



الأكاديمية السعودية الرقمية
SAUDI DIGITAL ACADEMY



Big Data & AI Bootcamp

Capstone One Project

US Police Shooting Overview

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Many accidents have been trending in the US, notably in the previous two years of racist officers. For example, the accident named “I Can’t Breathe” which happened in New York, in 2019. This accident sparked a movement by black people titled Black Lives Matter. All of those accidents were inhumane for many individuals; especially to us. This led us to dig behind the explanations and the factors of the initiation of these accidents. Thus, we stumbled into a dataset that struck our interest, which is about the US Police Shootings in the US from 2015 to 2020. We will explain the dataset, its description, attributes, and some insights acquired based on a visualization that we made in Tableau that summarized most of the noteworthy interactions between the attributes.

Dataset title: US Police Shooting

Dataset Author: Ahsen Nazir

Resource: Kaggle (<https://www.kaggle.com/datasets/ahsen1330/us-police-shootings>)

This dataset examines police shootings in the United States. It precisely measures the common racism in America. We had no need to clean or alter the dataset, as it was absolutely flawless. It offers basic information about the shot victims, including their names, ages, genders, and races. In addition to the shooting and death information, the following questions illustrate our rationale for selecting the dataset.

- The date of the occurrence and the location where it occurred.
- How did they get shot? Did they attack?
- Were they carrying arms?
- Did they exhibit signs of mental illness?
- Was a camera worn by the police officer, or was the incident recorded?
- Did the victim run away?
- What type of weapons were employed by law enforcement?



Table 1 Dataset Description

Id	The id of the event.
Date	The event's date.
City:	The location of the event.
State	The state of the event.
Name	The name of the victim.
Gender	The gender of the victim.
Age	The age of the victim.
Race	The race of the victim.
Signs of Mental Illness	Did the victim show any signs of a mental illness? "True or false"
Flee	Did the victim flee? "Flee with foot, car, not fleeing"
Threat level	Threat level: the threat level of the event "attack, undetermined."
Manner of death	Manner of death: how was the victim killed? "Shot, tasered"
Armed	Armed: the weapon used by the police was "a gun, knife, unarmed."
Arms category	the classification of weapons "Guns, sharp objects, usual objects, unarmed"
Body camera	did the officer have a body camera that recorded the events during the shooting? "True or false"

- **Insights**

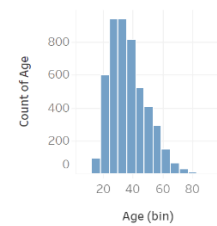
On the basis of the aforementioned questions, we drew conclusions about the shooting instances. There were approximately 4,895 shootings between 2015 and 2020, yet in 88% of these cases, police officers were not documenting the incidents, meaning their cameras were off. In our opinion, turning off the cameras could have a significant negative impact on the outcome, as the police station would be unable to ascertain if this case had a genuine danger or if a victim was unlawfully killed. The majority of these casualties were males between the ages of 25 and 30. In addition, the statistics indicate that approximately fifty percent of victims are white and approximately twenty-five percent are black, leading one to believe that whites are disproportionately afflicted. However, around 60% of U.S. citizens are white, whereas just 13% are black, therefore we may conclude that blacks are far more affected than whites from a border perspective.



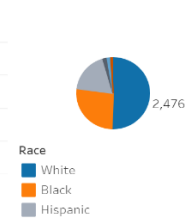
US Police Shootings 2015 - 2020 (EDA)

Total Shootings
4,895 shots

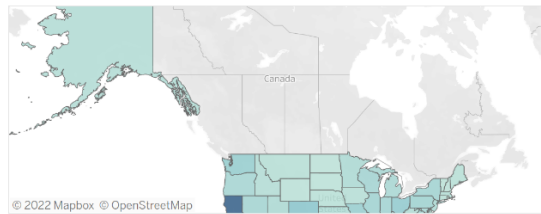
Ages of people been shot



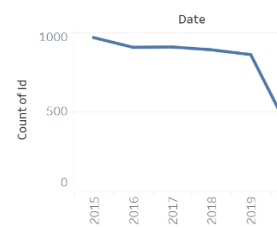
Race of people that been shot



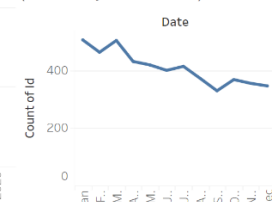
Heat map of police shooting in the US



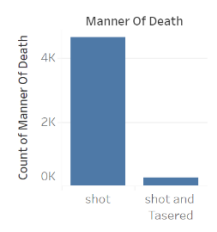
Timeline of police shootings



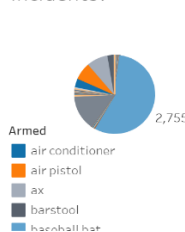
Police men shootings (Monthly overview)



