MSiA-411 Project Pitch

Group 5

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Project Background

Time and again, we are heartbroken by the news of gun violence. We pay more attention to the gun violence, especially the accidents' locations and demographic features of participants. This project will benefit the society by identifying risky locations and features of dangerous violence participants. It will also suggest the areas with weak gun control.

This data visualization project focuses on
- How the gun incidental characteristics change across the years (Temporal)
- What age groups are highly involved in gun violence among different locations (Spatial)
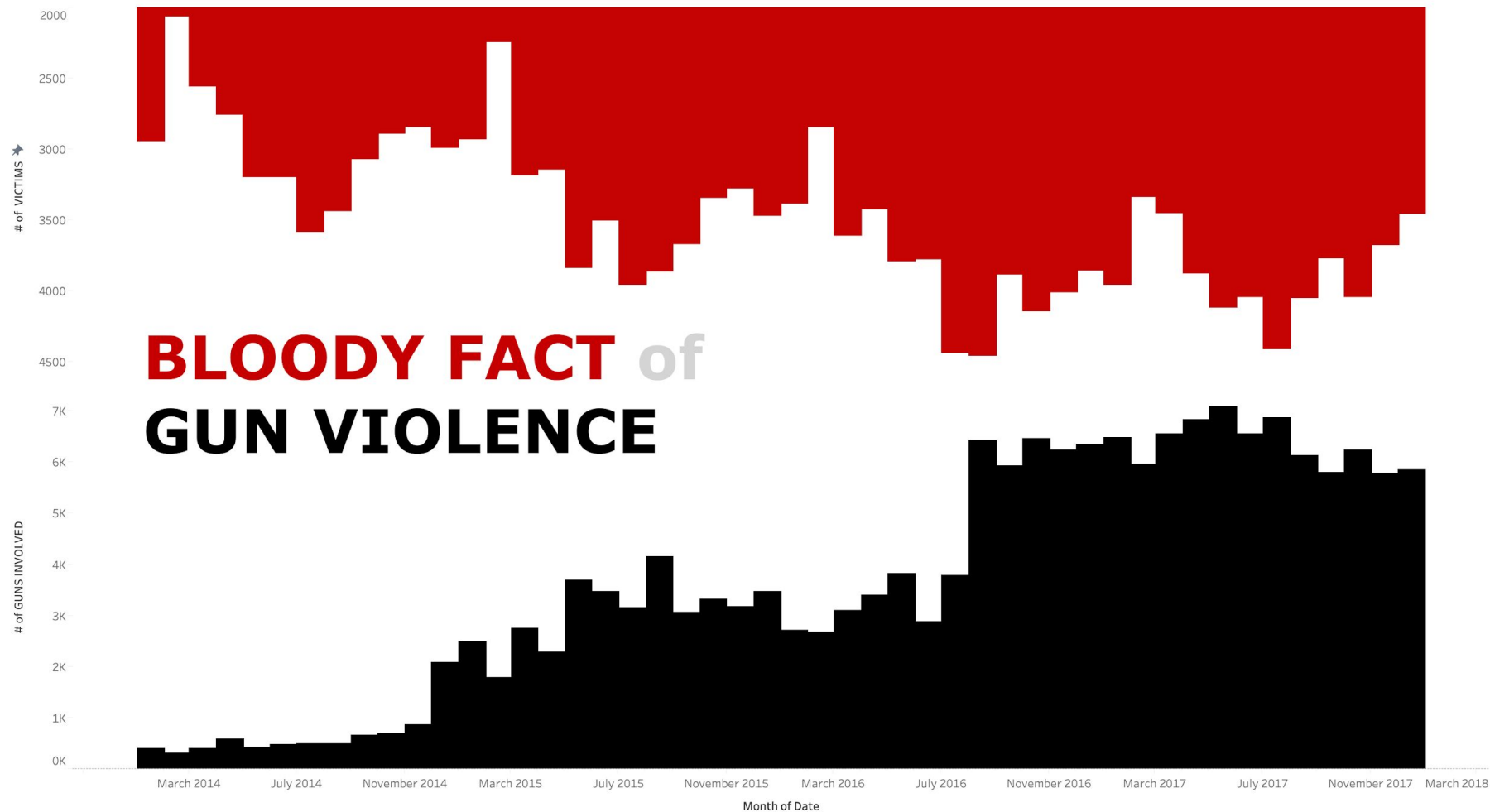- Miscellaneous demographic features associated with risky gun violence

Project Objective

- The study aims to elaborate the violence analysis from two domains
  - Spatial domain
    - Identify key feature of the gun violence participants
    - Recognize major incidental characteristics
  - Temporal domain
    - Visualize the dynamic of incidental rates and features
    - Detect main changes among the violences' event across the year
- Directional and Actionable insights
  - Target on risky gun violence groups and take preventative actions
  - Spot on the dangerous locations and allocate appropriate police force
  - Monitor the sources of unlawful guns and impose stronger gun control

Problems of interest

- **Location**
  - How are the age groups of violence participants distributed among different locations?
  - What are the major incidental characteristics among different locations?

- **Demographic features**
  - Where are the most dangerous area with severe gun violence in recent years?
  - Does the incidental characteristics change across the year?

BLOODY FACT of GUN VIOLENCE

Number of Gun Incidents by State

- As shown by the graph, Illinois has the highest number of reported gun incidents from 2013-2018. It is followed by California, Florida and Texas.

- We aim to build an interactive map showing how these numbers change over time.

Common Locations of Gun Incidents

- The word cloud illustrates that from 2013-2018, most of gun violence incidents were reported in Austin, Walmart, 7-Eleven, Motel 6 and McDonald's.

- We will make an interactive word cloud showing how these common locations change across different years