# Police Killings in the United States
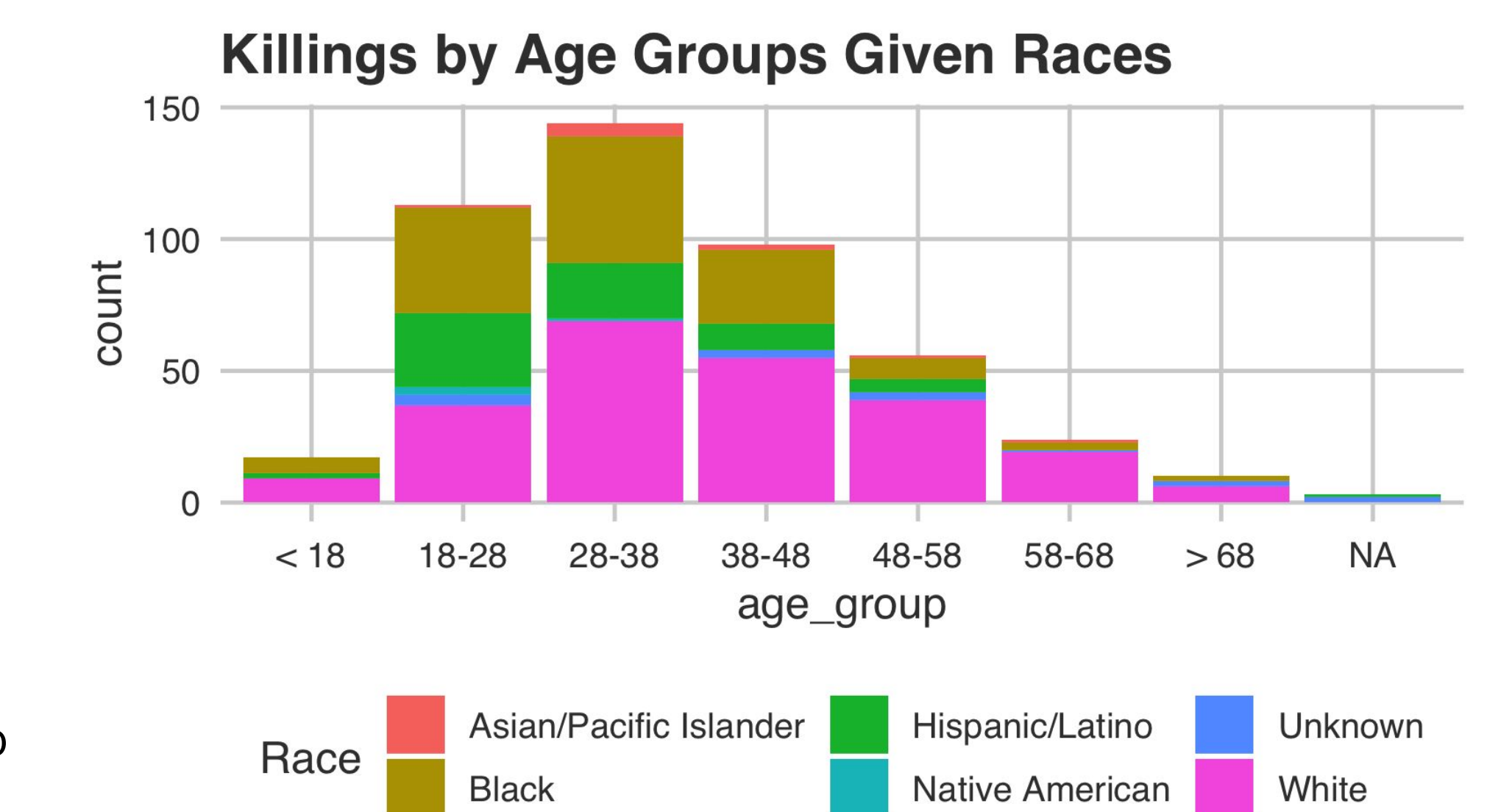