

# Gun Deaths

---

Sahil Jain

Rawan Al Mobarak

# Introduction

Based on the current events that have been taking place in the US over past few years related to gun violence and gun crimes the movement for strong gun laws and repealing 2nd amendment have been on the rise.

This project is about analyzing and visualizing gun violence data in US both in general shootings and mass shootings that over past 50 years.

# Motivation

The motivation behind choosing this particular project is to provide solid evidence in favor or against an argument. According to the 2nd Amendment “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed” is a constitutional right for every American Citizen just like other constitutional rights. Clearly, the main aim of our project is to provide our own opinion through data but not to advocate against or in favor of gun laws.



# Goal

Avoiding political correctness and making decisions on the basis of facts.

Comparing US with other countries in the world.

Comparing mass shootings and general shootings.

# Data gathering and processing

Data for this project was primarily gathered from four primary sources. Kaggle, FBI, Mother Jones and The Guardian.

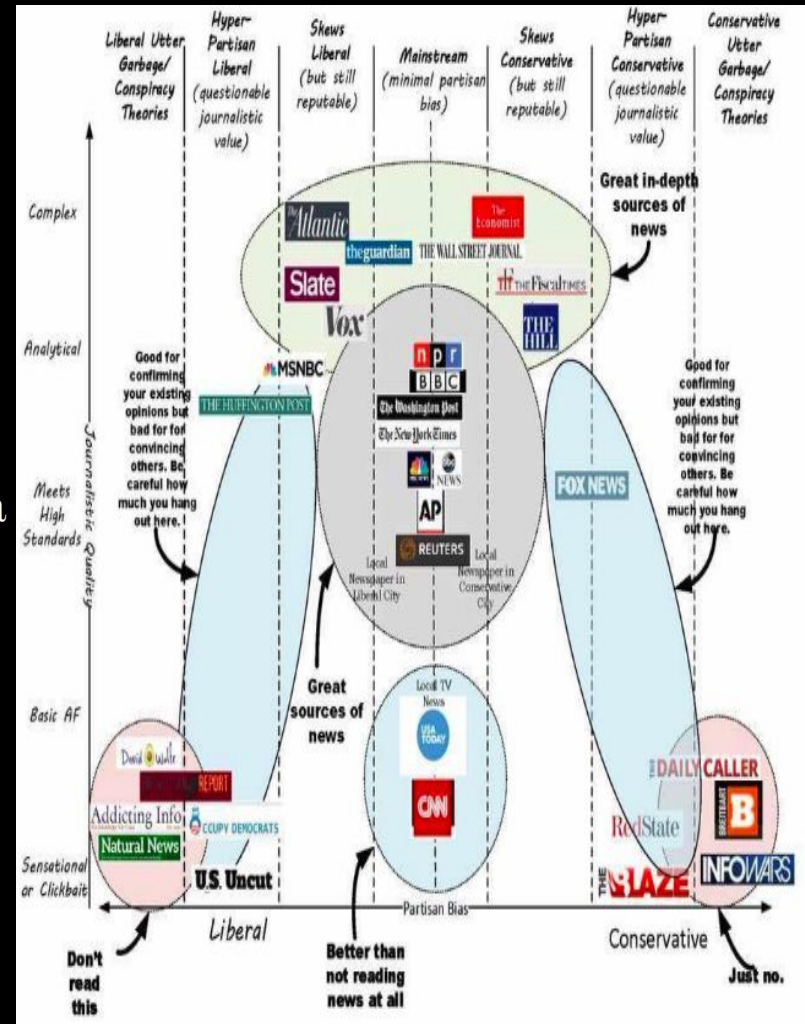
Processing was done using R and Excel by deleting extra/unimportant variables out of the data set and by adding extra variables of latitude, longitude, GDP, population in some of the data sets.

# Data Biasness

An interesting point we came across, was about how bias the data is. Take a look at this picture:

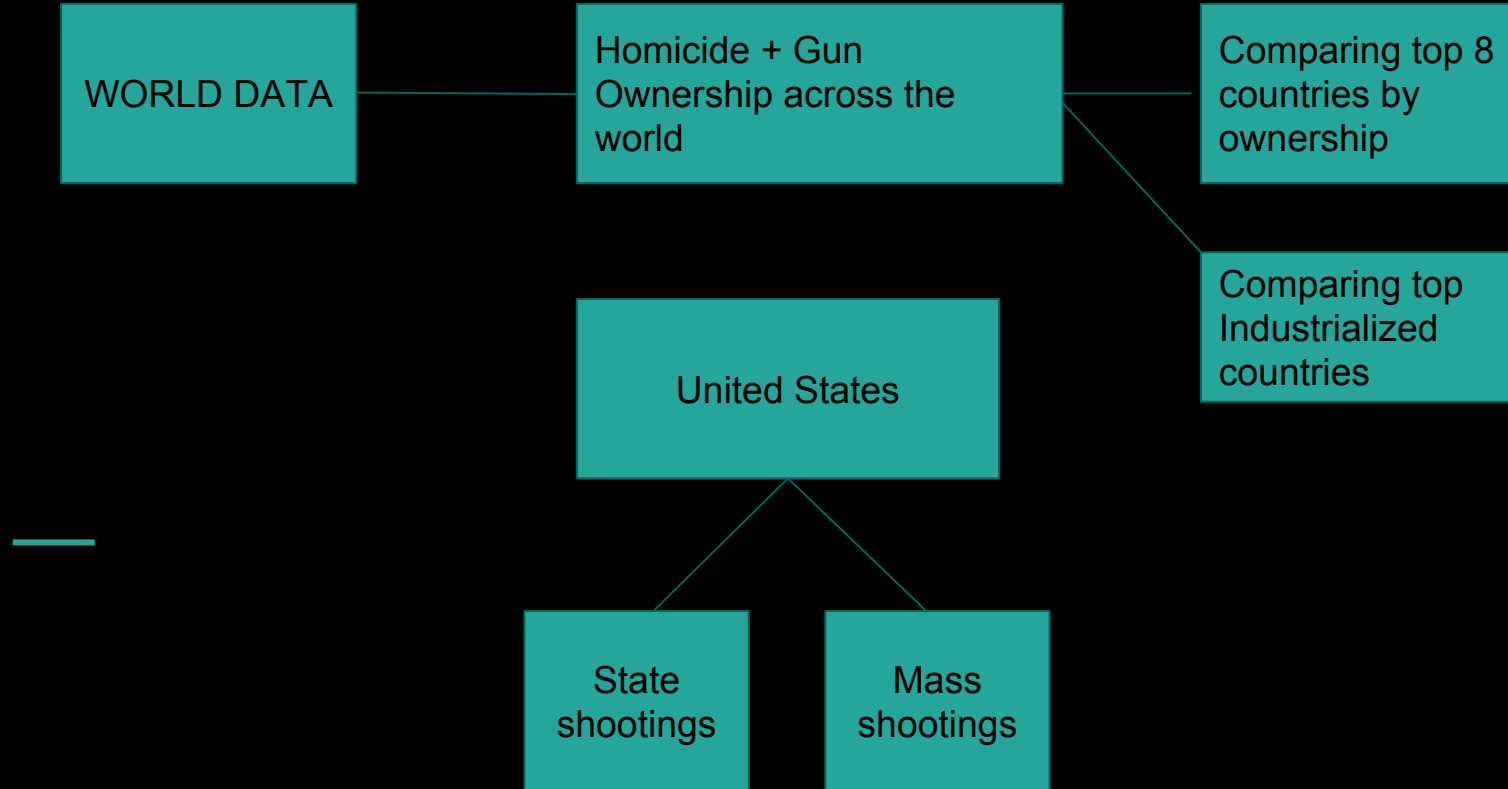
Most of these sources had data on them, but data was tweaked a bit for their own purpose.

In FBI data, gun violence in defense and gun violence in assault were recorded separately, but most sources would count them as one.



# Project

This project is divided into two sub categories:



# Project Visualization

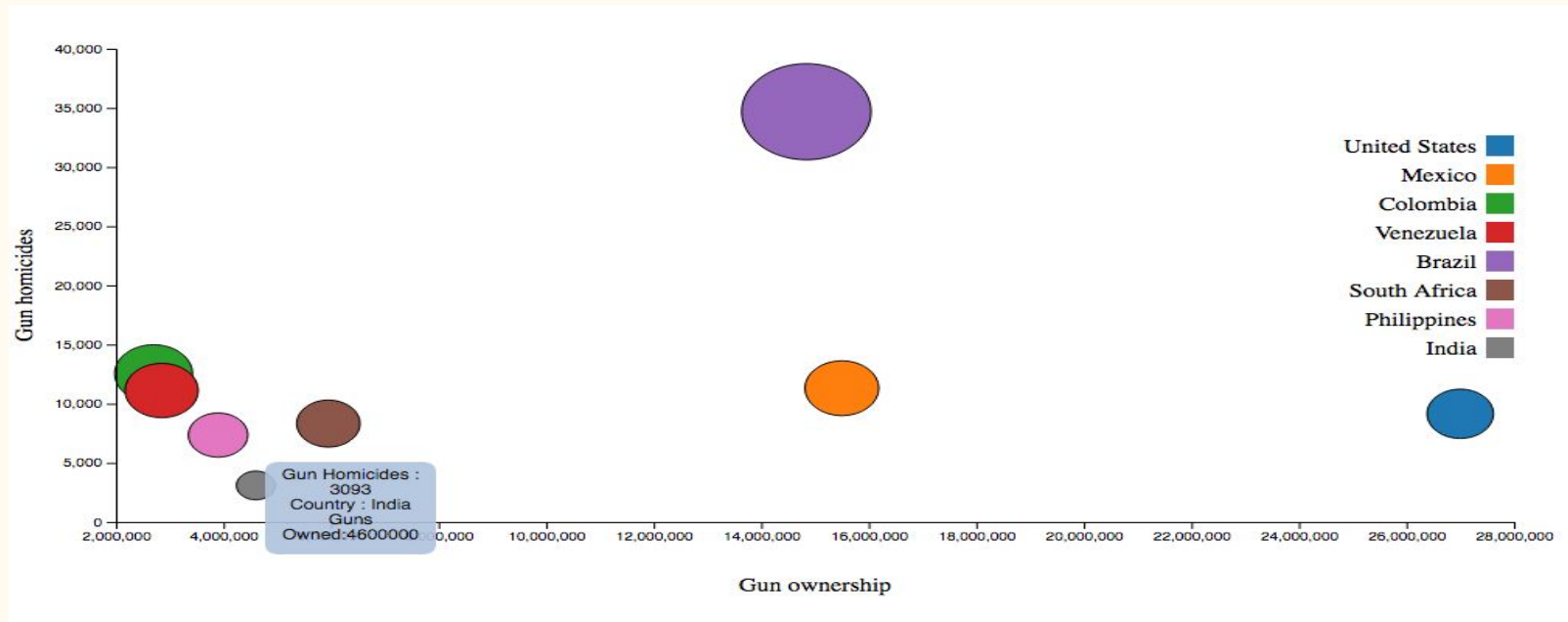
The very first visualization of our project is about visualizing gun ownership and homicide data across the world





