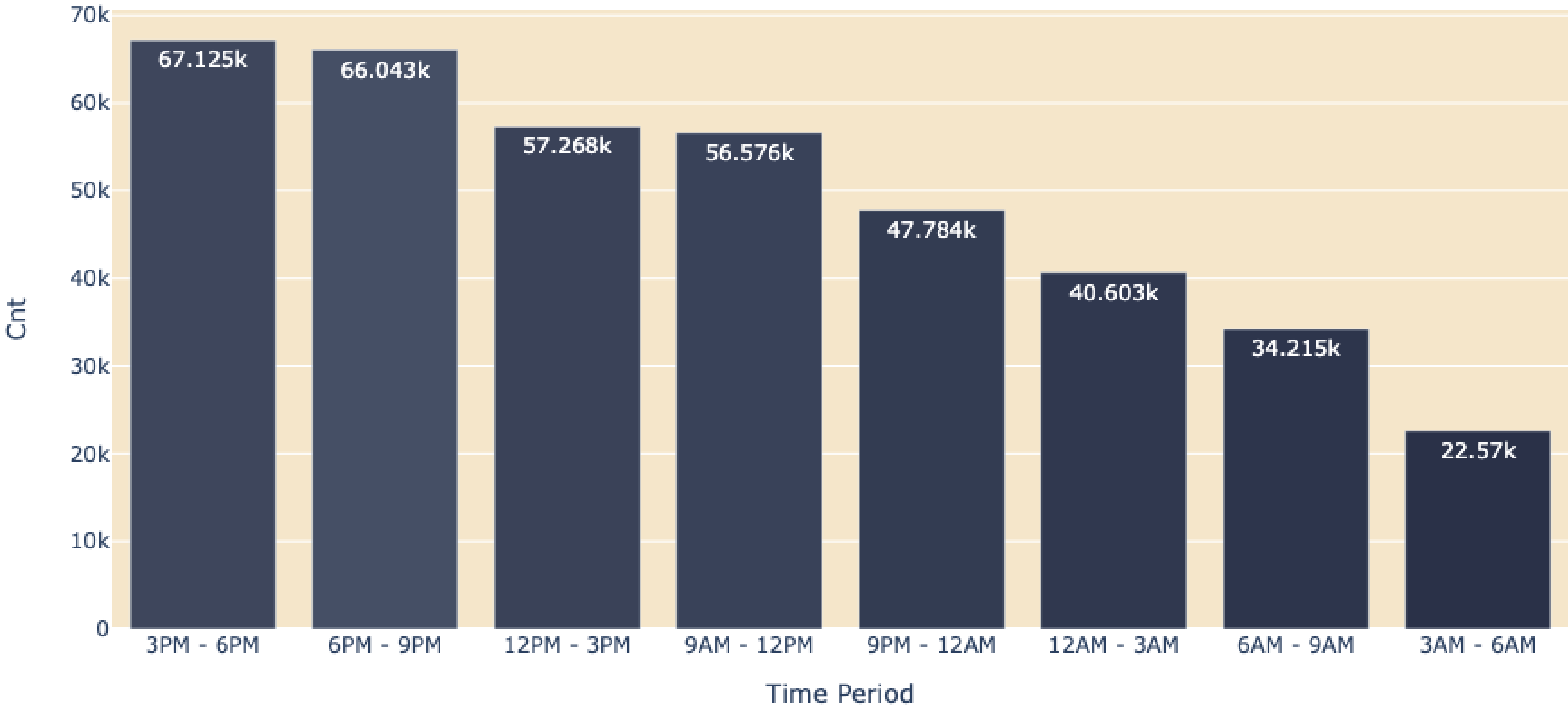
GENERAL STATISTICS

Victim Age Group Distribution



GENERAL STATISTICS

Time Period Distribution



INTERACTIVE VISUALS

```

1  #Number of Crime Count between timeperiod in a area
2  app = JupyterDash(__name__)
3
4  app.layout = html.Div([
5      html.H3('Area / Time Period Selection:'),
6      dcc.Dropdown(id='dropdown1',
7                   options=data['AREA NAME'].unique(),
8                   value='77th Street'),
9      html.Br(),
10     dcc.Dropdown(id='dropdown2',
11                  options=data['Time Period'].unique(),
12                  value='12PM - 3PM'),
13     dcc.Graph(id='visual')
14 ])
15 @app.callback(Output('visual', 'figure'), Input('dropdown1', 'value'), Input('dropdown2', 'value'))
16 def plot(area, timeperiod):
17     df = pd.DataFrame(data.groupby(['AREA NAME', 'Time Period'])['Crime Category'].value_counts())\
18         .rename(columns={'Crime Category': 'Cnt'}).reset_index()
19
20     fig=px.bar(
21         df.loc[(df['AREA NAME']==area)&(df['Time Period']==timeperiod)],
22         x='Crime Category',
23         y='Cnt',
24         color='Crime Category',
25         text_auto=True,
26         title=f'Number of Crime Count between {timeperiod} in {area}'
27     )
28
29     return fig
30
31 if __name__ == '__main__':
32     app.run_server(mode='inline', debug=True, port=6005)