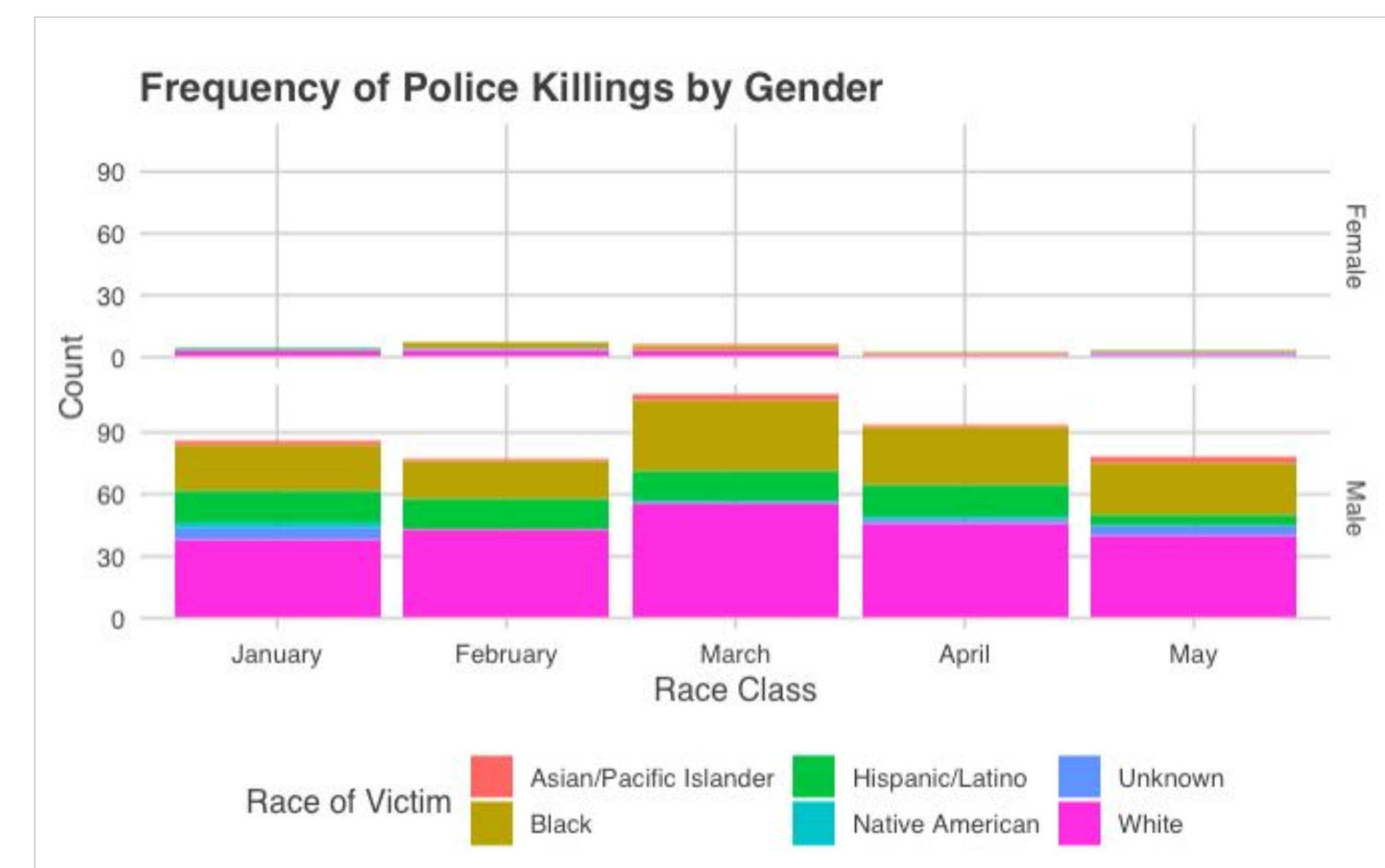
An exploration of police killing data from January 1 to June 2, 2015