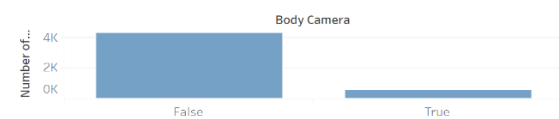
What is the manner of death of the victims?



What is the most used weapon in these incidents?

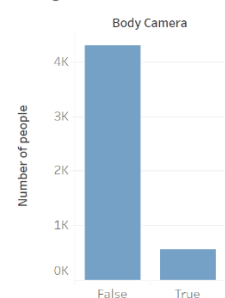


Were the police officer wearing a body camera that recorded the events during the incidents?

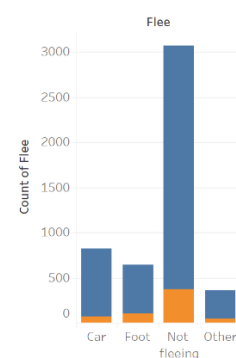


88% of incidents were not filmed by the police body camera, would cameras prevent such incidents?

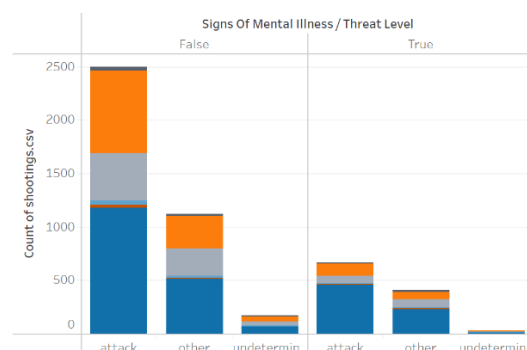
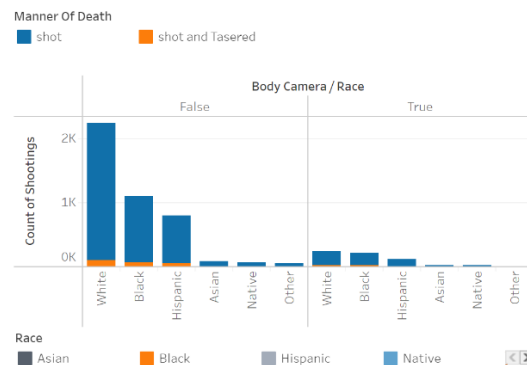
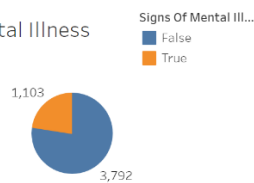
Were the police officer wearing a body camera that recorded the events during the incidents?



Did the victims flee?



Signs of Mental Illness





To interact more with the dashboard, please check the dashboard link:

https://public.tableau.com/app/profile/johara.alkanhal/viz/USpoliceshootingsEDA2_16646517597510/Story1

On the basis of the dashboard's visualization, the following preventative measures are recommended:

- Based on the state and the number of shootings, they must mandate that all police officers turn on their cameras and establish sanctions for those who do not comply.
- In light of the racial diversity of those who have been murdered, the U.S. government should expand its activities to raise awareness about the consequences of racism. And avoid bias by including all races in these campaigns.
- Adding a relief button to police uniforms to be pressed prior to an exchange of gunfire or if the police are threatened, so that the police station can assess the severity of the situation and send police cars to the scene without informing the criminal, thereby preventing a return to gun use and murder.
- Providing the police officers with intensive training on how to conduct conversations and control their emotions in order to control their actions as provocations escalate, hence reducing the number of fatalities in these situations. From the amount of closed cameras, it may be inferred that there was a conversation the police did not want recorded in order to protect their careers.