```

AREA STATISTICS

DEMOGRAPHIC STATISTICS

CRIME STATISTICS

AGE / ETHNICITY / GENDER

CRIME MAP

LA CRIME BY CRIME CATEGORY

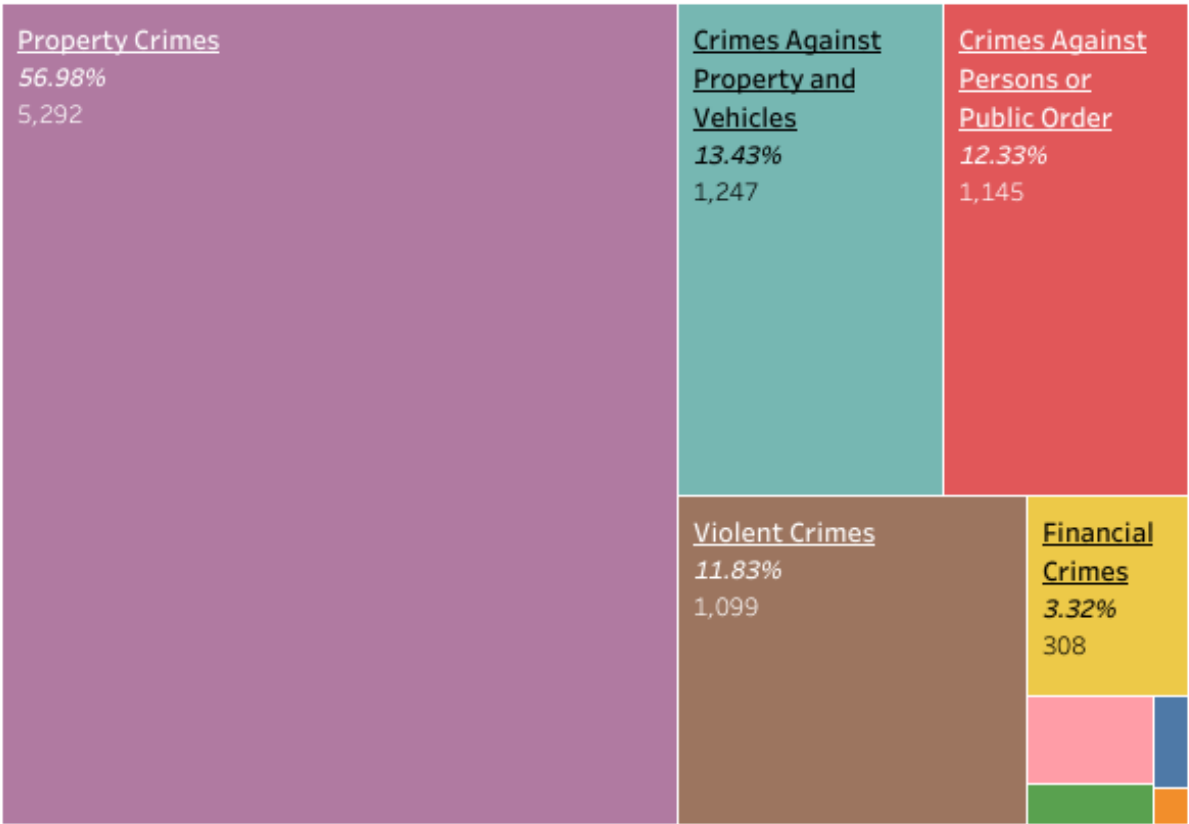
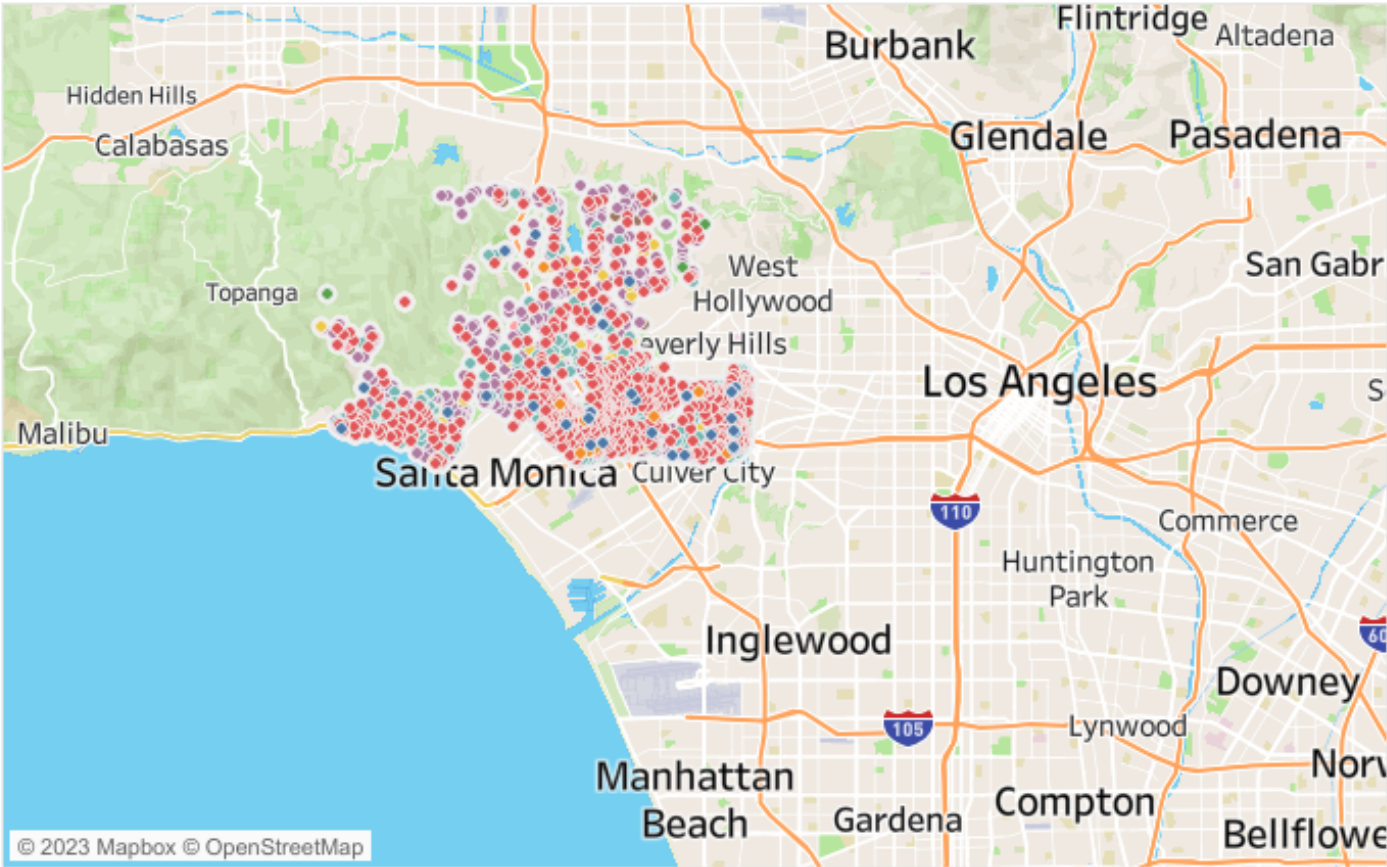
Area Name
West LA

Year
2020

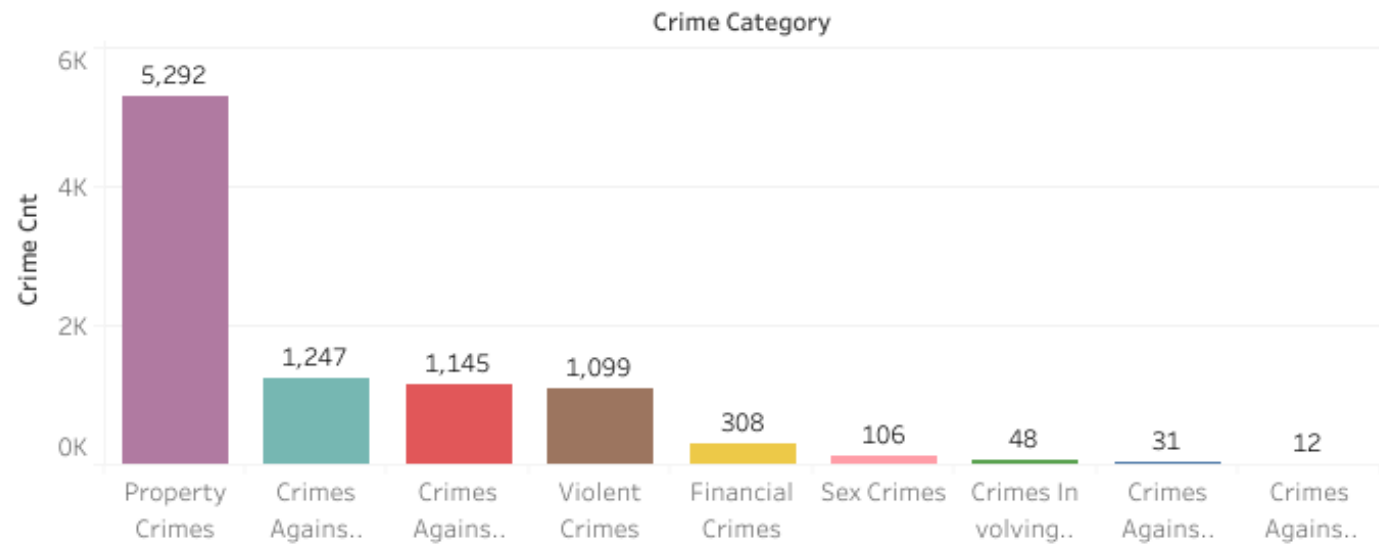
Crime Category

- Crimes Against Children
- Crimes Against Property and Ve..
- Property Crimes
- Crimes Against Law Enforcement
- Crimes Involving Weapons
- Sex Crimes
- Crimes Against Persons or Publi..
- Financial Crimes
- Violent Crimes