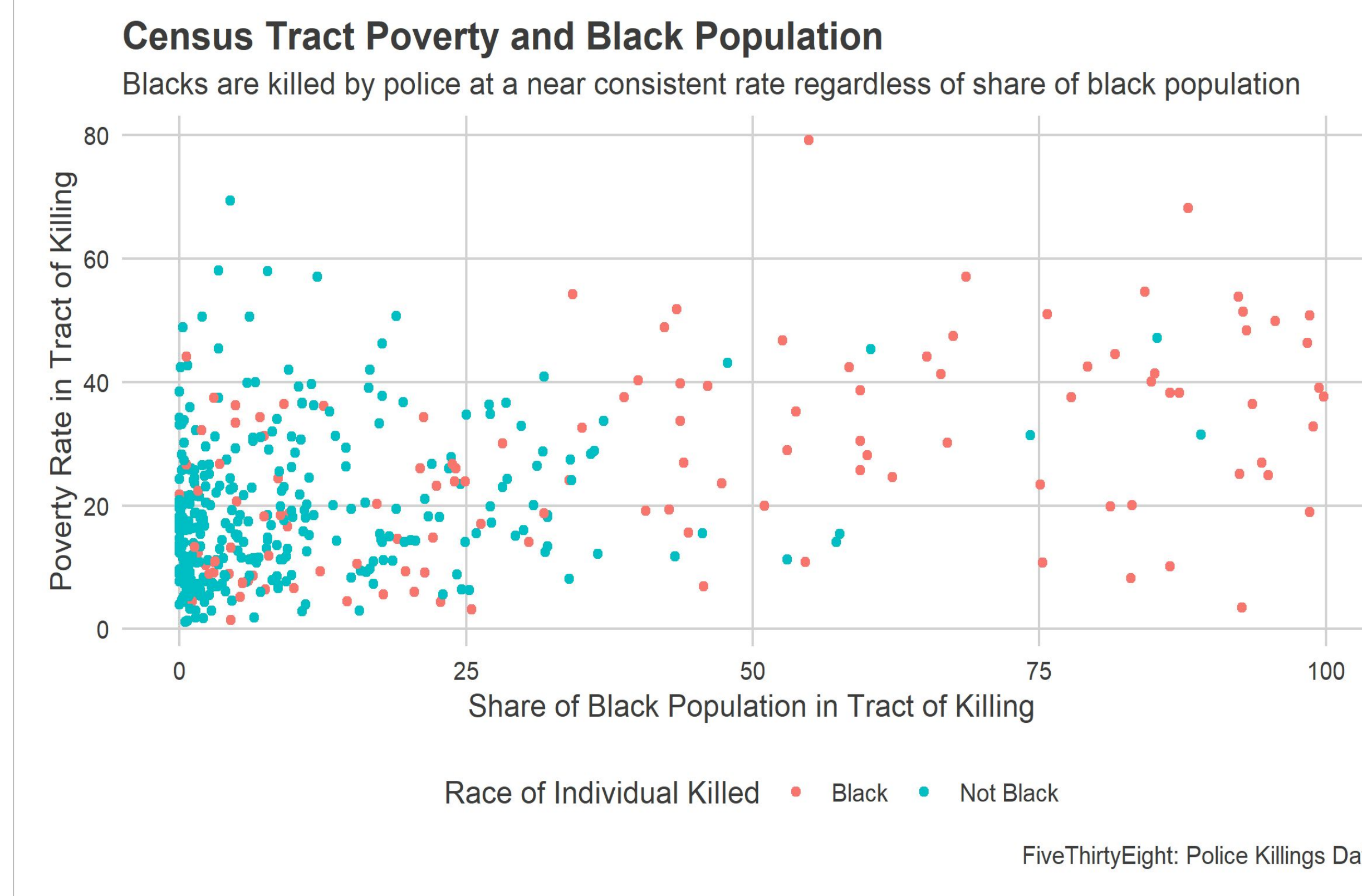*Ina Rastegar, Ben Kaplan, Lizzy Ma, Justin Lee*

