# Analysis of the Impact of Hate Crimes on Police Shootings in the United States

#### Motivation

- Around 1000 people were killed every year
- Huge Protest
- Find out the possible reasons

### Research Question

Do US states with higher hate crime rates also experience elevated rates of fatal police shootings?

#### **Used Data**

| Victim's<br>age | Victim's<br>gender | Victim's<br>race | Date of Incident<br>(month/day/year) | City        | State     | Zipcode | Agency<br>responsible<br>for death         | Cause of<br>death | Criminal<br>Charges? | Symptoms of mental illness? | Alleged Weapon<br>(Source: WaPo and<br>Review of Cases Not<br>Included in WaPo<br>Database) | Alleged<br>Threat Level<br>(Source:<br>WaPo) | Fleeing<br>(Source:<br>WaPo) | Armed/Unarmed<br>Status |
|-----------------|--------------------|------------------|--------------------------------------|-------------|-----------|---------|--|-------------------|----------------------|-----------------------------|---|--|------------------------------|-------------------------|
| Unknown         | Male               | Hispanic         | 2020-12-31                           | Miami       | Florida   | 33133.0 | Miami Police<br>Department                 | Gunshot           | No known<br>charges  | No                          | gun   | attack                                       | Not fleeing                  | Allegedly Armed         |
| 39              | Male               | White            | 2020-12-31                           | Beaumont    | Texas     | 77707.0 | Beaumont Police<br>Department              | Gunshot           | No known<br>charges  | Yes                         | gun   | attack                                       | Not fleeing                  | Allegedly Armed         |
| 63              | Male               | Unknown<br>race  | 2020-12-31                           | Phoenix     | Indiana   | 46563.0 | Marshall County<br>Sheriff's<br>Department | Gunshot           | No known<br>charges  | No                          | vehicle   | attack                                       | Car                          | Vehicle                 |
| 23              | Male               | Black            | 2020-12-30                           | Minneapolis | Minnesota | 55407.0 | Minneapolis<br>Police<br>Department        | Gunshot           | No known<br>charges  | No                          | gun   | attack                                       | Not fleeing                  | Allegedly Armed         |
| 37              | Male               | White            | 2020-12-30                           | Wichita     | Kansas    | 67203.0 | Wichita Police<br>Department               | Gunshot           | No known<br>charges  | No                          | gun   | attack                                       | Foot                         | Allegedly Armed         |

| STATE_NAME | INCIDENT_DATE                 | TOTAL_OFFENDER_COUNT | OFFENDER_RACE | VICTIM_COUNT | OFFENSE_NAME                    | TOTAL_INDIVIDUAL_VICTIMS | LOCATION_NAME                      | BIAS_DESC  |
|------------|-------------------------------|----------------------|---------------|--------------|---------------------------------|--------------------------|------------------------------------|--|
| Alaska     | 2013-02-15<br>00:00:00.000000 | 1                    | Unknown       | 1            | Aggravated<br>Assault           | 1.0                      | Highway/Road/Alley/Street/Sidewalk | Anti-Black<br>or African<br>American               |
| Alaska     | 2013-03-01<br>00:00:00.000000 | 1                    | White         | 2            | Intimidation                    | 2.0                      | Highway/Road/Alley/Street/Sidewalk | Anti-<br>American<br>Indian or<br>Alaska<br>Native |
| Alaska     | 2013-06-07<br>00:00:00.000000 | 4                    | White         | 1            | Burglary/Breaking<br>& Entering | 1.0                      | Residence/Home                     | Anti-Black<br>or African<br>American               |
| Alaska     | 2013-06-17<br>00:00:00.000000 | 1                    | White         | 1            | Simple Assault                  | 1.0                      | Highway/Road/Alley/Street/Sidewalk | Anti-Black<br>or African<br>American               |
| Alaska     | 2013-06-20<br>00:00:00.000000 | 1                    | White         | 1            | Intimidation                    | 1.0                      | Highway/Road/Alley/Street/Sidewalk | Anti-Black<br>or African<br>American               |

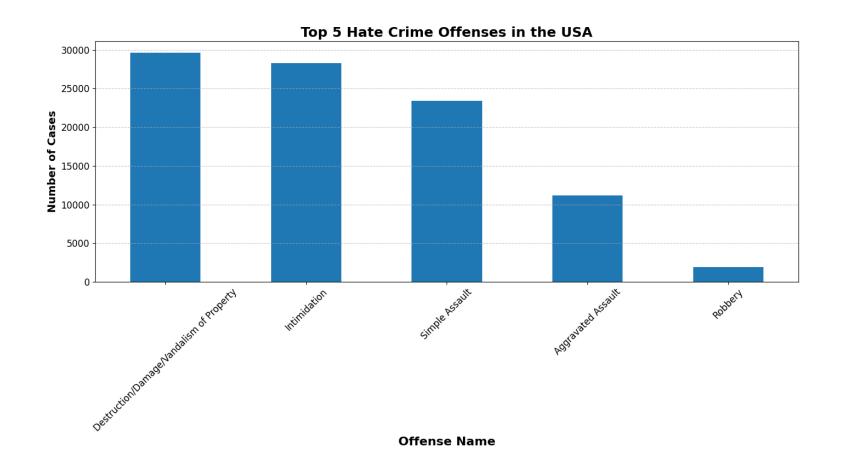
U.S Police Shootings 2013- 2020 [CC0: Public Domain license] FBI Hate Crimes in the USA (1991–2020)[U.S. Government Works]

