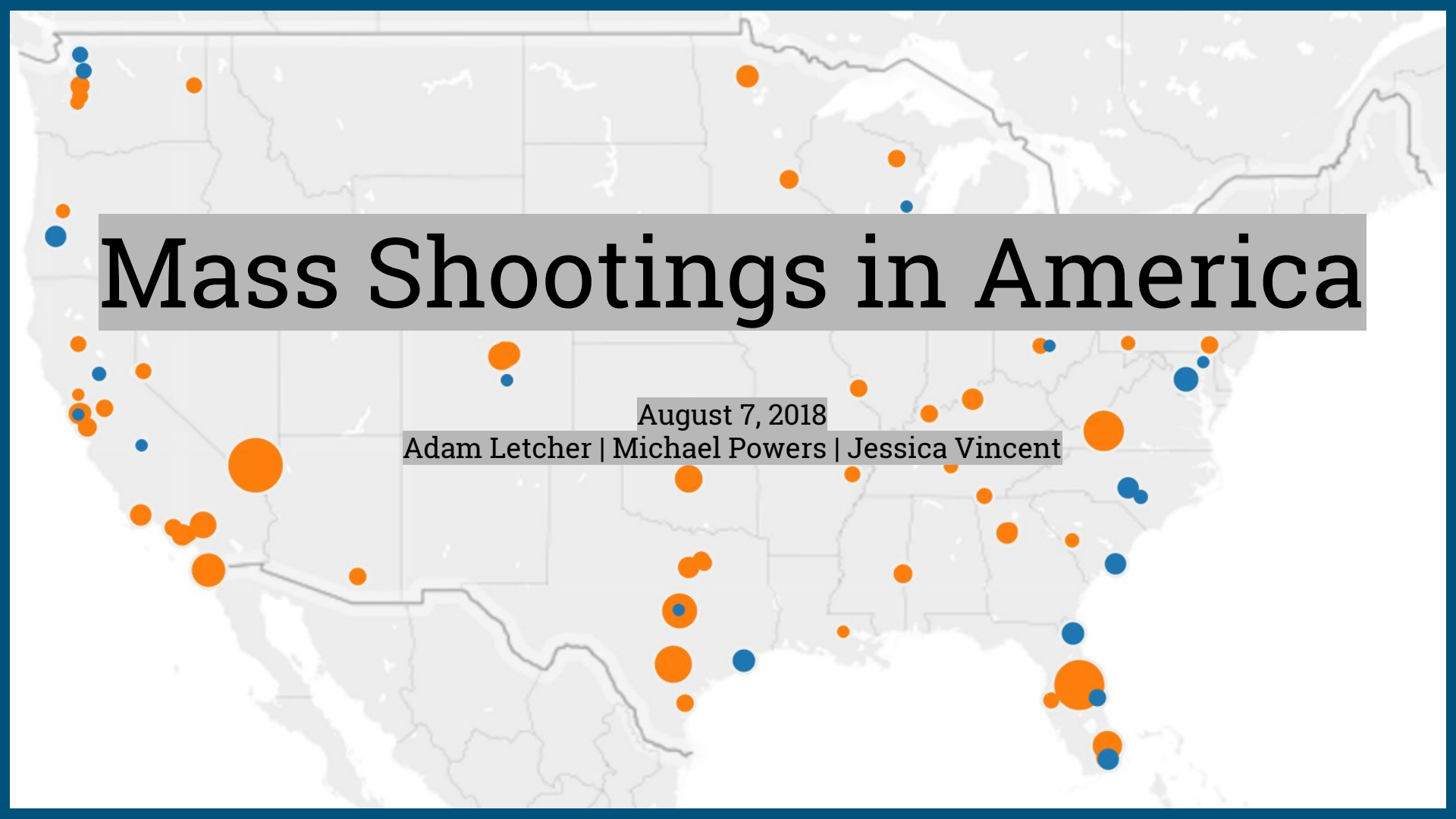


Mass Shootings in America

August 7, 2018