## Overview

The following visuals are made using data from fivethirtyeight. They compiled data from both the Guardian, for data on police killings, and the census, for data on the tract that the victim was killed in. Information on the victim, such as their age, race, cause of death, and their armed status are recorded. Using reporting of where the killing occurred, census tract data for that location is also recorded, such as average income, racial demographics, and education levels. The data encompasses killings that occurred between January 1, 2015 to June 2, 2015.

In this approximately 5 month span, 467 killings were recorded in this dataset, and many consider this information to be grossly underreported.
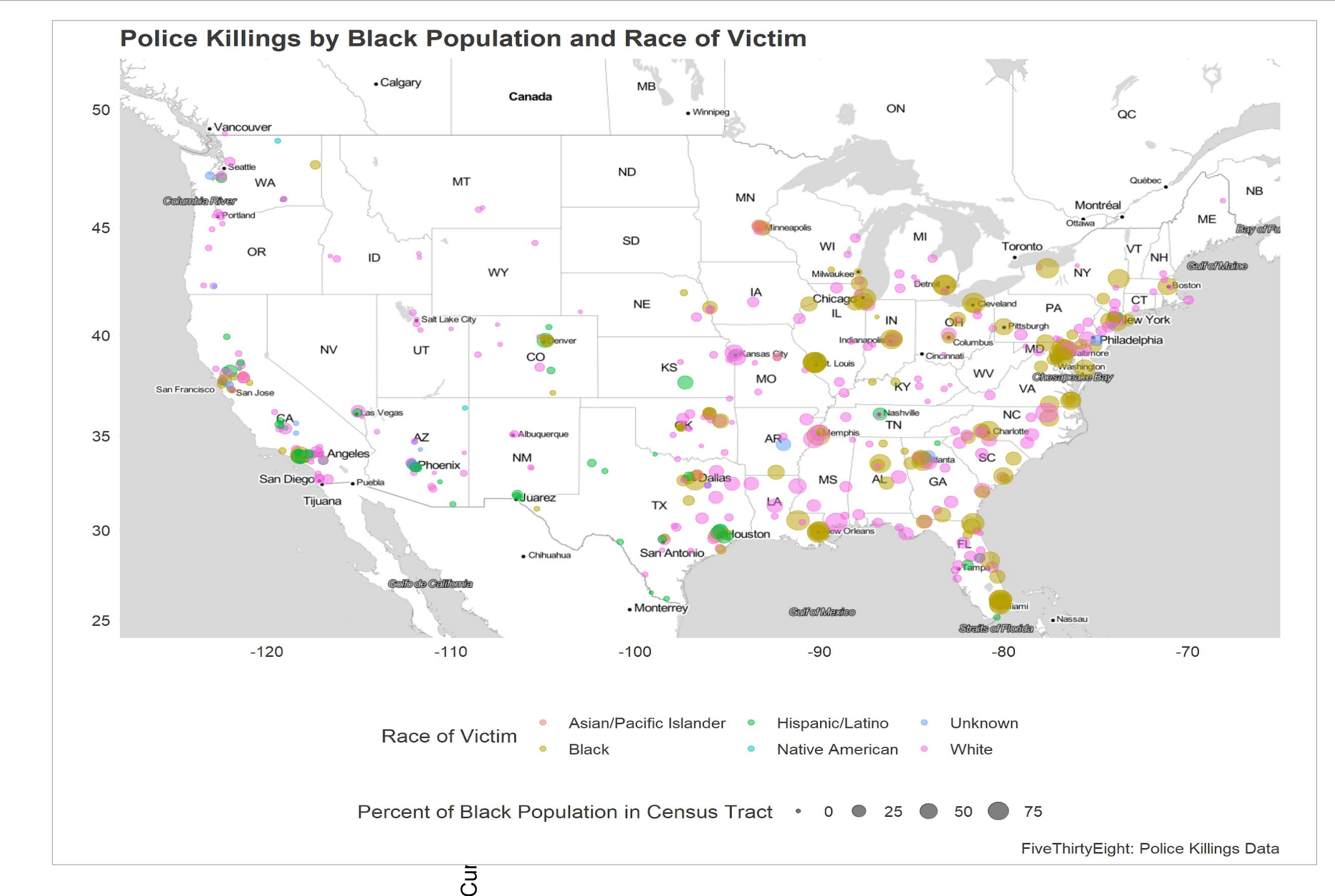
- A vast majority of victims who are killed by police are male
- Blacks and whites appear to be the most targeted race groups
- Distribution of age of the killed is right skewed. It appears that the median falls under the 28-38 age group. This group is also the largest among all age groups shown in the graph.
- It also appears that blacks are more targeted and they are younger. Individuals who are over 48 year-old are more likely to be white than those who are under 48 year-old.