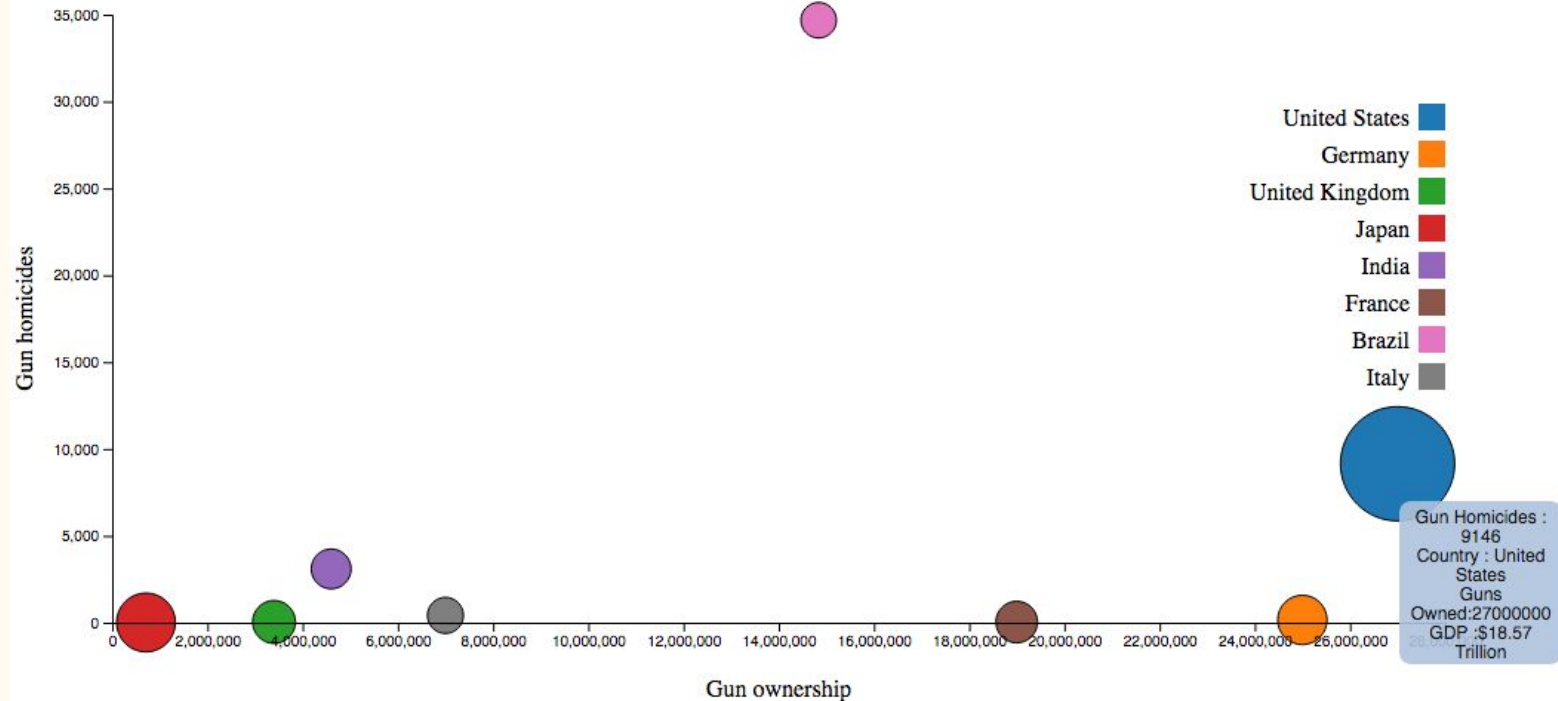
# Comparisons between The US and other countries

Here we made a very simple scatter plot also a bubble chart to compare US with other highest Gun owning countries in the world. Here size of the circle is based on the total number of gun deaths in these countries. Hovering over the circle will give you all necessary information regarding the country.



# Comparison

Second chart is comparing about comparing US with other industrialized countries across the world. These countries were chosen simply on the basis of their GDP. Similarly hovering over circle will give you all necessary information.



# The United States

After comparing different countries across the world we will shift our focus to the US. For US, we divided our focus into two different parts.

