California Crime Rates Visualization

Project 2

Collaborators

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Topic and Rationale

How safe is California? Given California is the 3rd largest state by area and the 1st largest state by population, this can be a difficult question to answer. The purpose of this project is to breakdown California by county and visualize how the crime categories, rates, and demographics change.

Method

Database: SQL
Track: Dashboard
New JS library: React and Highcharts

Data

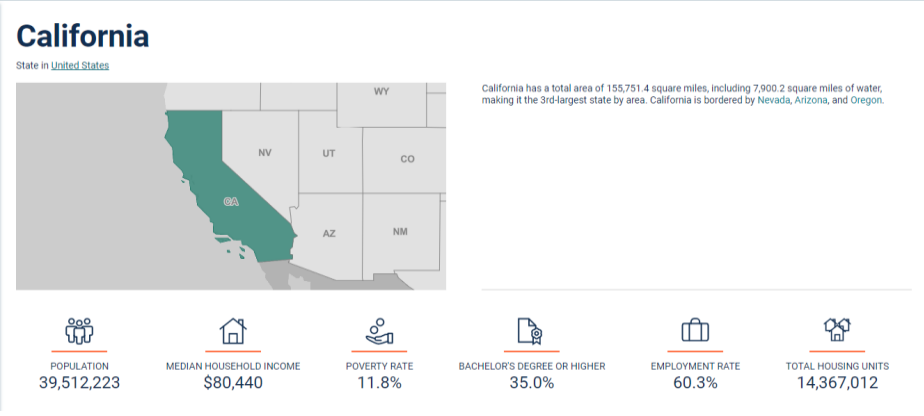
US Census Bureau API - California County Demographic information:
https://www.census.gov/data/developers/data-sets/acs-5year.html

FBI Crime Data API - California Crime Details:
https://crime-data-explorer.fr.cloud.gov/pages/docApi

Inspirational Visualizations

Defaults for all visualizations will be numbers for the state of California.

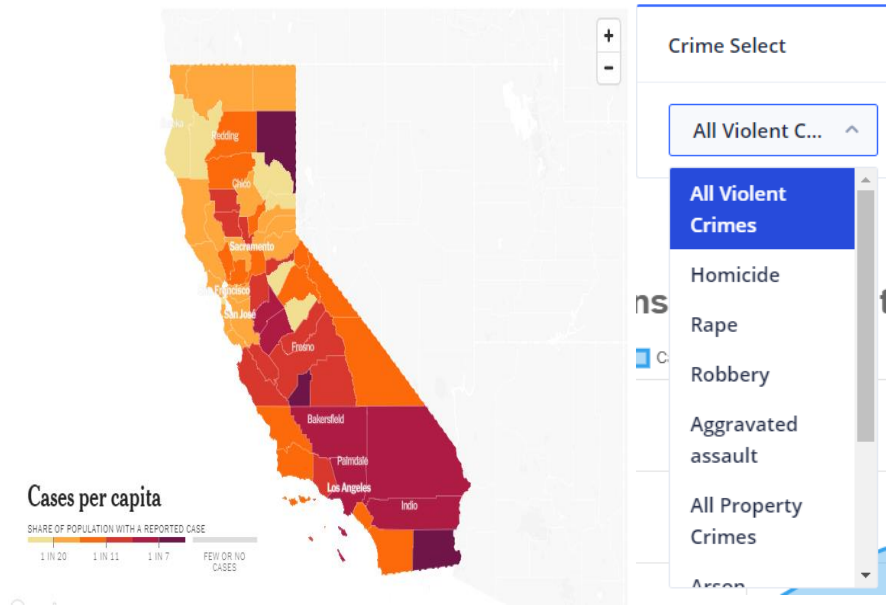
Demographics:



Ideas: Table to the right of map detailing crime rates. Interactive map with clickable counties. Values would change with county selection.

Source: https://data.census.gov/cedsci/profile?g=0400000US06

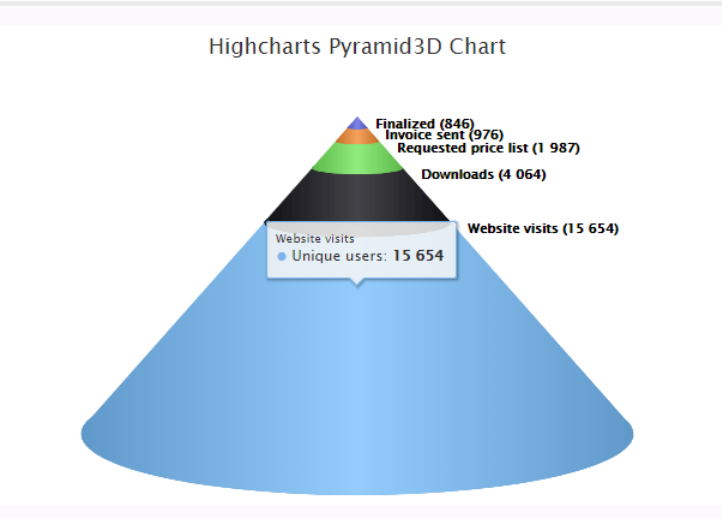
Crime Rate Heatmap:



Ideas: Default map is “All Violent Crime”. Popups attached to each county giving specific numbers. Dropdown with specific crime categories to change heatmap. This map could have the same interactivity as the above map, where one can click on a county to update the visualization above.

Sources: Figure 1: https://www.nytimes.com/interactive/2021/us/california-covid-cases.html
Figure 2: https://crime-data-explorer.fr.cloud.gov/pages/explorer/crime/crime-trend

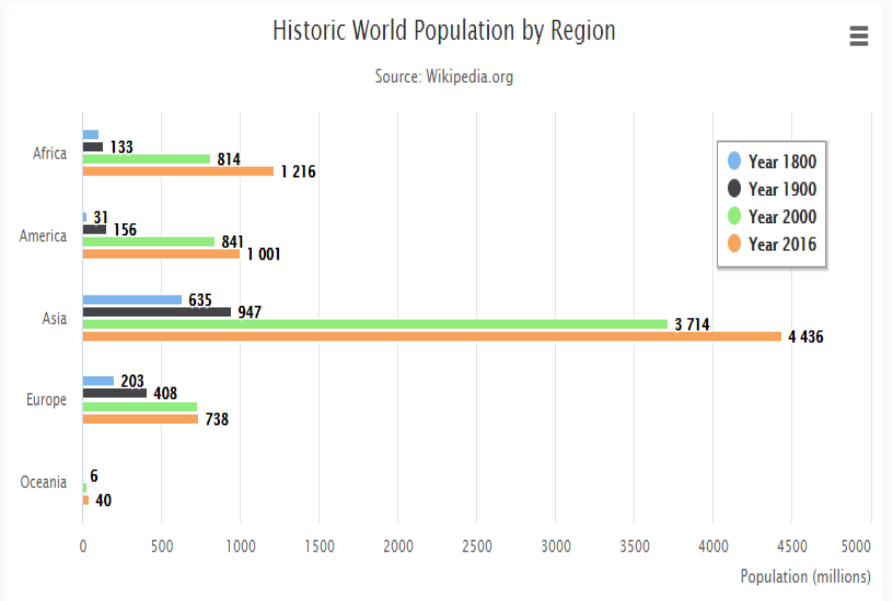
Crimes Pyramid:



Ideas: Pyramid to break down crimes visually per county. Will have a drop down menu to change county, but also changes any time a county is selected in one of the above maps.

Source: https://www.highcharts.com/docs/chart-and-series-types/pyramid-3d

Interactive Bar Chart:



Ideas: Default would be a standard bar chart. Have the option to compare up to 5 counties using a list with checkboxes. Default chart would convert to this chart for comparisons.

Source: https://www.highcharts.com/docs/chart-and-series-types/bar-chart

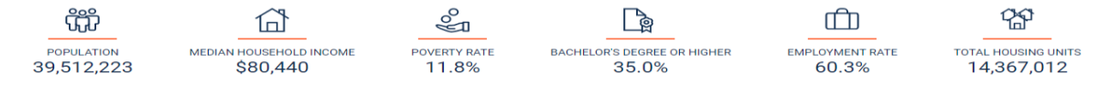
Design Sketch

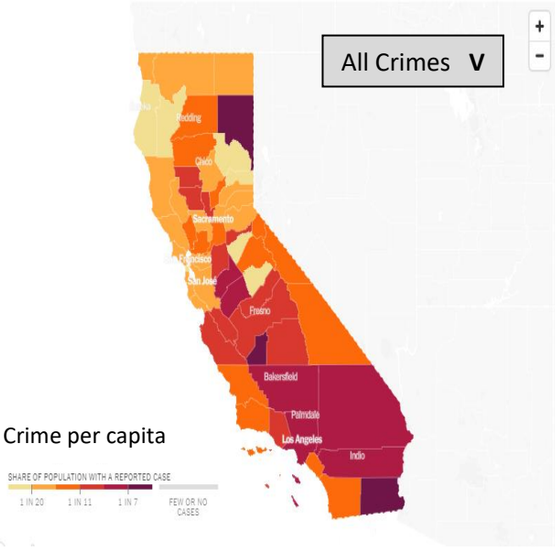
All images used in this document are for example visualization purposes only. Sources for original images can be found above.

