EQUALITY INC.

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General Assembly
Project 5

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PROBLEM STATEMENT

Amongst all the craziness of 2020, the one thing we did not expect to focus on was the *Black Lives Matter* movement. It has been 157 years since slavery was abolished and 150 years since people of color received the right to vote. Unfortunately, systemic racism continues in the United States and other countries around the world. We at, *Equality inc.*, work with law enforcement to teach racial bias. We do this by evaluating the crime in your area and looking at the number of fatal encounters. With our help, we can reduce your number racially biased fatal encounters.
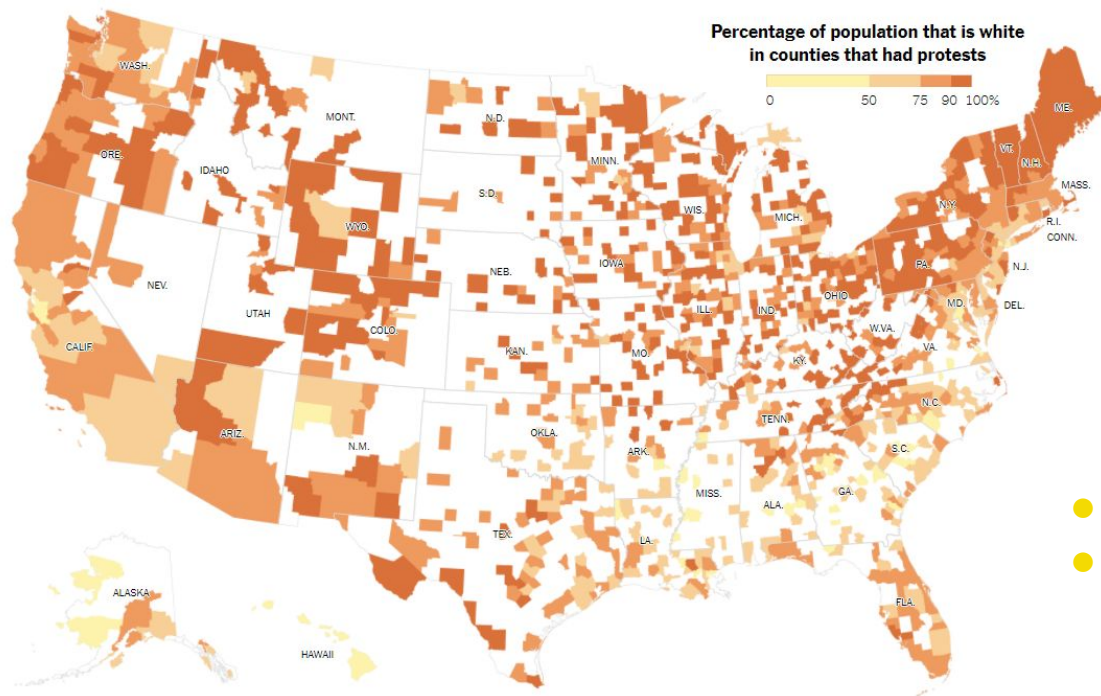
BACKGROUND

From May 26 - June 28, 2020, it is estimated **15-26 million** people participated in demonstrations over the death of George Floyd and others

The New York Times called this the **largest** Black Lives Matter demonstration this country has ever seen.

Percentage of population that is white in counties that had protests
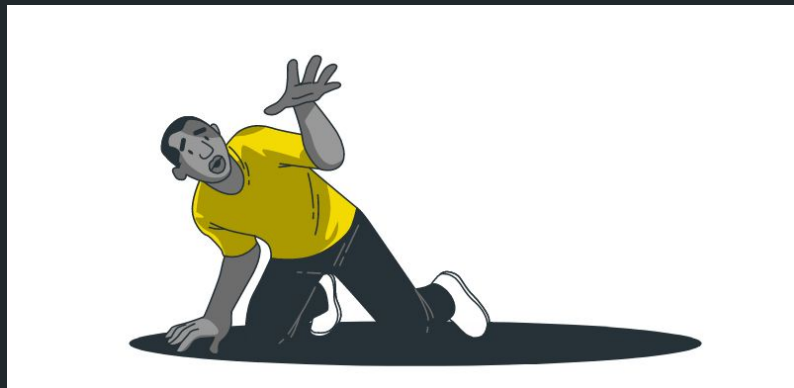
0   50   75 90 100%