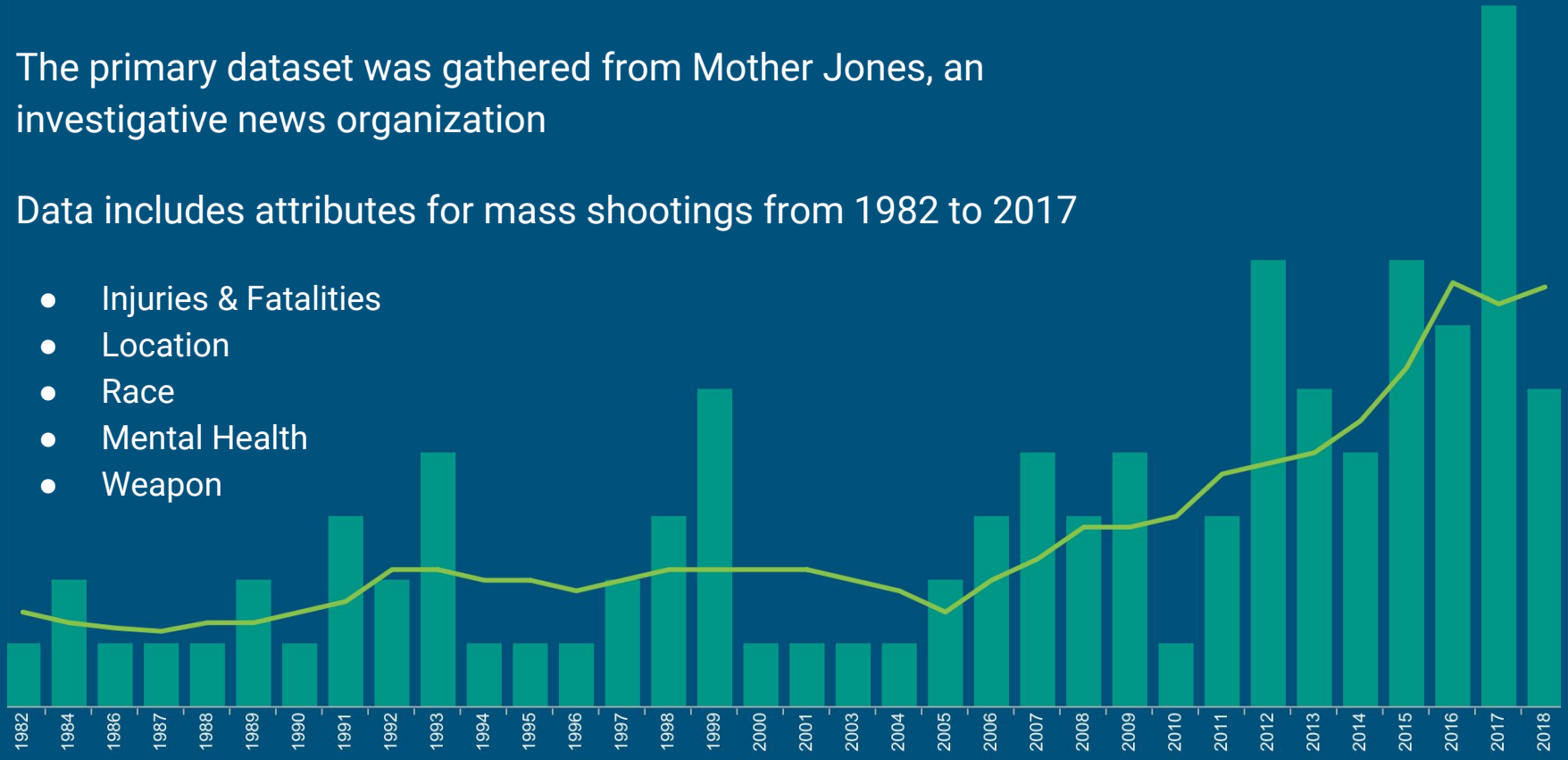
Adam Letcher | Michael Powers | Jessica Vincent