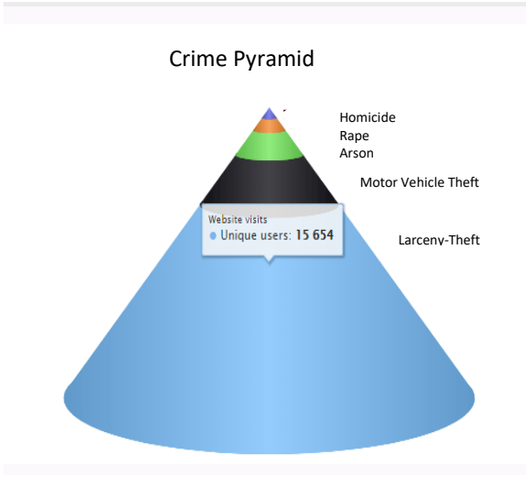
California Crime Rates

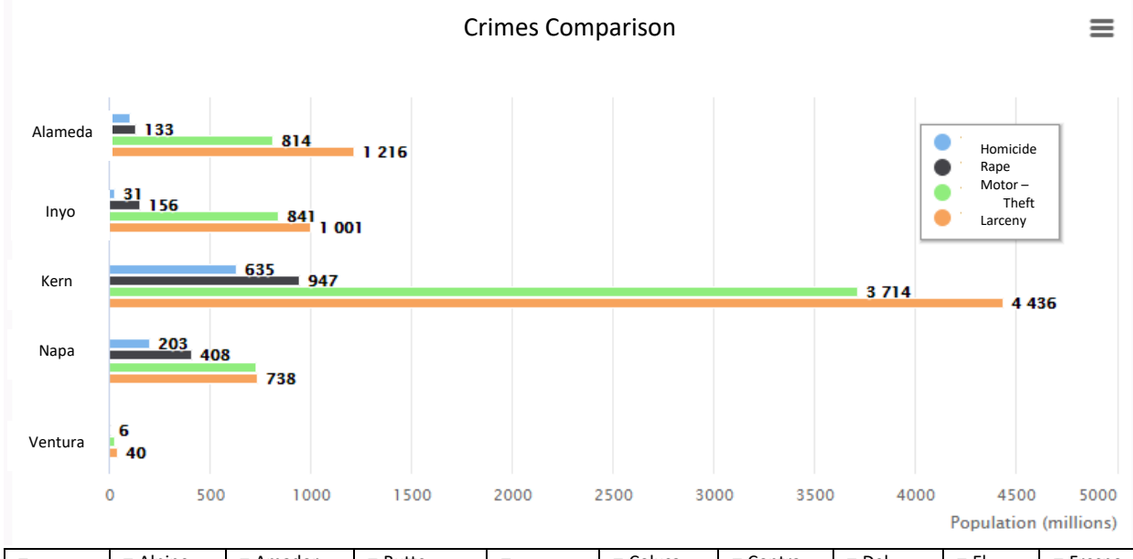
Select a County: ∨

Crime	Per 100,000
Homicide	4.13
Rape	5.76
Robbery	12.34
Aggravated Assault	9.83
Arson	7.56
Burglary	15.39
Larceny-Theft	18.78
Motor Vehicle Theft	16.54









□ Alameda	□ Alpine	□ Amador	□ Butte	□ Calaveras	□ Colusa	□ Contra Costa	□ Del Norte	□ El Dorado	□ Fresno
□ Glenn	□ Humboldt	□ Imperial	□ Inyo	□ Kern	□ Kings	□ Lake	□ Lassen	□ Los Angeles	□ Madera
□ Marin	□ Mariposa	□ Mendocino	□ Merced	□ Modoc	□ Mono	□ Monterey	□ Napa	□ Nevada	□ Orange
□ Placer	□ Plumas	□ Riverside	□ Sacramento	□ San Benito	□ San Bernadino	□ San Diego	□ San Francisco	□ San Joaquin	□ San Luis Obispo
□ San Mateo	□ Santa Barbara	□ Santa Clara	□ Santa Cruz	□ Shasta	□ Sierra	□ Siskiyou	□ Solano	□ Sonoma	□ Stanislaus
□ Sutter	□ Tehama	□ Trinity	□ Tulare	□ Tuolumne	□ Ventura	□ Yolo	□ Yuba		