The New York Times · Source: 2018 Census via Social Explorer; Crowd Counting Consortium protests database; New York Times protests database

DEMONSTRATIONS

- 4,700 across the US
- 140 per day

Fatal Encounters

A database compiling facts about encounters between police and civilians that involve use of force between 2000-2020

FEATURES USED IN THE DATASET

Age : *Age of person in encounter*

Latitude/Longitude: *Latitude/Longitude of encounter*

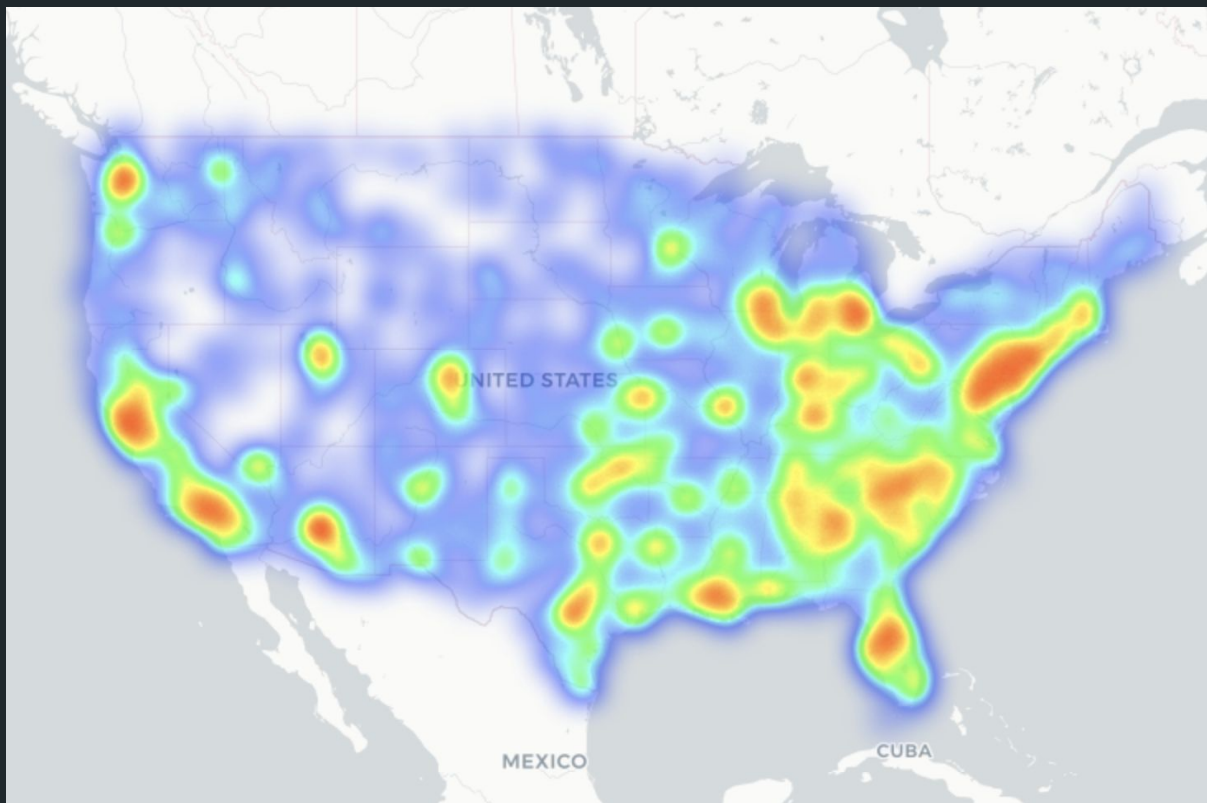**Gender:** *Binarized gender of person involved in encounter*