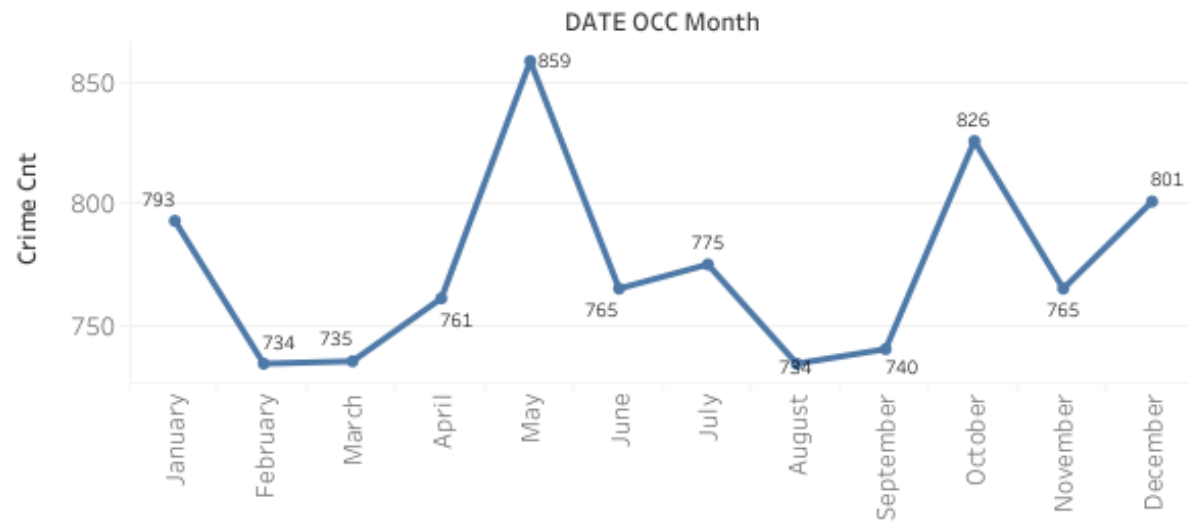
Los Angeles Crime Spotting (2020-2021)