- (1) General shootings
  - (2) Mass Shootings.
-

# General Shootings

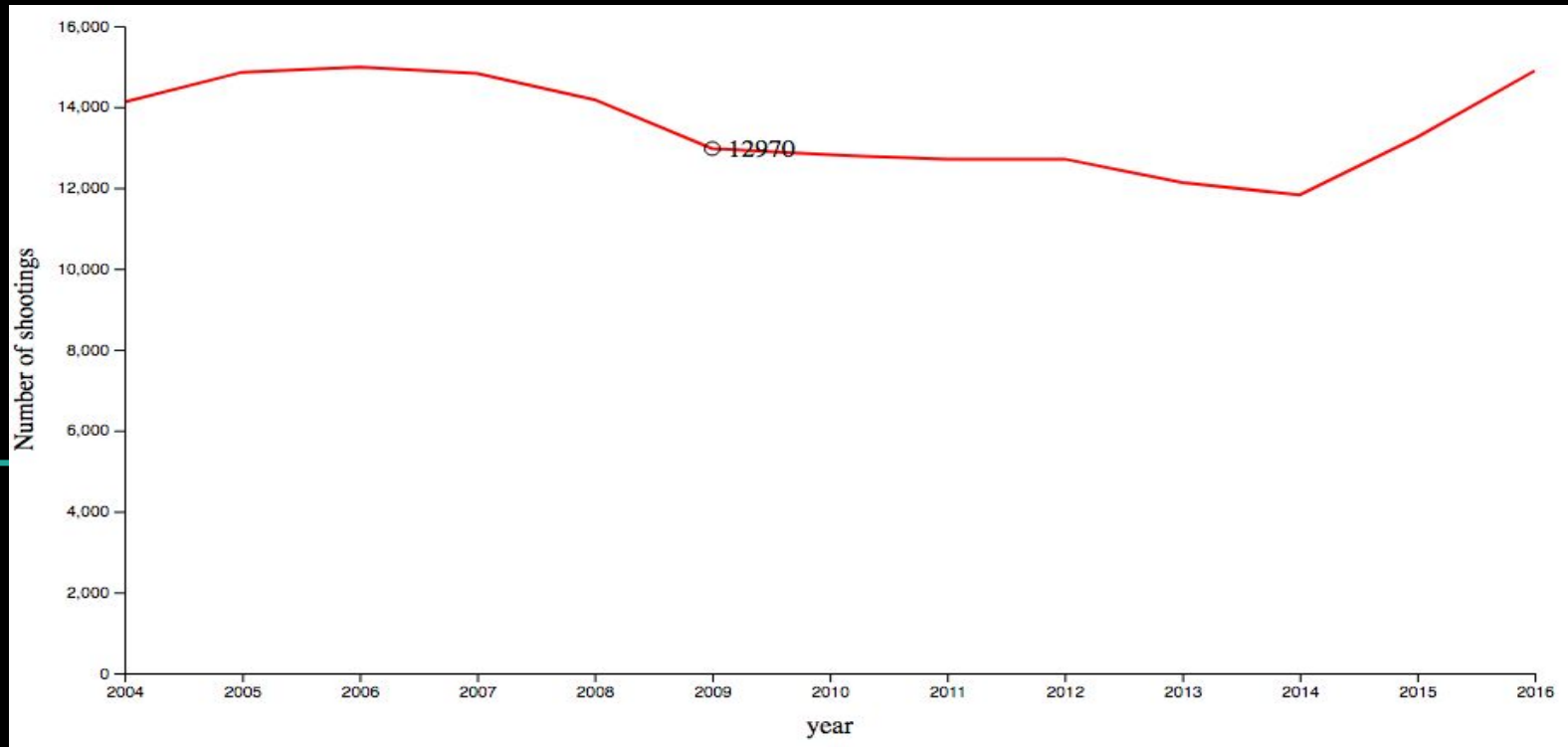
For general shootings we looked at the data from FBI to see how the trend has been going from year 2004-2016.

Comparing all 50 states and see how many shootings took place in these states in past 12 years.

In the end, a drop down menu to see how each and every state has done over past 12 years. In simple words, how the on going trend looks like in these states.

