# Week 5 Visualizations Activity

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## Description of the data:

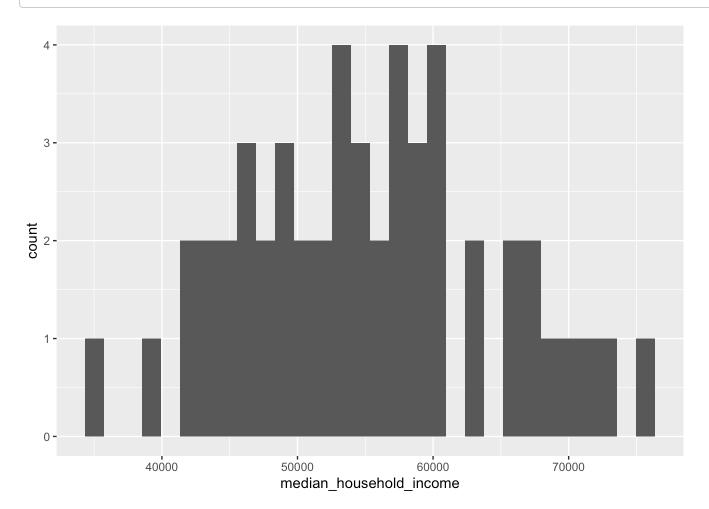
The dataset\* selected for this analysis comes from the FBI and the Southern Poverty Law Center (SPLC) and the research question is: What are the trends in hate crime rates by state, and what state-level factors are associated with these variations?

Data collection: The federal government does not systematically track hate crimes, as reporting to the FBI is voluntary. The Southern Poverty Law Center relies on media accounts and self-reports to evaluate the situation. Both sources provide publicly available data.

\*The dataset is found on GitHub (https://github.com/fivethirtyeight/data/tree/master/hate-crimes) and it is in csv. format. More background information can be found in this article (https://fivethirtyeight.com/features/higher-rates-of-hate-crimes-are-tied-to-income-inequality/).

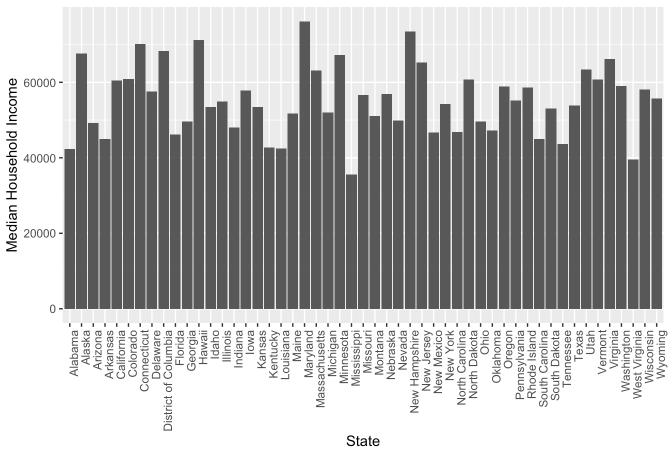
#### Histogram:

## `stat\_bin()` using `bins = 30`. Pick better value with `binwidth`.



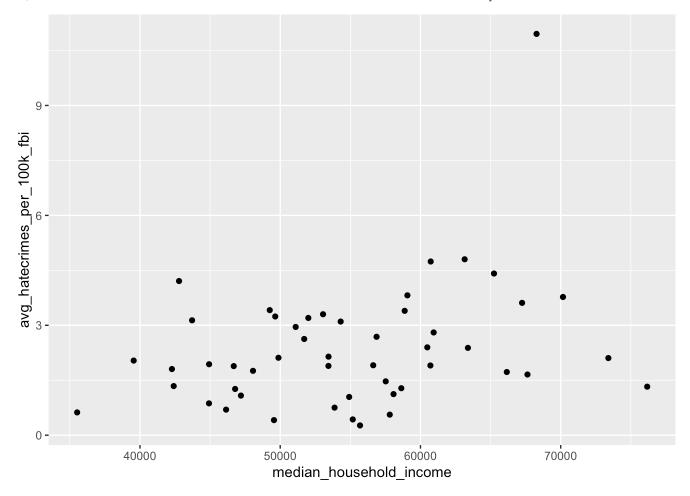
#### Bar chart:

### Median Household Income by State



Correlation plot: median\_household\_income and avg\_hatecrimes\_per\_100k\_fbi

## Warning: Removed 1 row containing missing values or values outside the scale range
## (`geom\_point()`).



Correlation plot: median\_household\_income and share\_population\_with\_high\_school\_degree