**Frequency of Police Killings by Gender**



**Killings by Age Groups Given Races**



## Police Killings of Blacks Appears to be a Systemic Problem

**Census Tract Poverty and Black Population**
Blacks are killed by police at a near consistent rate regardless of share of black population



FiveThirtyEight: Police Killings Data

**Police Killings by Black Population and Race of Victim**



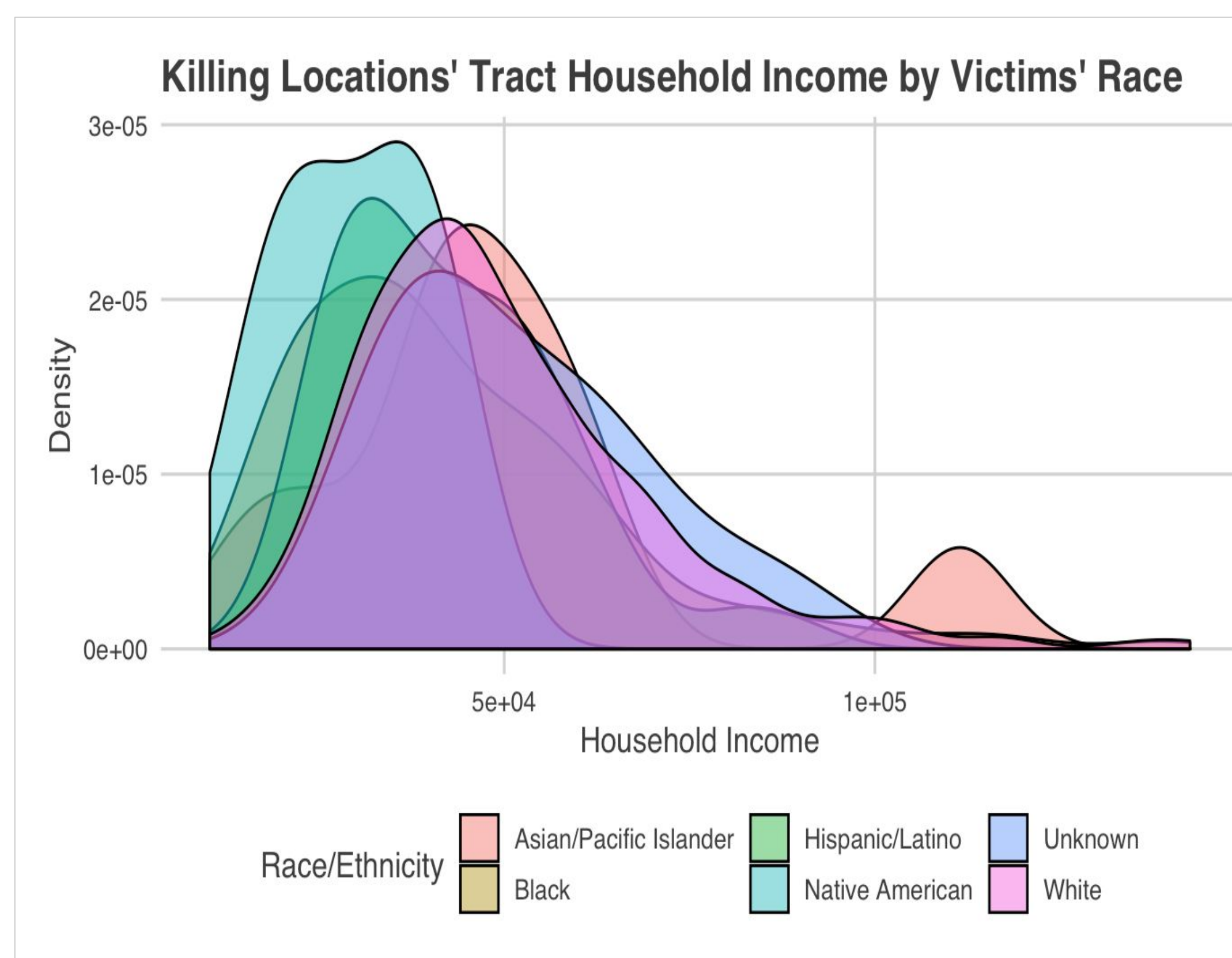FiveThirtyEight: Police Killings Data

- Blacks appear to be killed by police more often in regions with smaller black populations