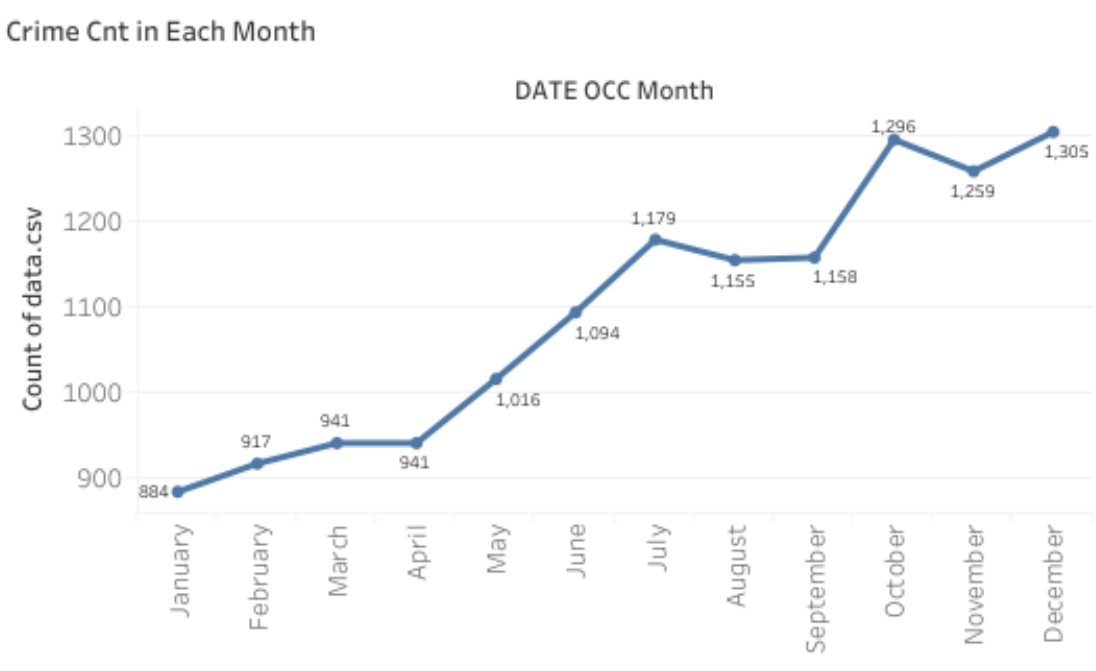
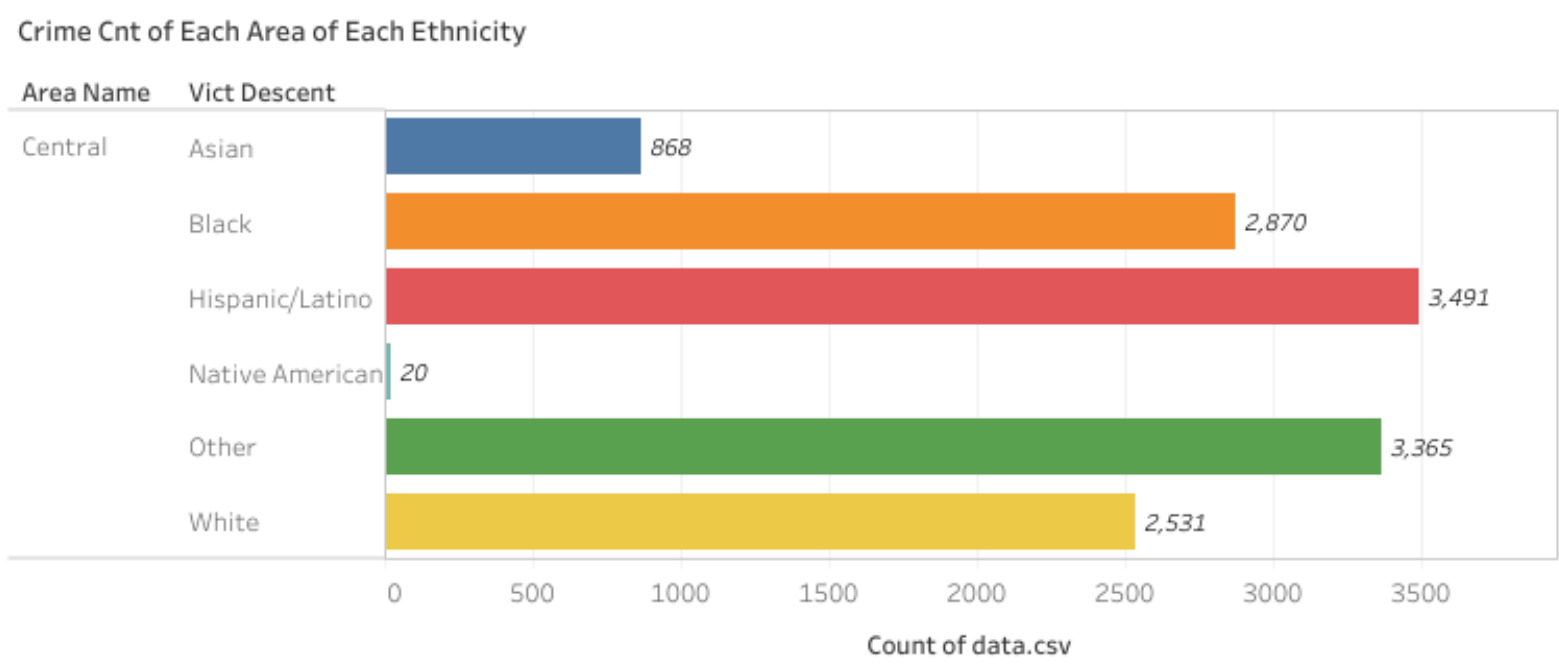
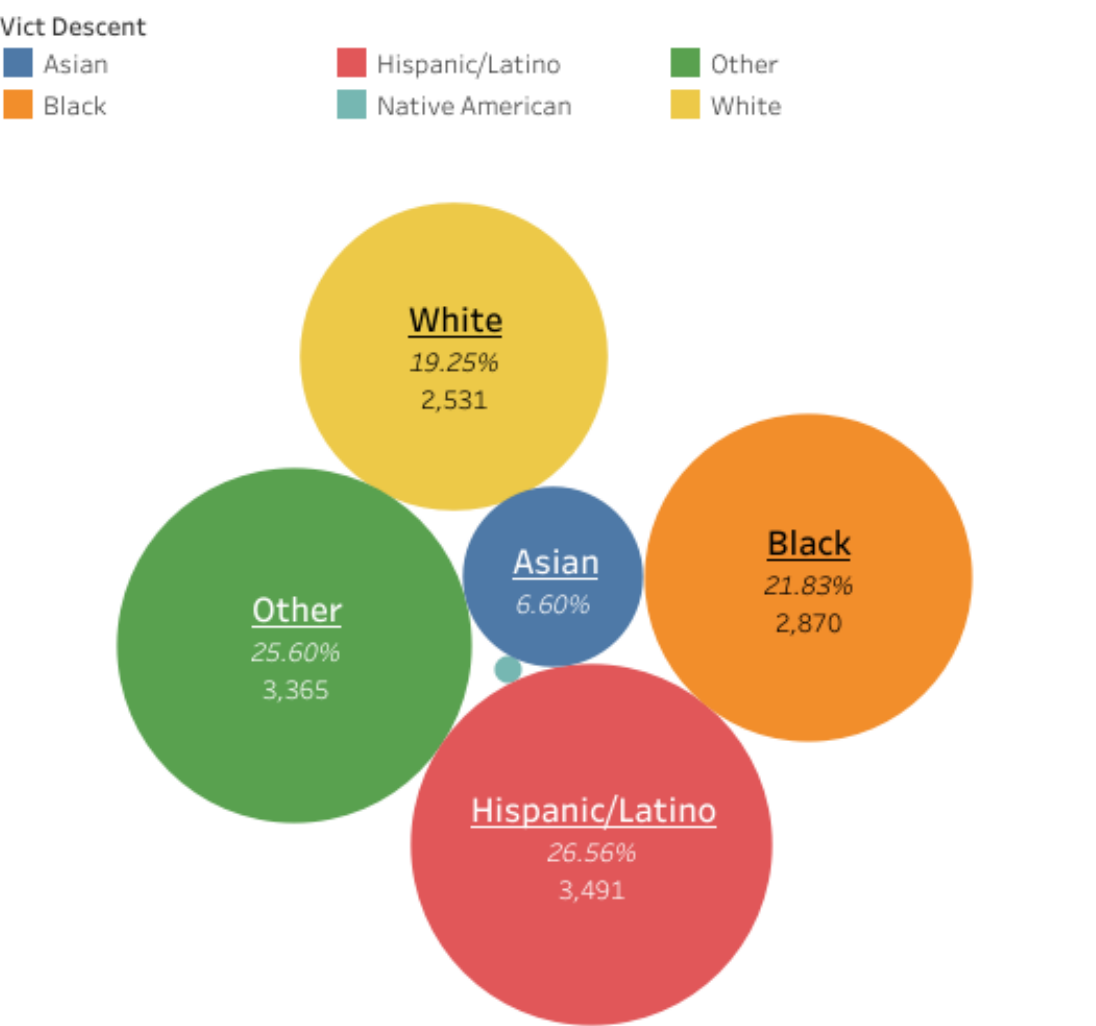
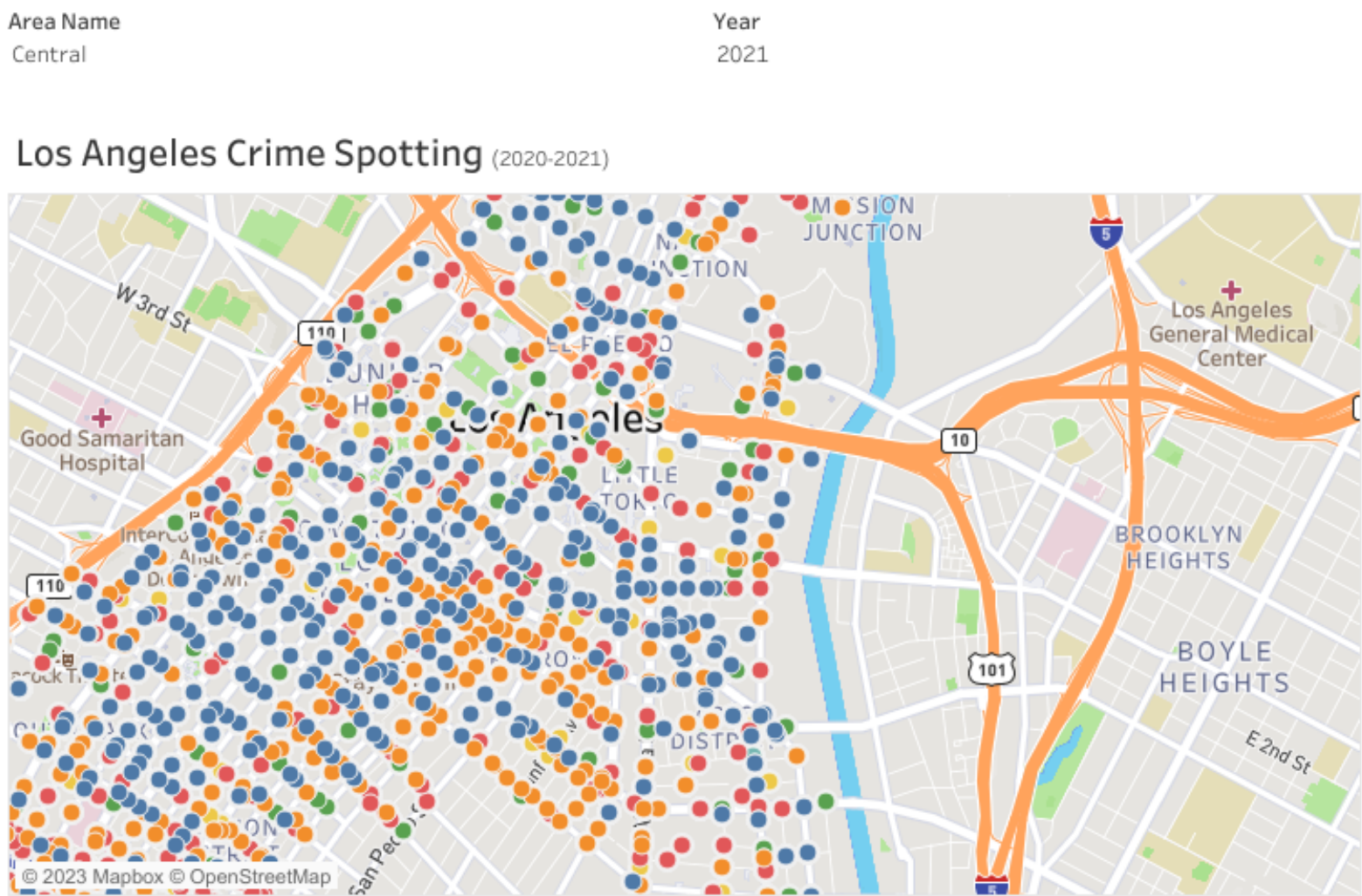
Crime Cnt in Each Crime Category