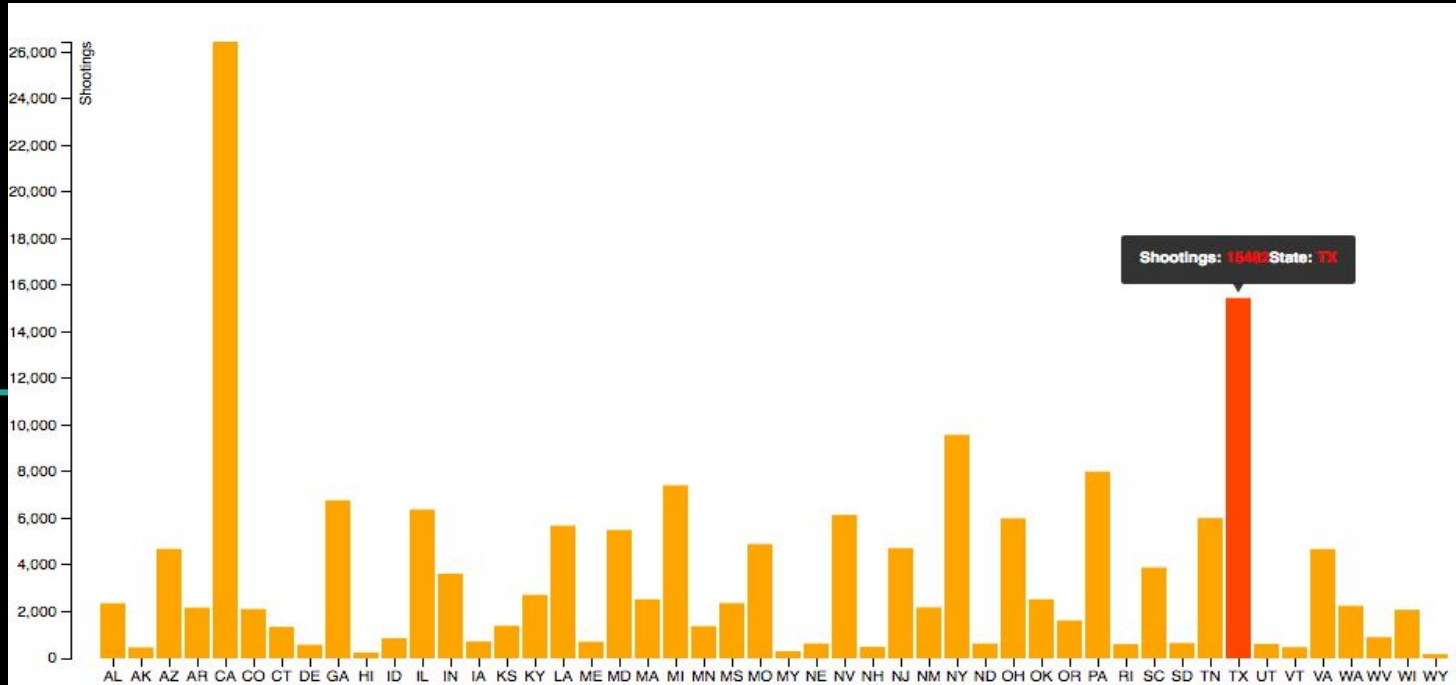
# Shootings over year 2004-2016

Here, the line chart shows the total shootings took place in the US in each year since 2004 to 2016. Mass shootings are not included this chart. This data was downloaded from FBI



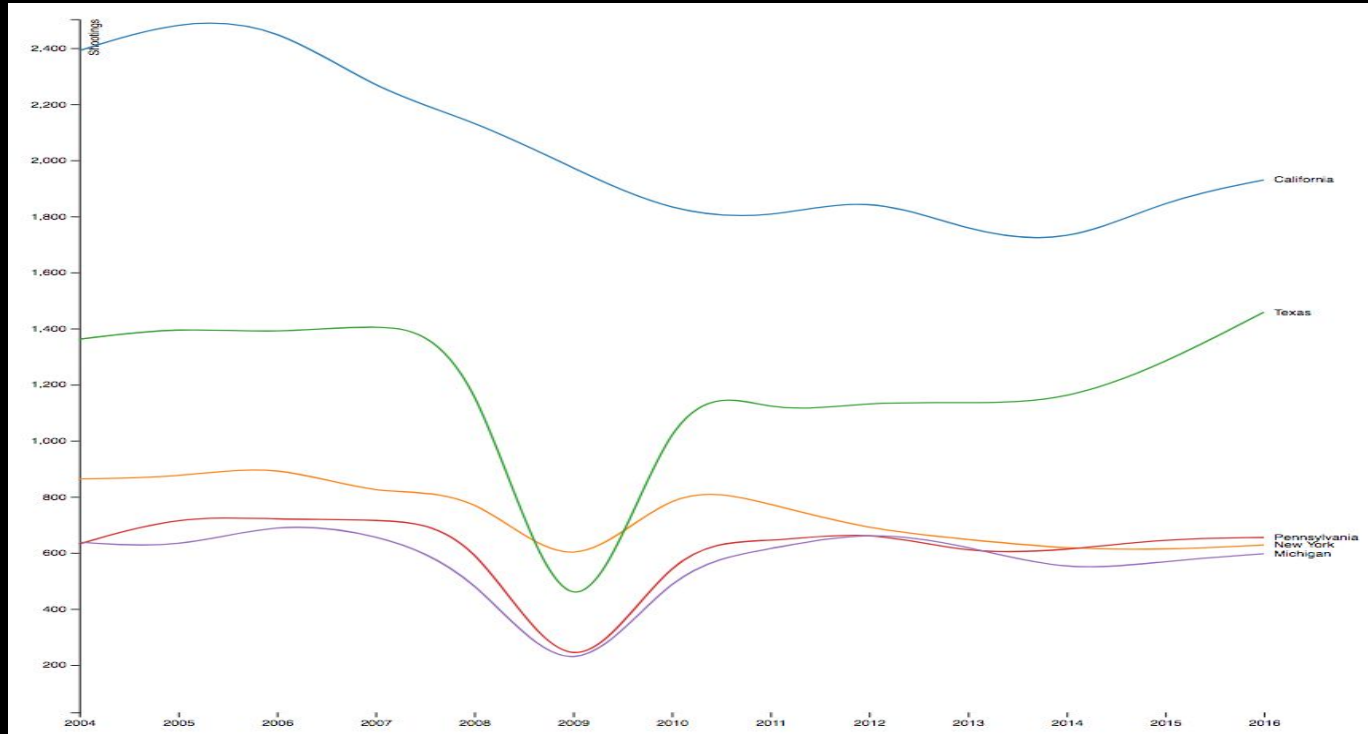
# State statistics, 2004-2016

The bar chart here shows total number of shootings took place in each and every state since 2004.