- This is unlike killings of non-blacks by police, which appear to occur most frequently in areas with high populations of non-blacks
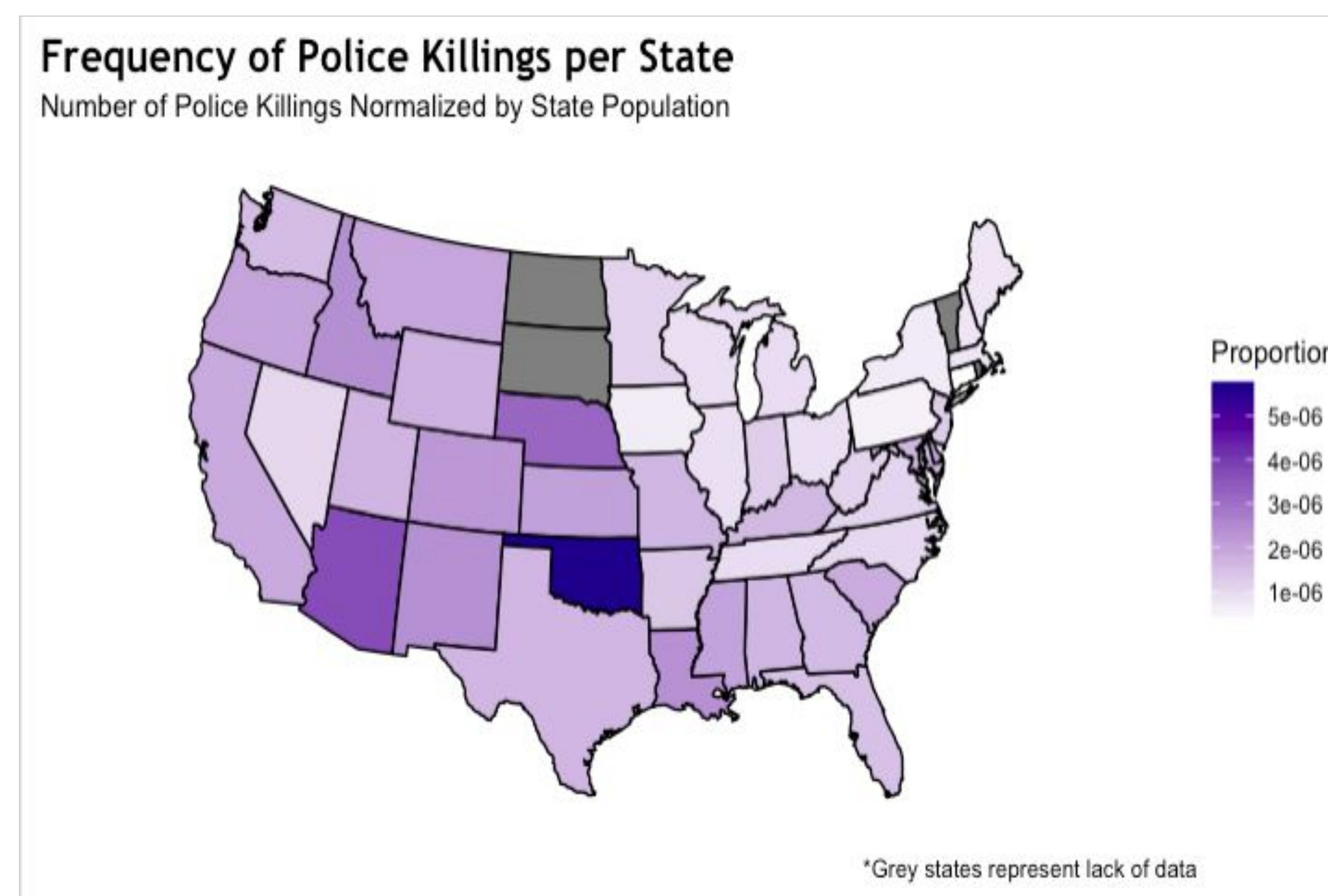- This suggests an underlying systemic problem in this country.

- Most police killings occur in densely populated regions on the eastern portion of the US
- Police killings of whites appears to occur most often in census tracts with low white populations
- It appears that some states need police reform far more than others (keep in mind, this is not normalized by population size).