Crime Cnt in Each Month



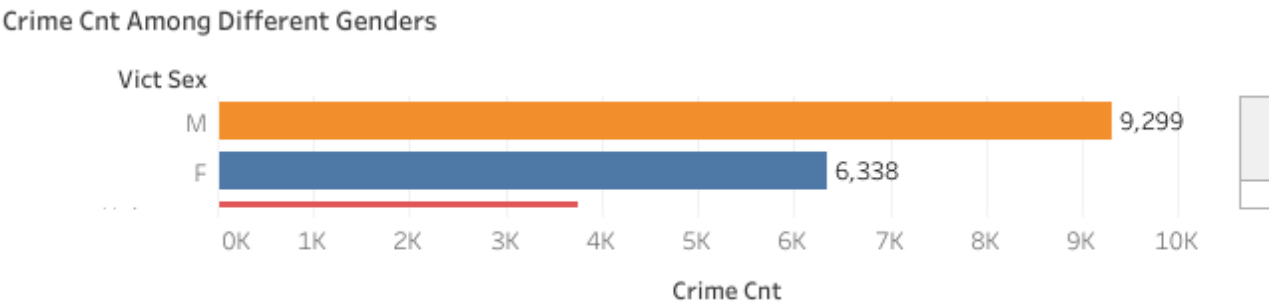
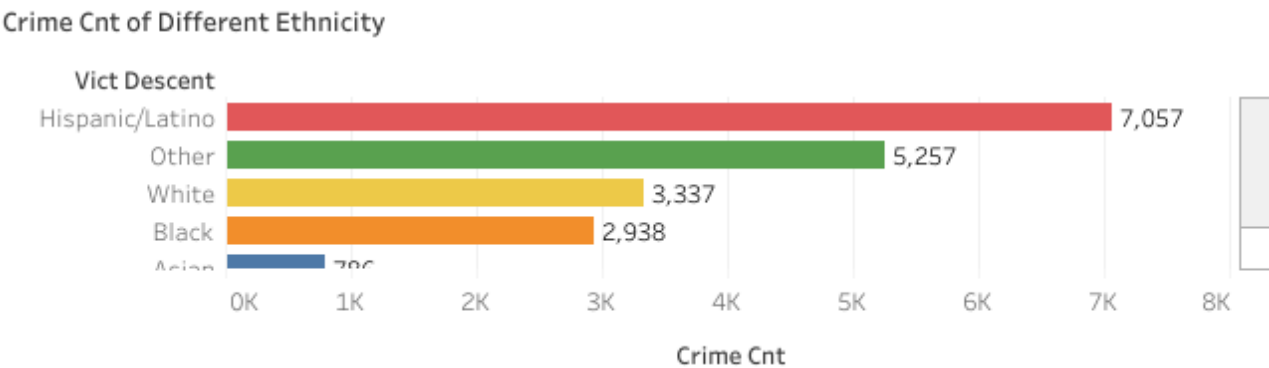
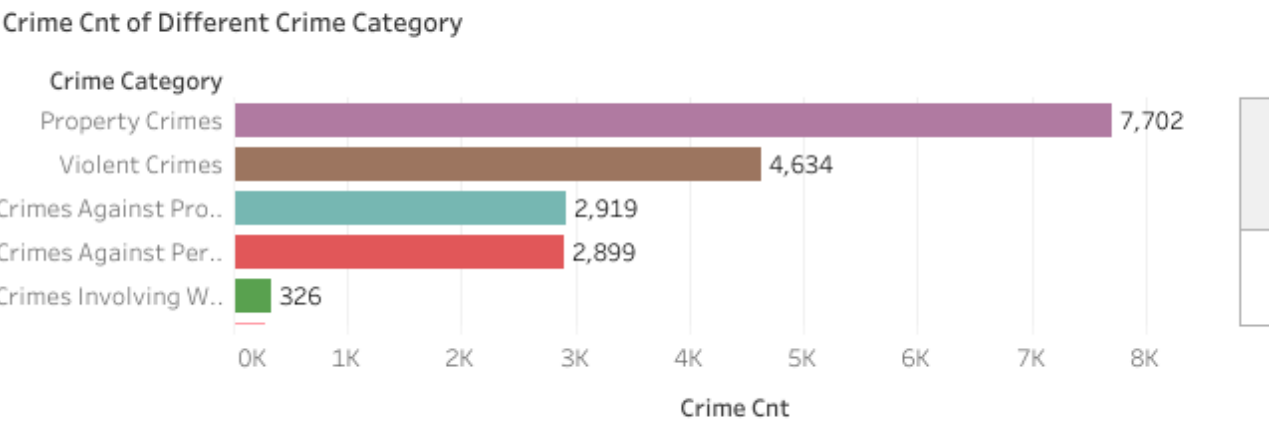
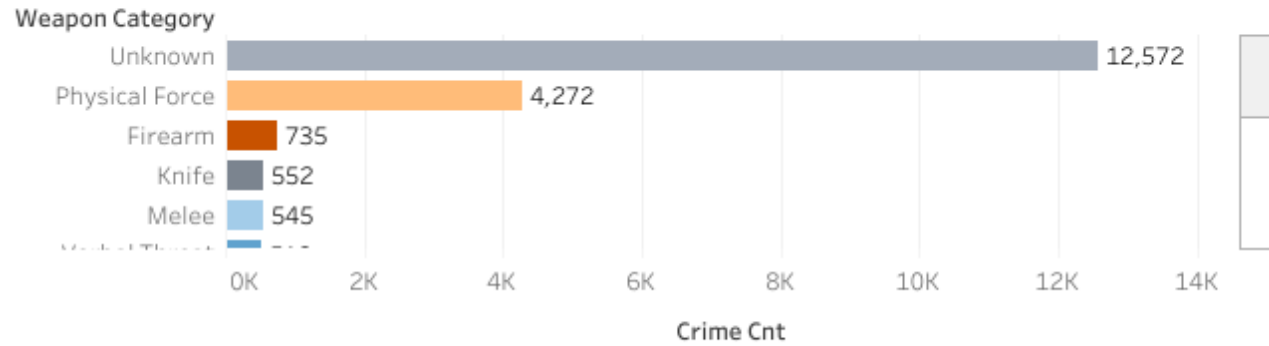
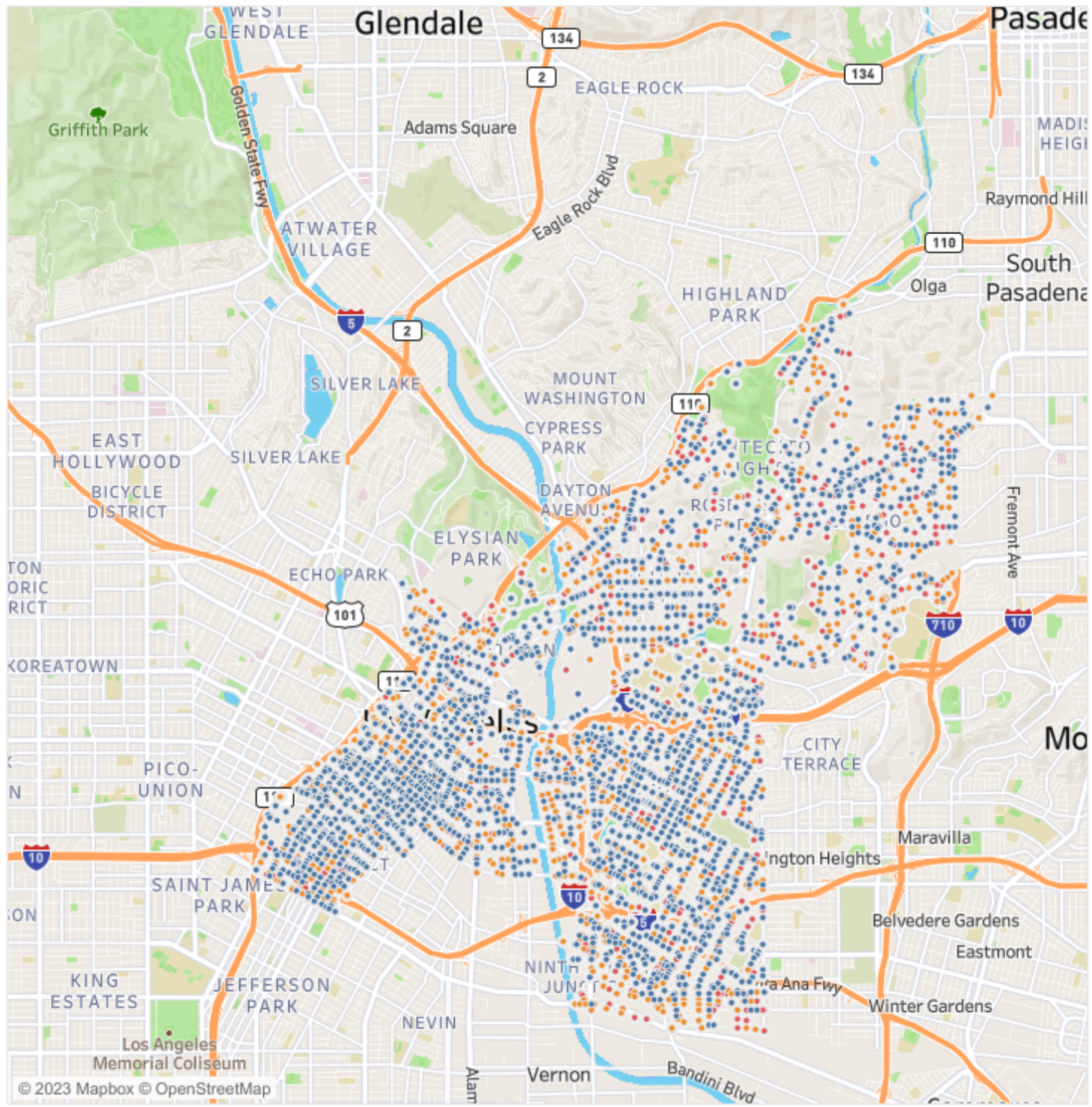
LA CRIME BY VICTIM ETHNICITY