# Shooting trends in each state

Here we're looking at the top 5 states and trend since 2004



# Mass Shootings

For mass shootings we looked at data from multiple sources, that were, Kaggle, Mother Jones, Vox and The Guardian.

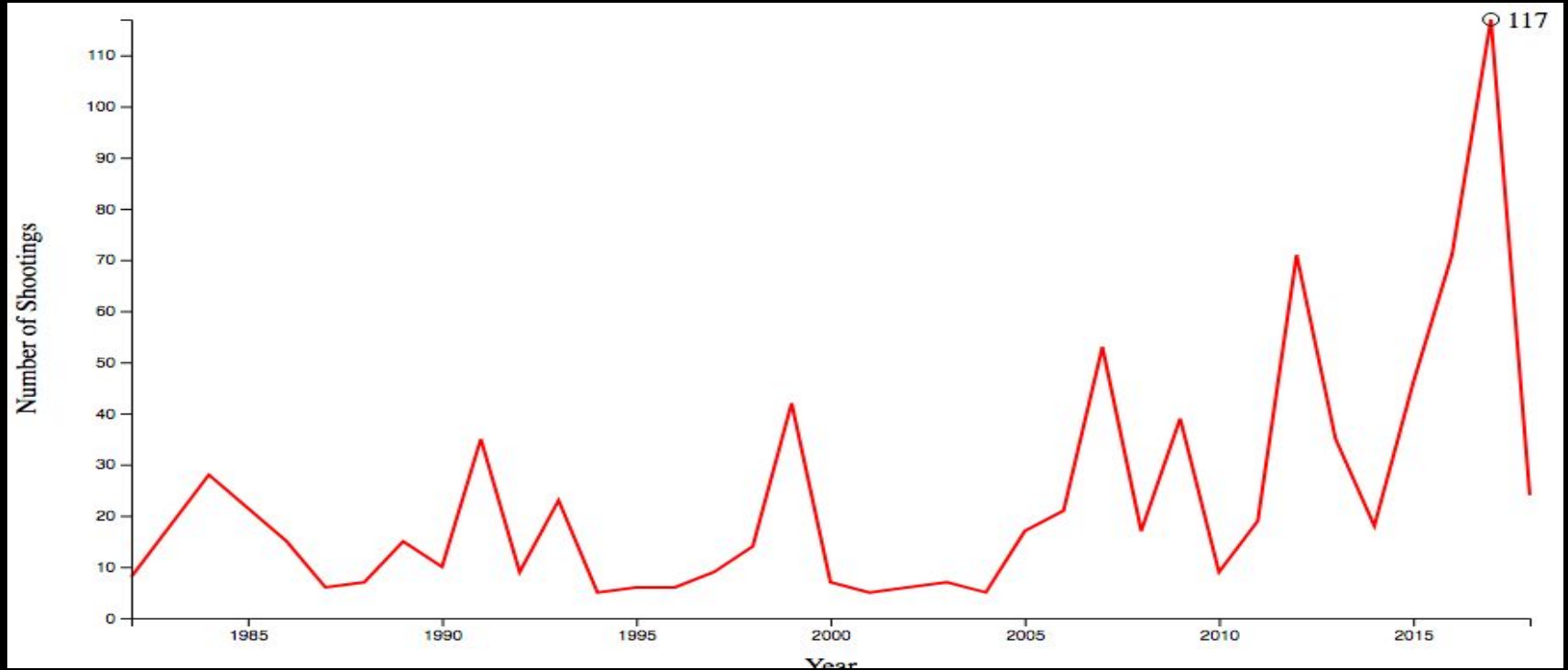
We looked at the mass shooting data from Year 1982-2018 and visualizing how many people got killed every year in mass shootings, what were common weapons that were used in these shootings, how these weapons were obtained.