## Methodology

- Exploratory Data Analysis (EDA)
- Correlation Analysis

# Exploratory Data Analysis (EDA)

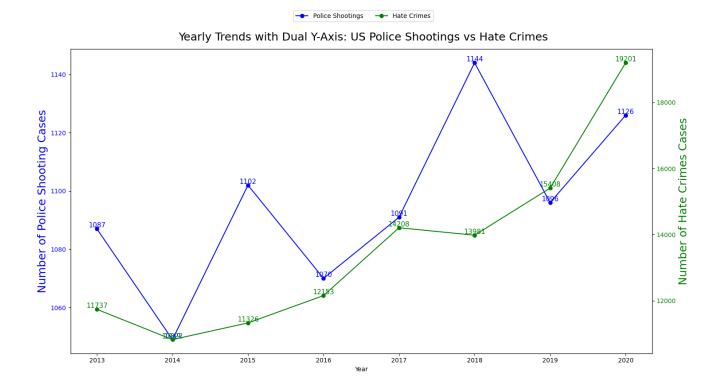
## **Top 5 Hate Crimes**



Most of the crimes are related to property

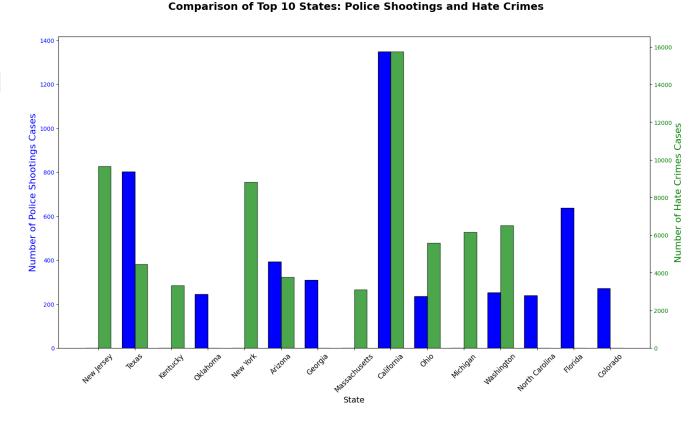
# Yearly Analysis

- Hate crimes consistently rise after 2018, peaking in 2020.
- Police shootings peak in 2018 but show variability over the years.



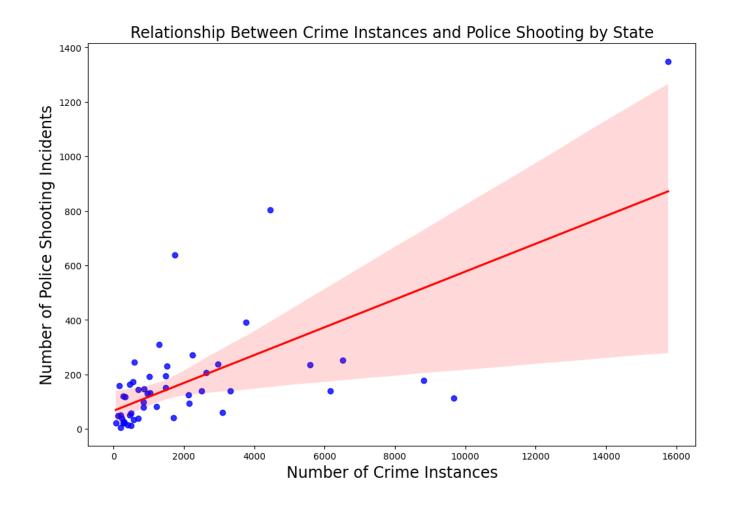
### Top States: Police Shootings vs. Hate Crimes

- •California leads in both police shootings and hate crimes (16,000 hate crime cases).
- •States like **New York** and **Michigan** show high hate crimes but minimal police shootings.



## **Correlation Analysis**

Moderate Positive Correlation (0.67)



#### Result

• California leads in both police shootings and hate crimes

Moderate Positive Correlation

• Other factors like socio-economic and demographic aspects may also contribute.

#### References

- James Vandenberg. (2013–2020). US Police Shootings Dataset. Retrieved from https://www.kaggle.com/datasets/jamesvandenberg/us-police-shootings-20132020 [2] Jonathan Revere. (1991–2020).
- FBI Hate Crimes in USA Dataset. Retrieved from https://www.kaggle.com/datasets/jonathanrevere/fbi-hate-crimes-in-usa-19912020 [3]
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