LA CRIME BY TIME PERIOD

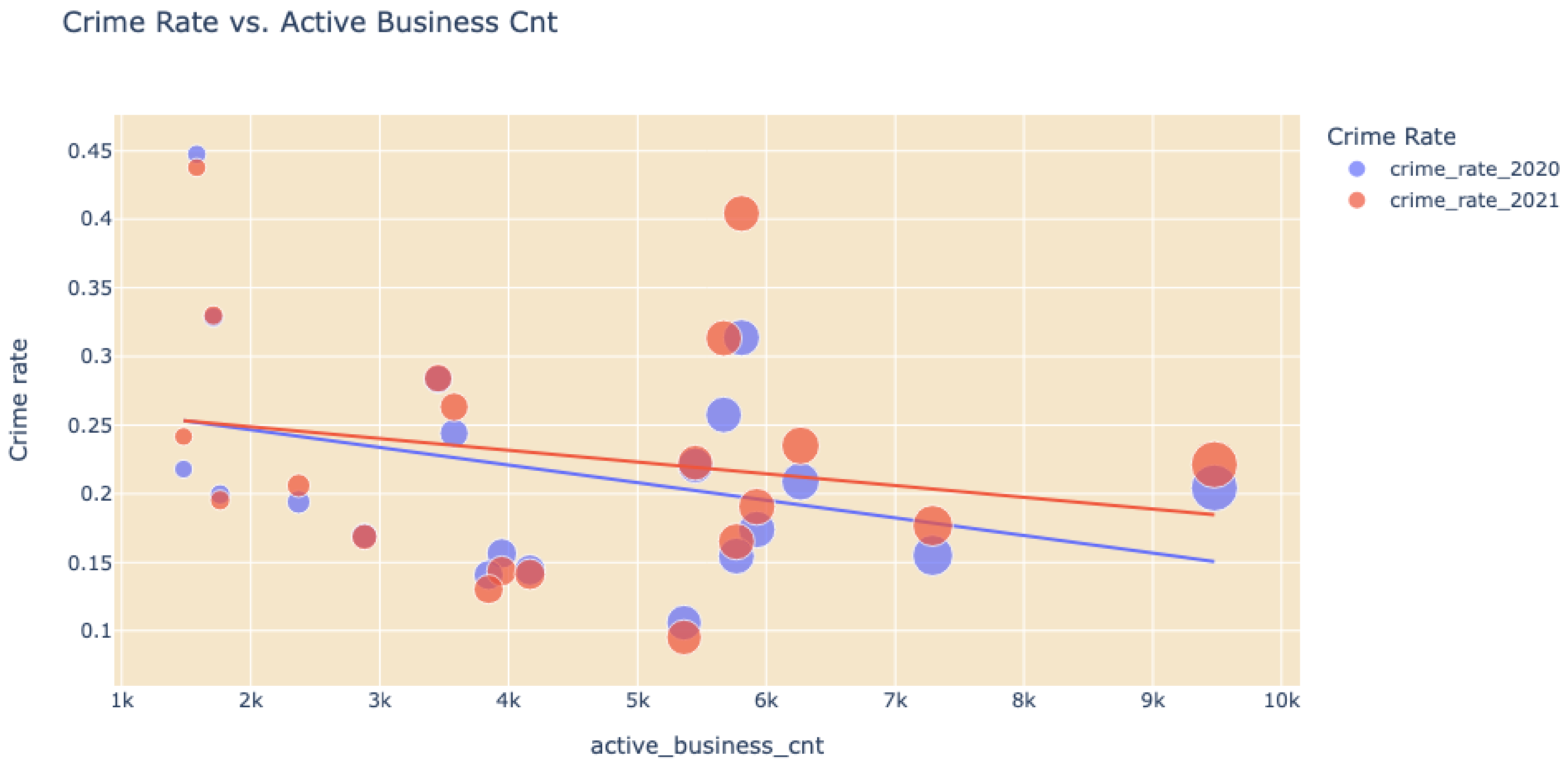
Time Period All Year 2020 Area Name Multiple values Vict Sex F M Crime Cnt of Different Weapon Used

Los Angeles Crime Spotting (2020-2021)