---

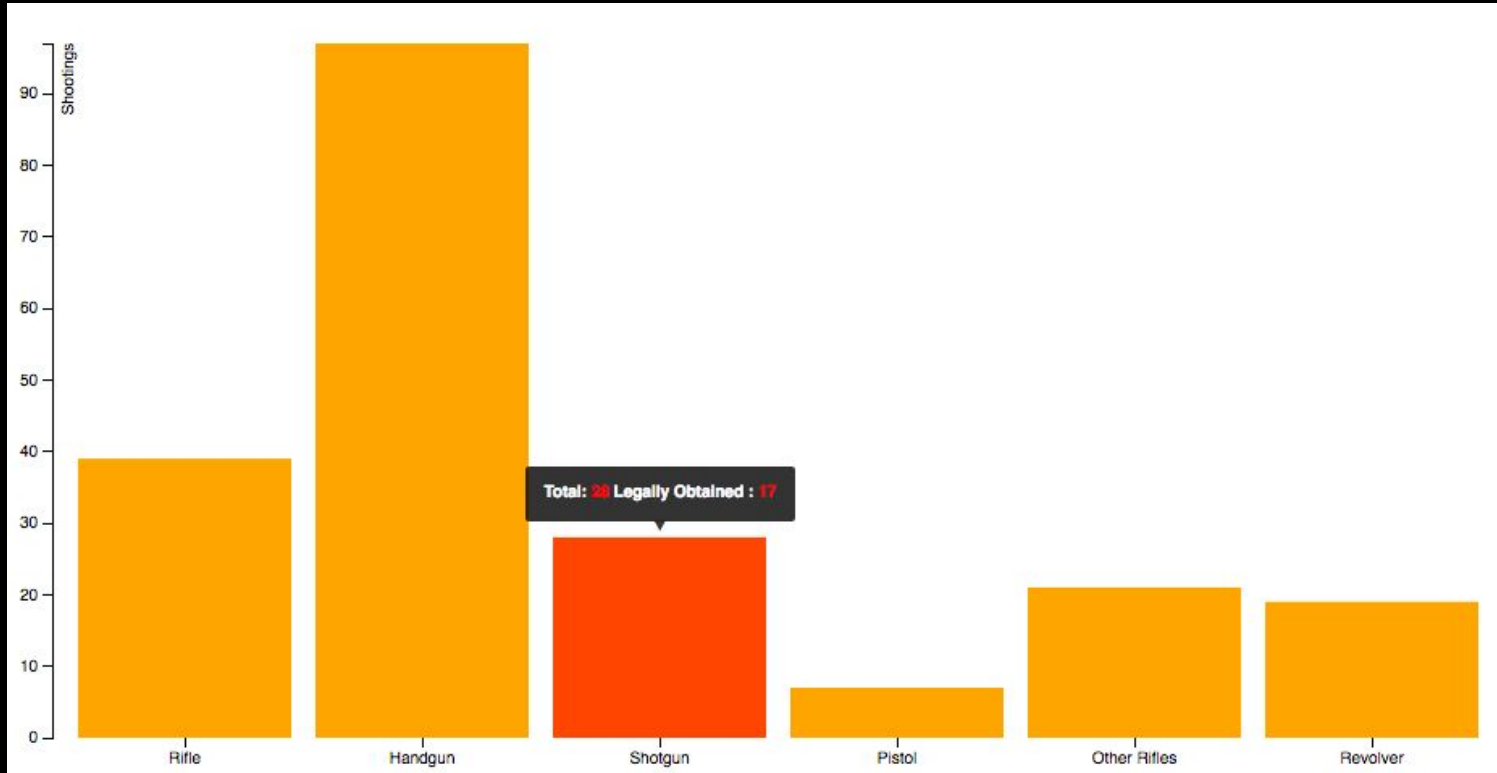
Mass shootings and fatalities in each US state.