State: *State where the encounter took place*

Cause of Death: *Cause of death in encounter*

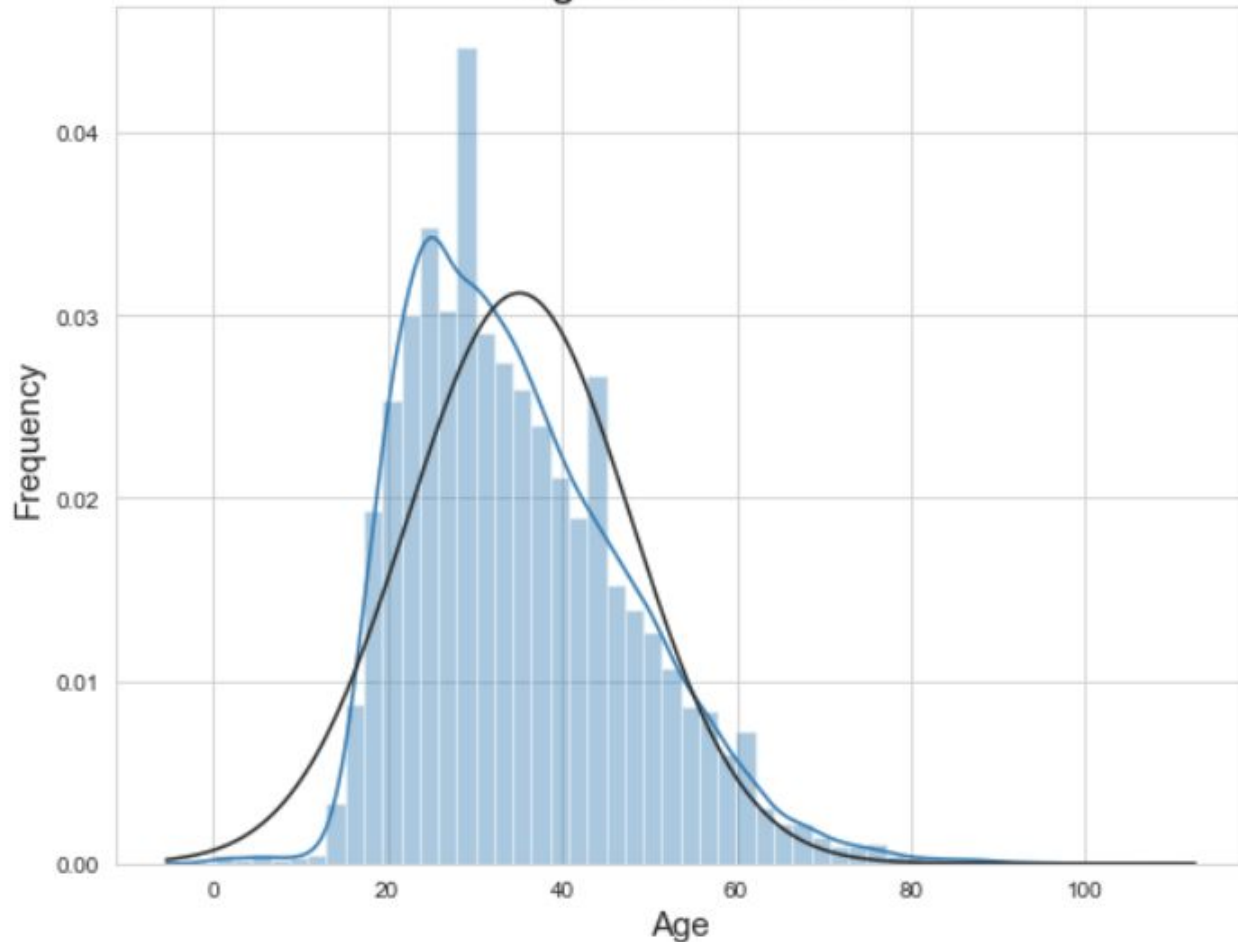**Intended Use of Force:** *Intended use of police force*