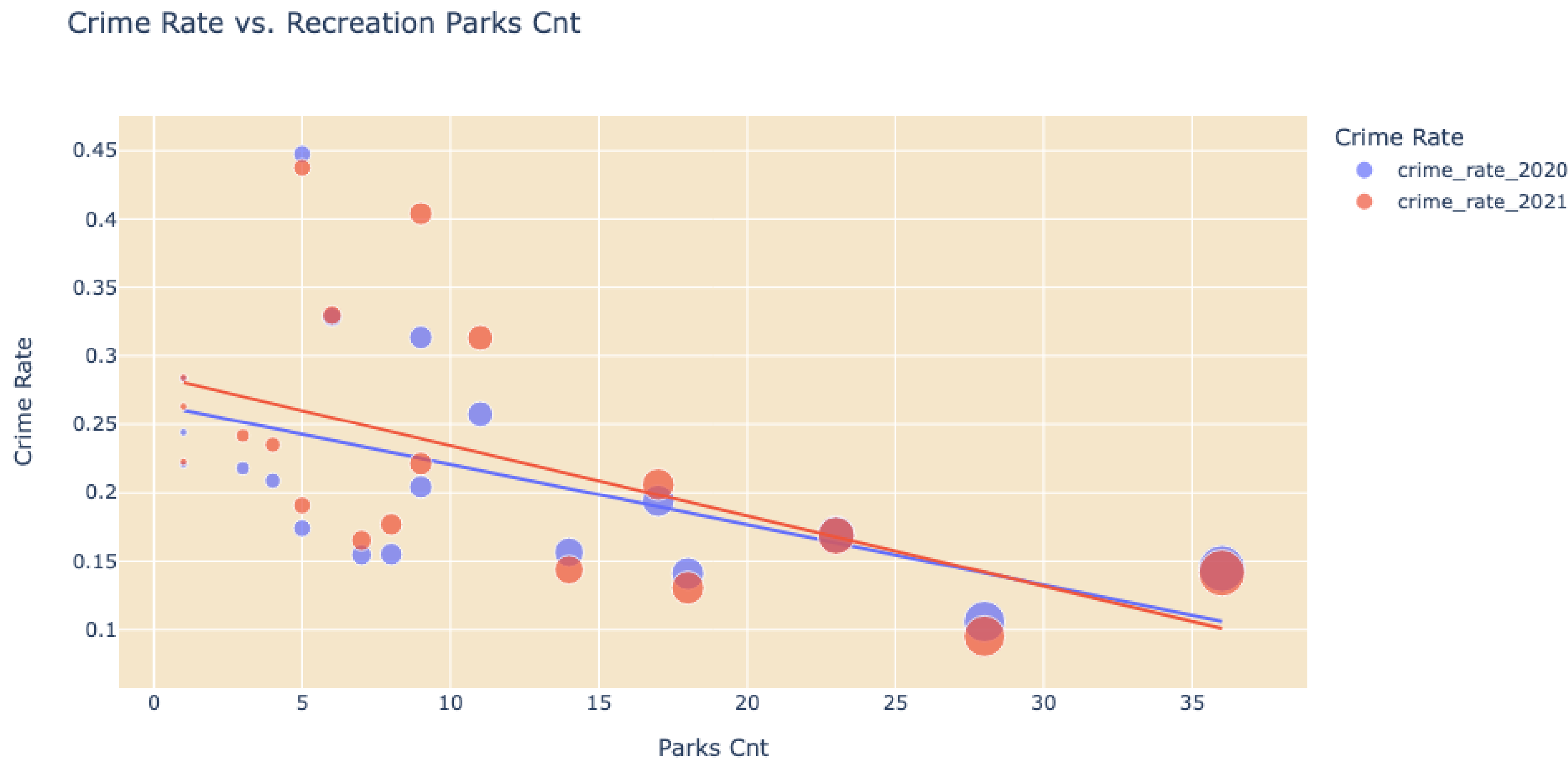


OTHER FACTORS

CRIME RATE VS. ACTIVE BUSINESS CNT

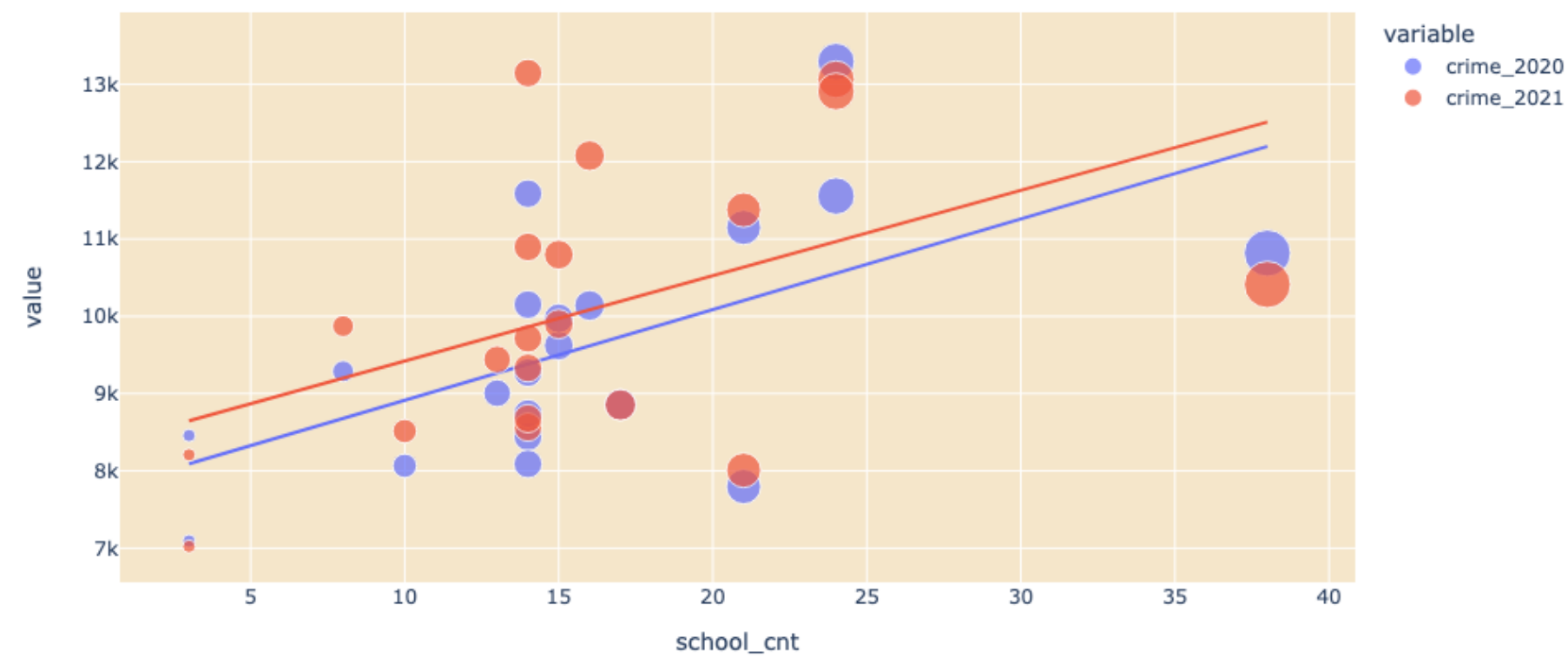


CRIME RATE VS. RECREATION PARKS CNT

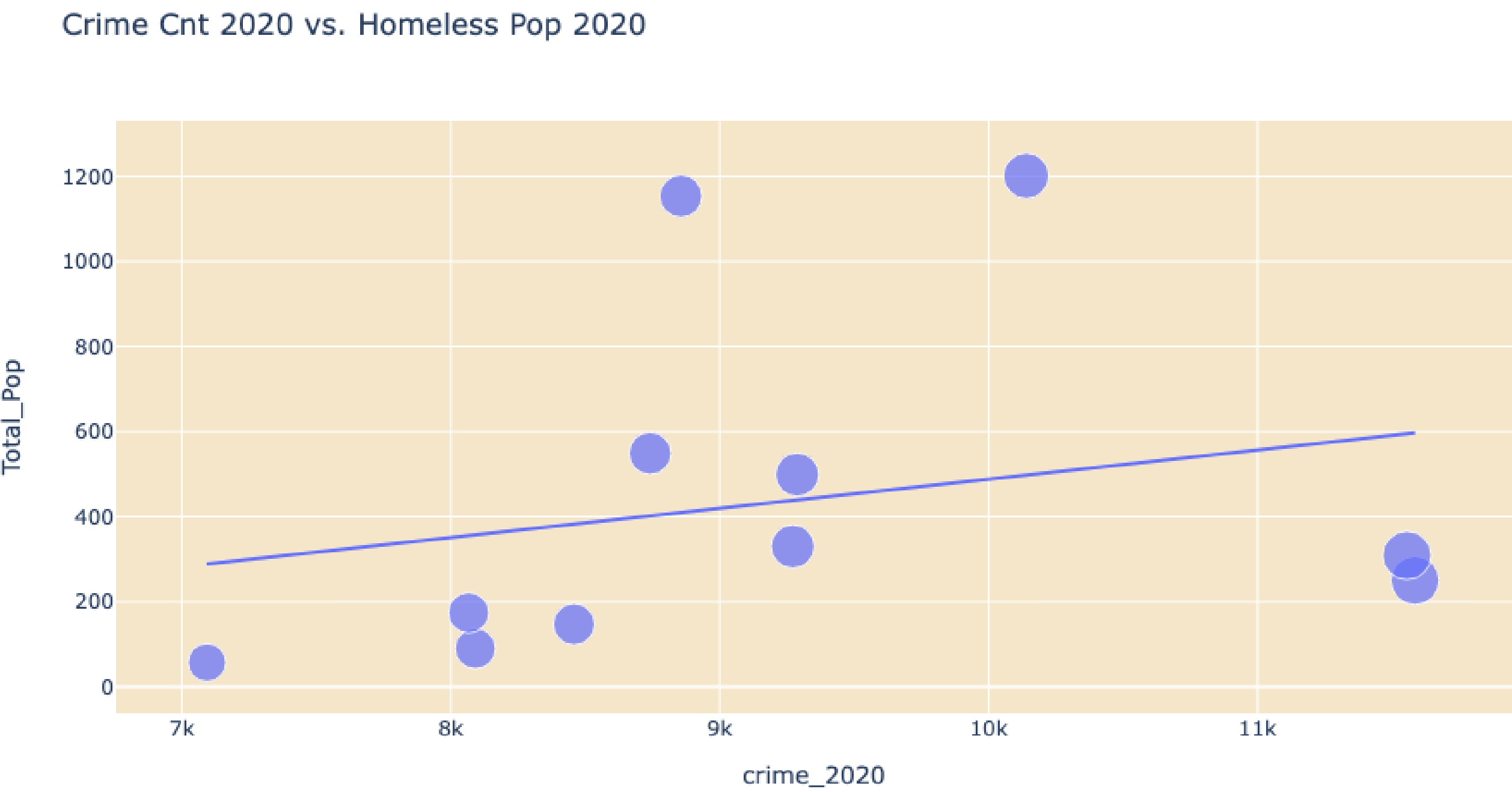


CRIME CNT / RATE VS. SCHOOL CNT