## Location Influences Police Killings Too

**Killing Locations' Tract Household Income by Victims' Race**



**Frequency of Police Killings per State**
Number of Police Killings Normalized by State Population
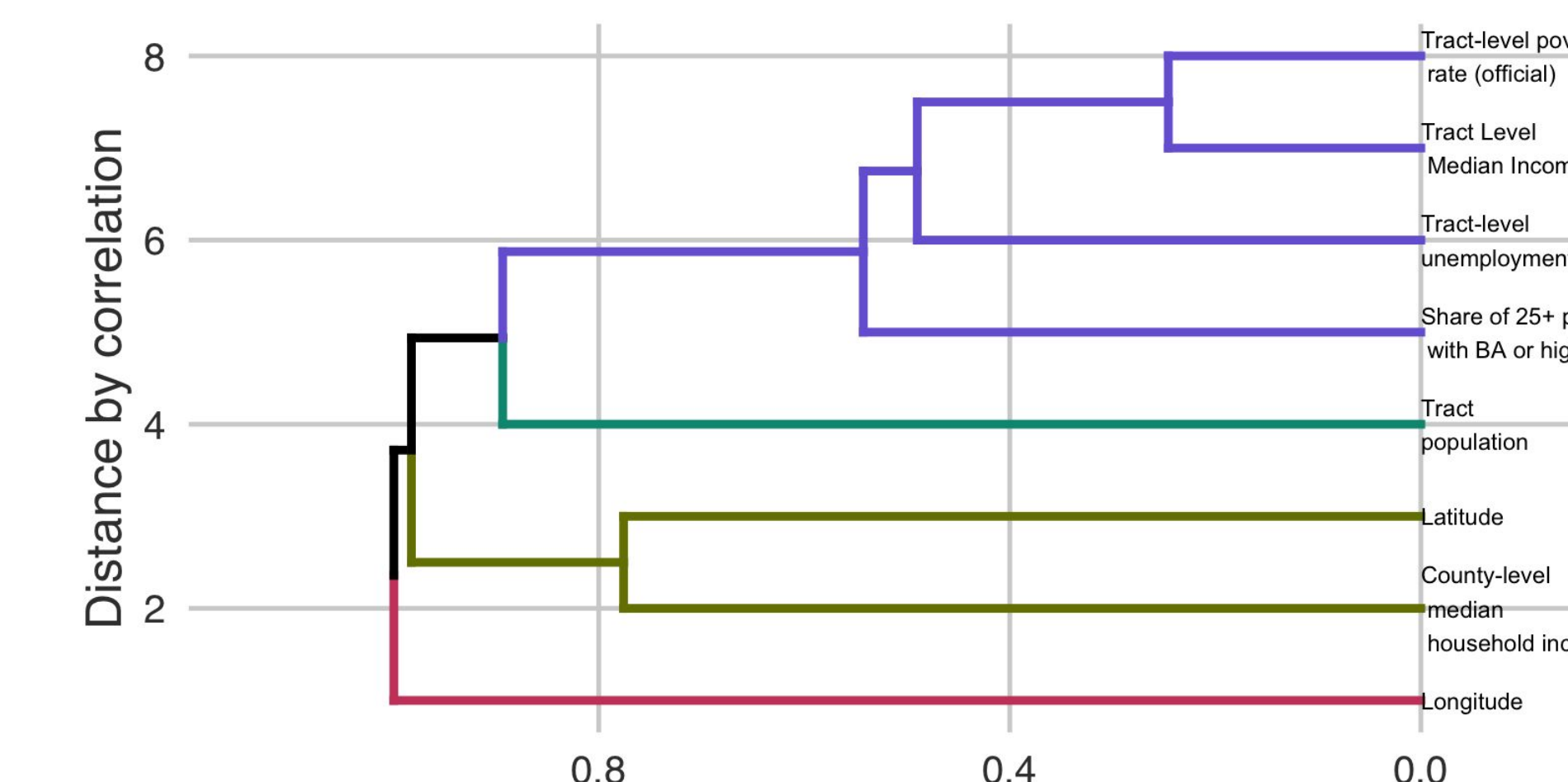