Race: *Race of person in encounter (target variable)*

WHERE FATAL ENCOUNTERS OCCUR
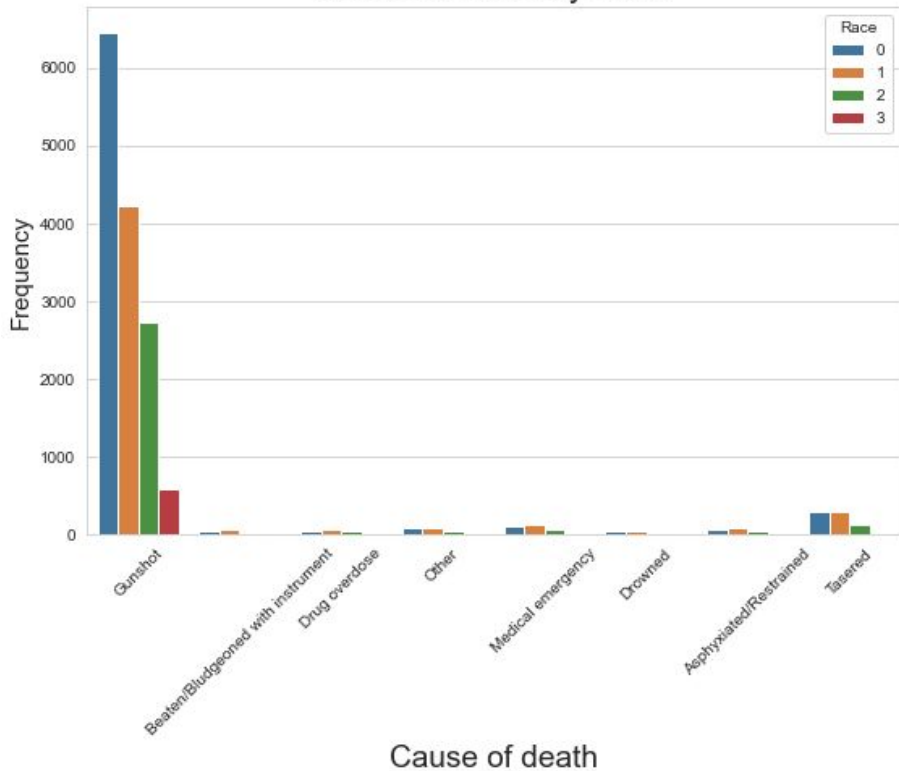
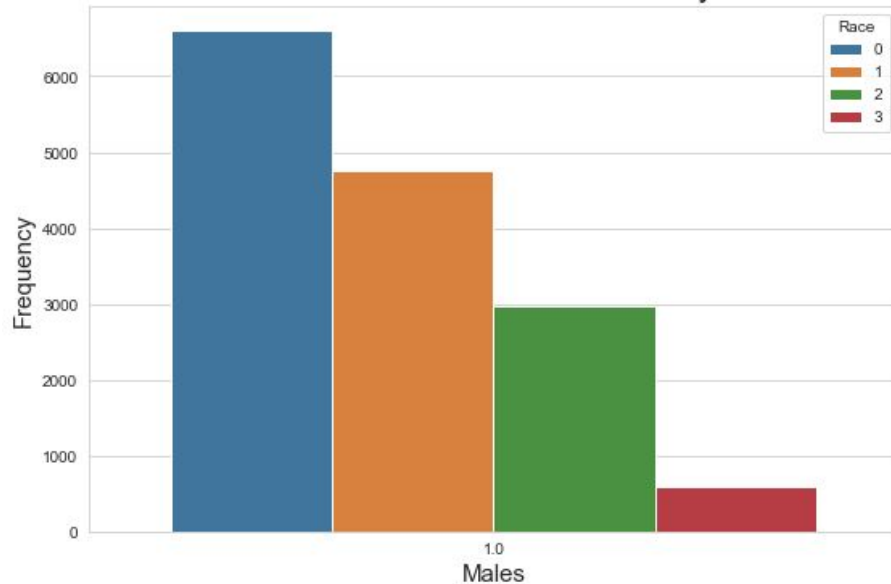## Age Distribution