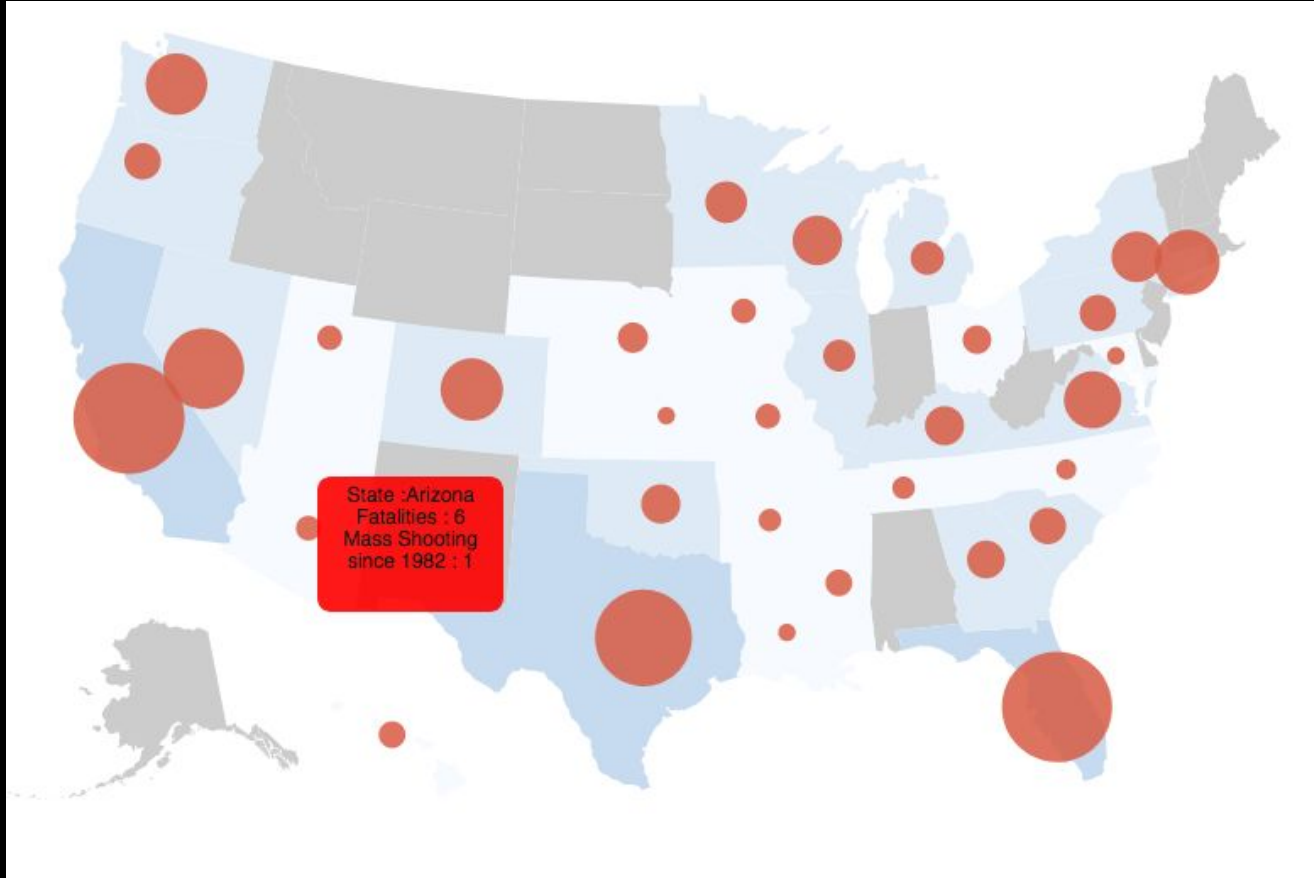
# Mass Shootings fatalities, 1982-2016



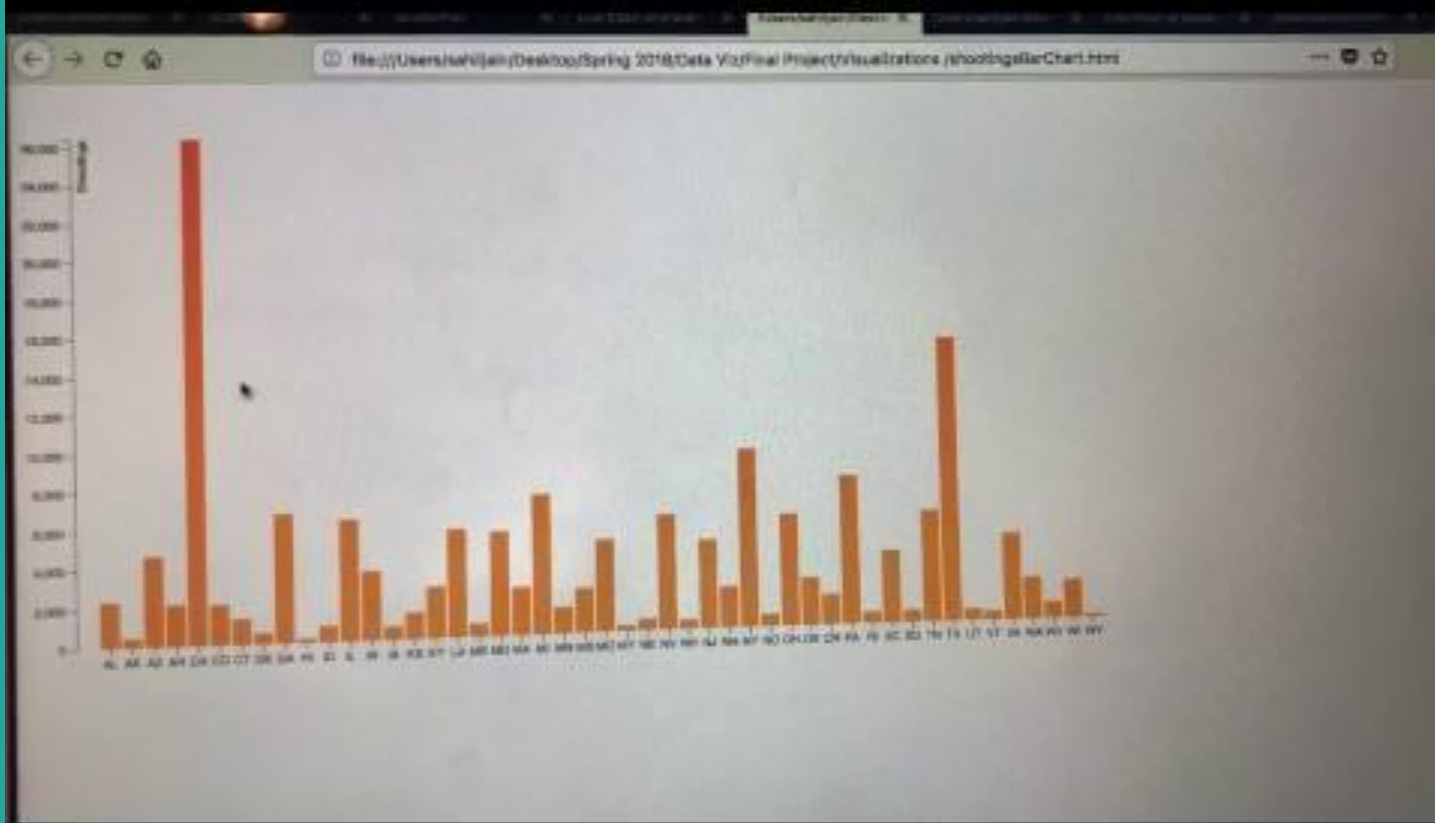
# Guns Used



# Mass shootings in state



# Demo



# Conclusion:

The place changes, the number changes, but the choice of weapon remains the same. In United States, people who want to kill a lot of people most often do it with guns.

Public mass shootings account for tiny fraction of the countries deaths but they are uniquely terrifying because they occur without any warning in the most mundane places.