Crime Cnt vs School Cnt

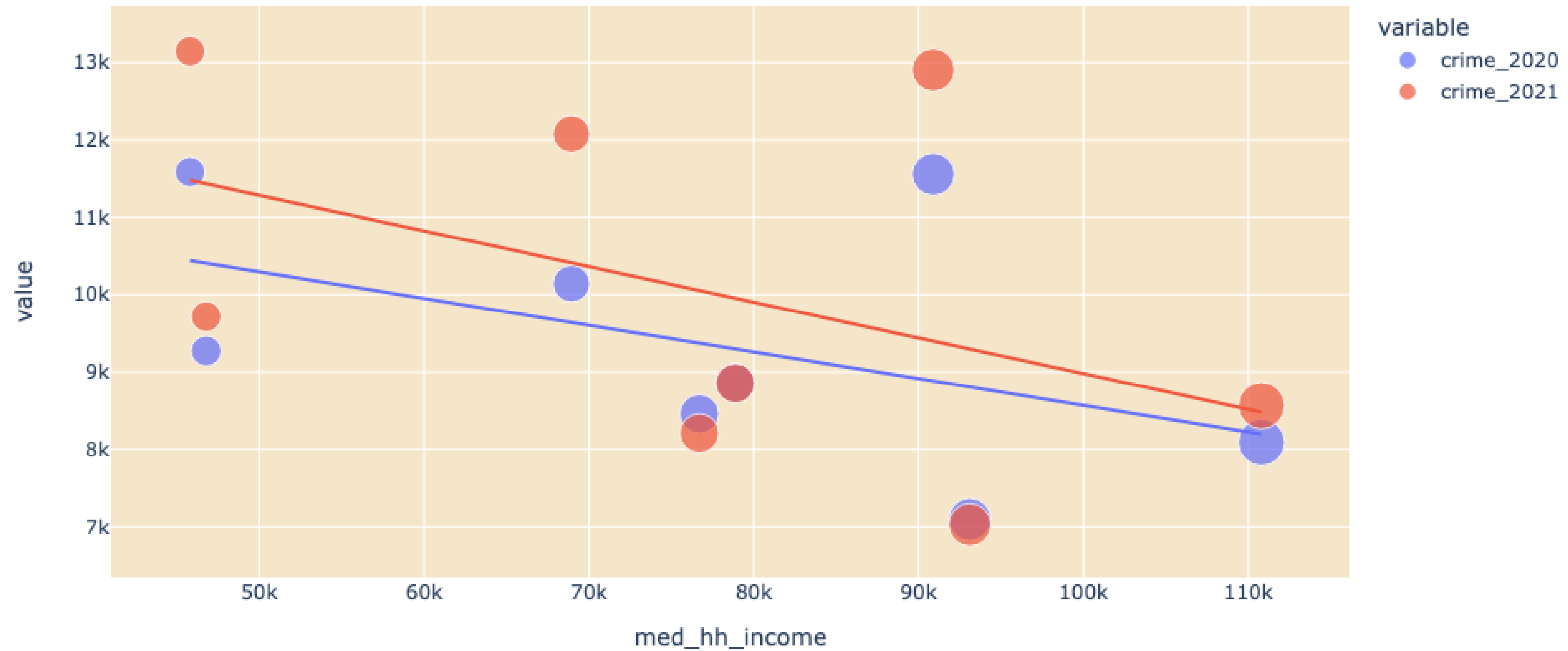


CRIME CNT 2020 VS. HOMELESS POP 2020

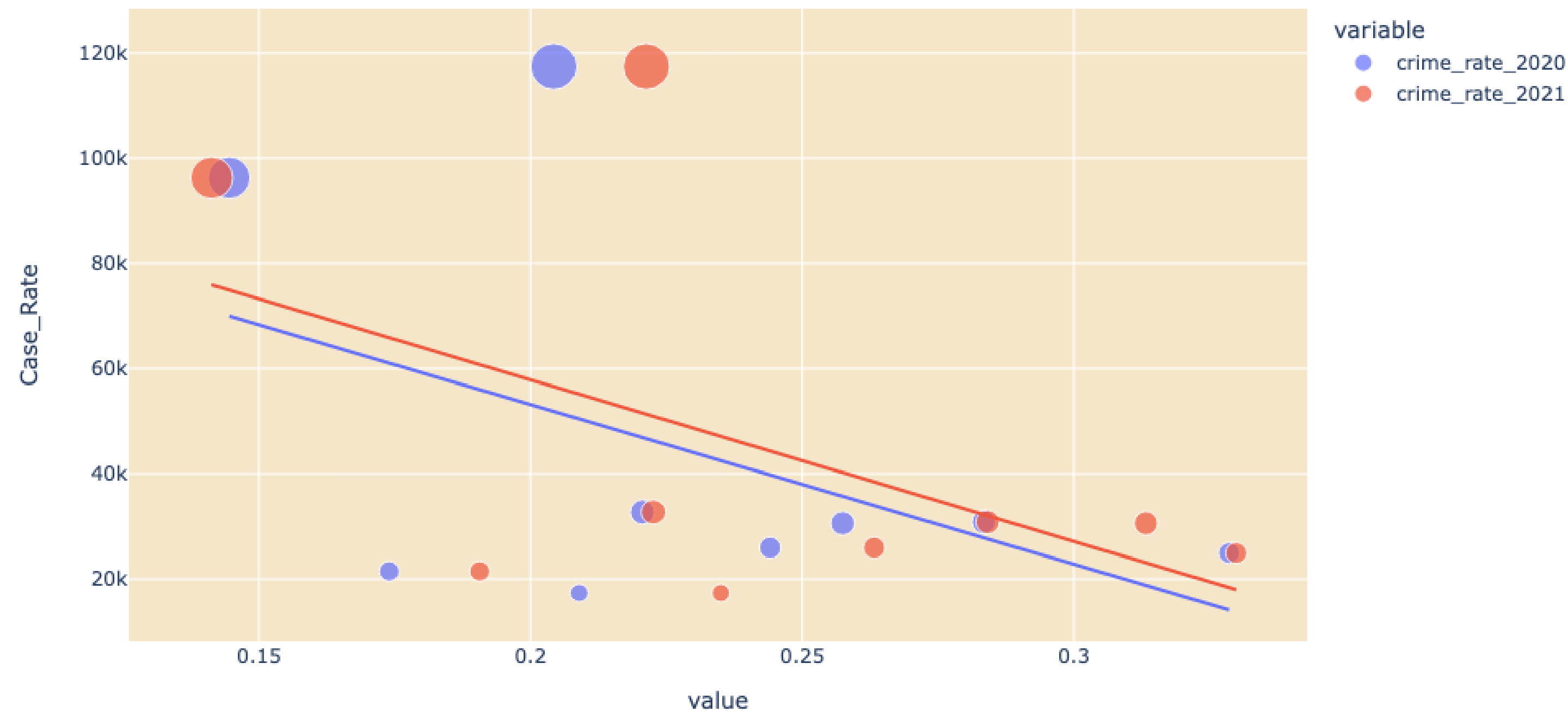


CRIME CNT VS. MEDIAN HH INCOME

Crime Cnt 2020/2021 vs. Median Household Income



CRIME RATE VS. COVID CASE RATE



THANK YOU