Age is slightly right skewed

Median Age
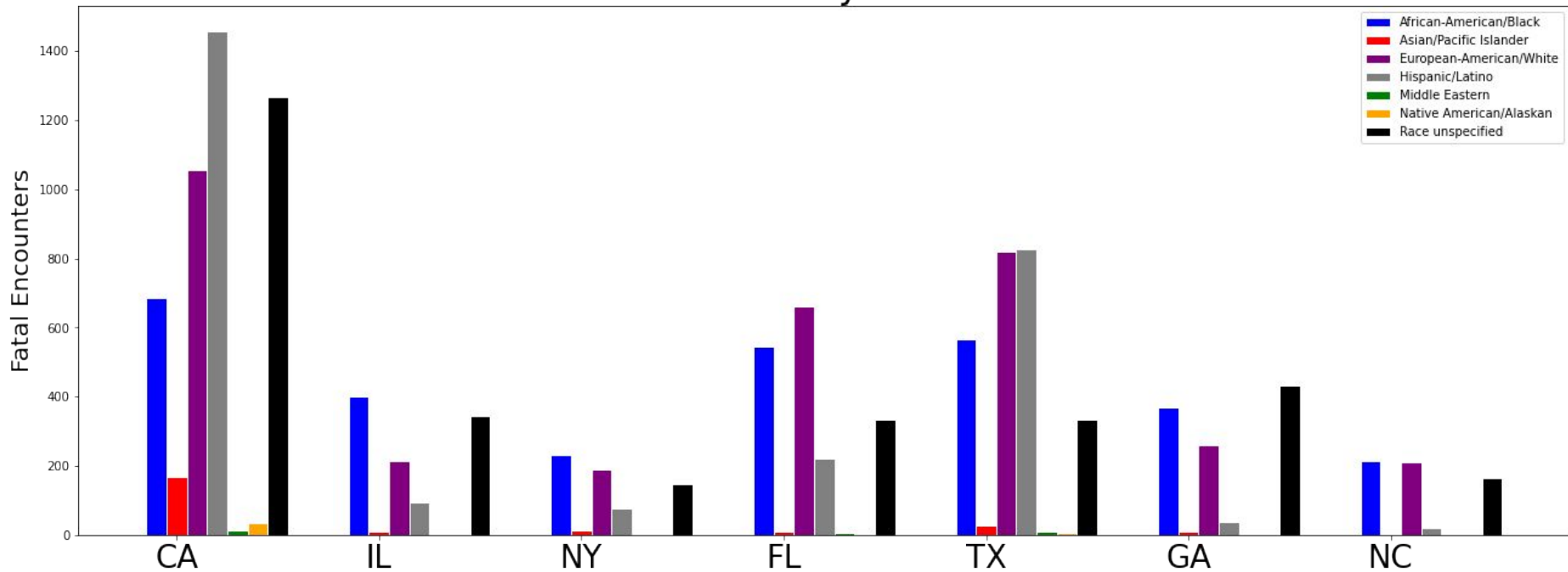30

Cause of Death by Race

Number of Male Fatal Encounters by Race

Fatal Encounters by State and Race

MODEL
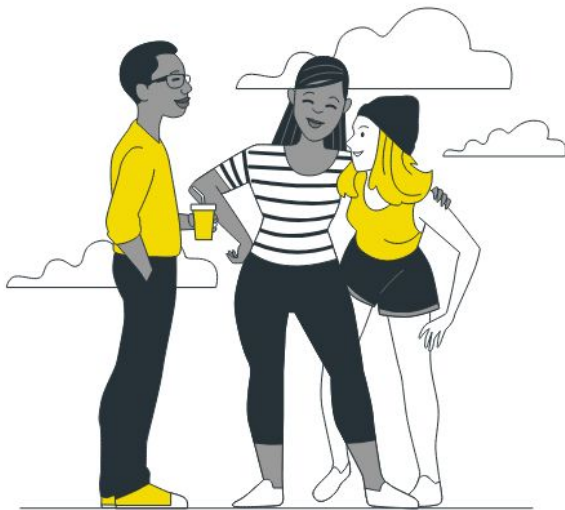
K Nearest Neighbor

N Neighbors = 51

Baseline

White **34.6%**
Black 22.9%
Hispanic 13.5%
Other 29.0%

Final Scores

Train: 46.77%

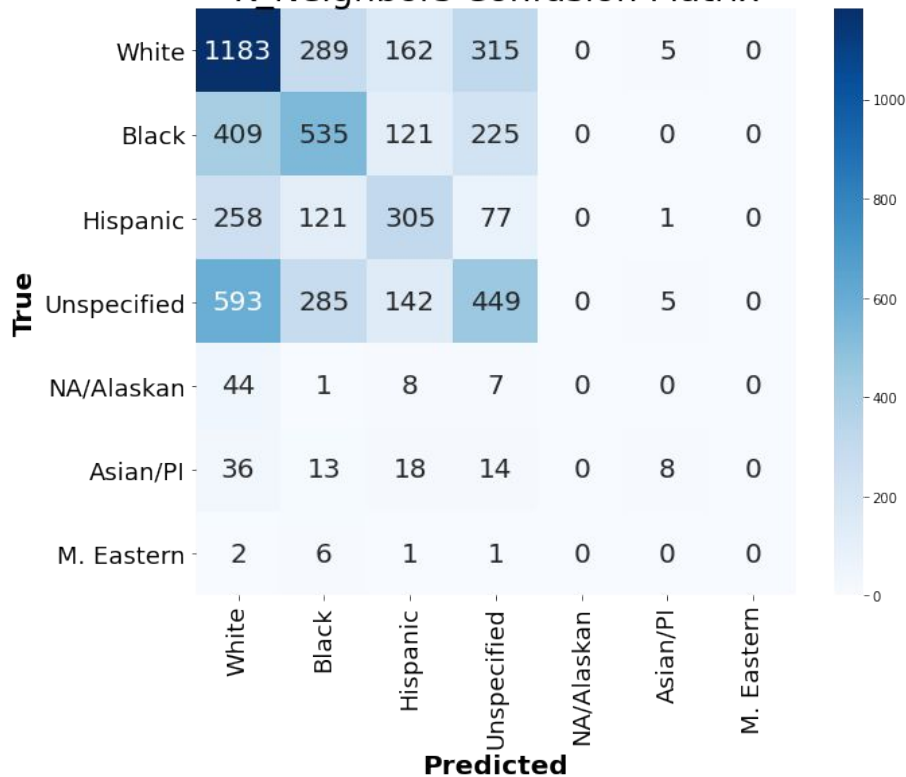**Test: 43.98%**

K_Neighbors Confusion Matrix

Very low represented minorities misclassified

Most misclassifications classified white

Unspecified Race category highly misclassified

All minorities have higher representation than census demographics

CONCLUSIONS

Moral Dilemma

African Americans 23% of fatalities, but just 13% of US Population.

Race Not Specified 28%

Nationwide level ---> State level

Work with local law enforcement

GOAL: LIMIT THE RACIALLY BIASED DEATHS ACROSS THE COUNTRY

EQUALITY INC.
FIGHTING TO MAKE OUR JUSTICE SYSTEM JUST

SOURCES

https://fatalencounters.org/

https://www.census.gov/quickfacts/fact/table/US/PST045219

https://www.nytimes.com/interactive/2020/07/03/us/george-floyd-protests-crowd-size.html