*Grey states represent lack of data

- Household income is generally unimodal with a right skew.
- Average household income appears to be bimodal for Asian/Pacific Islander victims, but this may also be a result of a small sample size.
- Hispanic/Latino people are killed in the tracts of the lowest average income.
- The average household income in the US is ~$59,000. The majority of these killings happen in low income, high poverty areas.
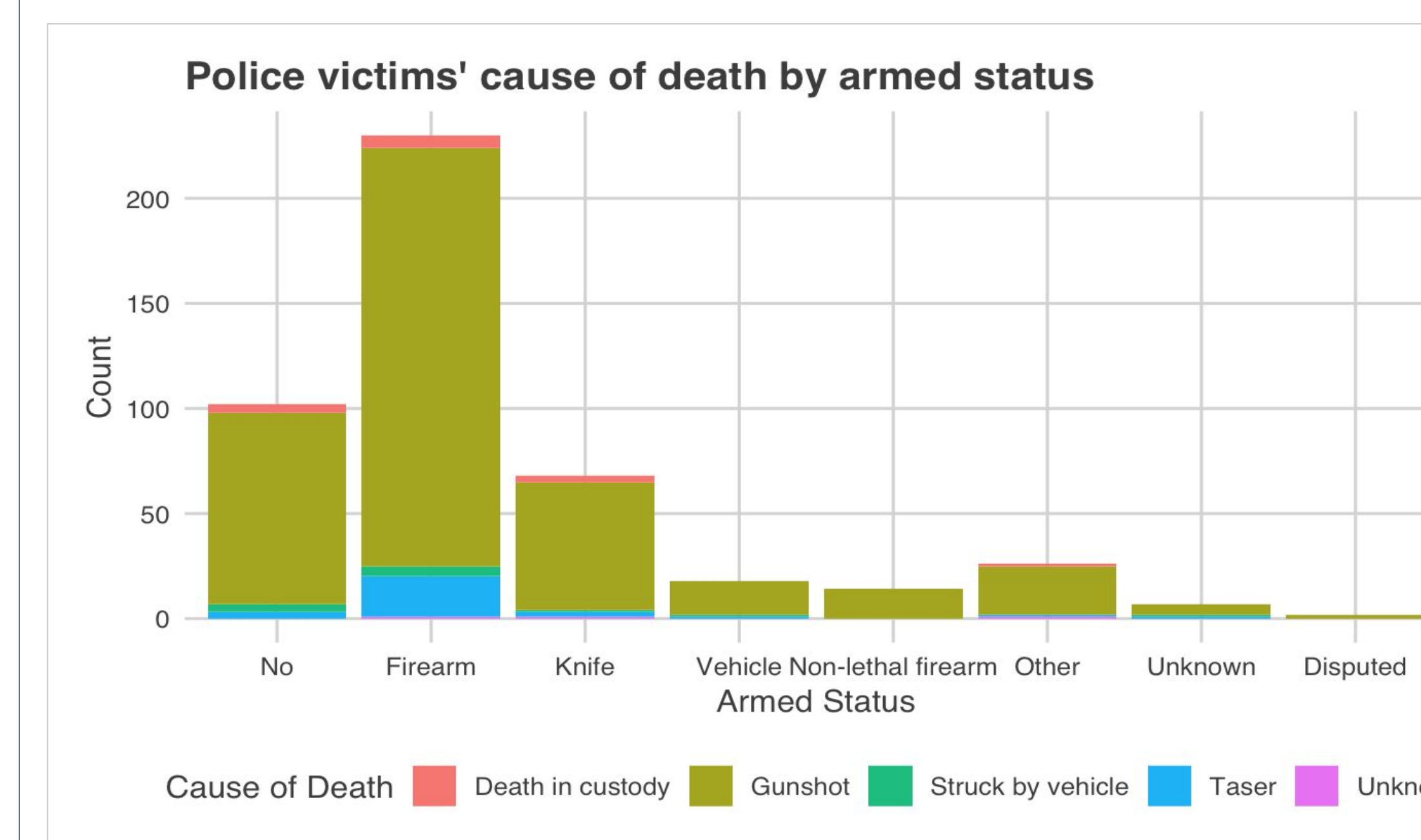
- In 2015, Oklahoma had the highest police killing rate in the nation
- The Northeast overall seems to have a low frequency relative to state population of police killings

**Clusters of continuous variables**



- The dendrogram shows the clustering of all the continuous variables in the Police Killing dataset based on their pairwise correlation. According to the result, there is a close relation between the tract-level income, poverty rate, unemployment rate and education level, which is expected. There is also close relation between county-level income and latitude .

**Police victims' cause of death by armed status**



- An overwhelming majority of victims of police killings are killed by gunshot, and an overwhelming amount of them were killed carrying a firearm.
- It is interesting that more victims had no weapon than had any weapon aside from a firearm.
- Of those killed who were not carrying a weapon, 50% were white, and 31% were black. Considering the racial demographics of the United States, blacks are overly present in this statistic.
- Every person killed carrying a non-lethal firearm was killed by a firearm.