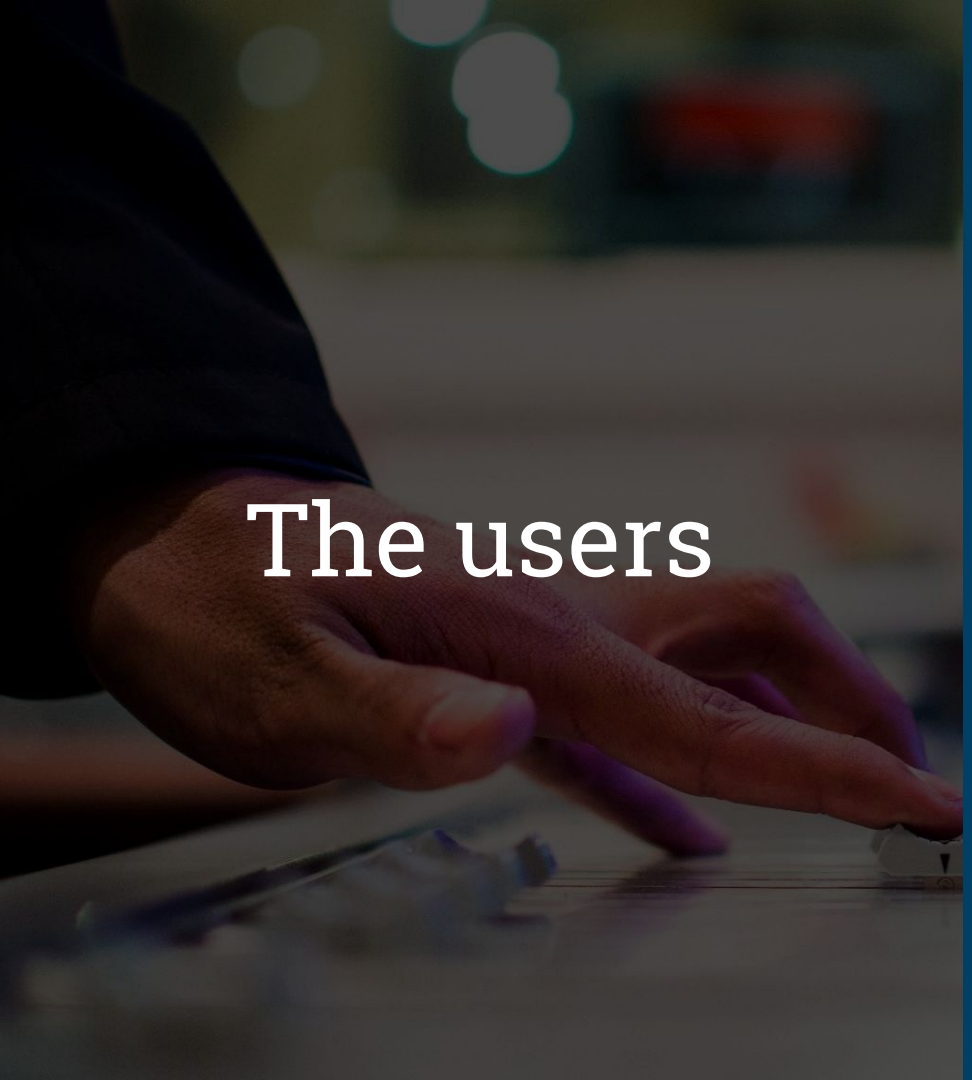
The data

The primary dataset was gathered from Mother Jones, an investigative news organization

Data includes attributes for mass shootings from 1982 to 2017

- Injuries & Fatalities
- Location
- Race
- Mental Health
- Weapon





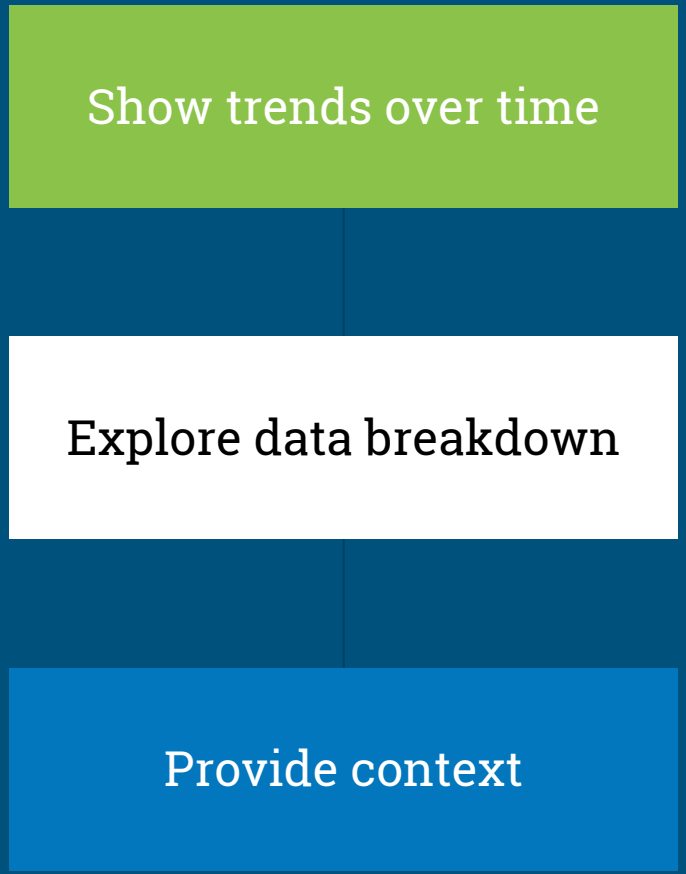
The users

Any person who wants to understand overall trends in US mass shootings

Visualization goals

Our goal is to provide insights about mass shootings in America. Some questions include:

1. Have mass shootings changed over time?
2. Have fatality rates changed over time?
3. Where have mass shootings taken place?
4. Who is doing the mass shootings?
5. Does the mental health or criminal record play into mass shootings?
6. What venues are the most susceptible to mass shootings?
7. Were the weapons used obtained legally?



Design Iteration

Prototyping

Exploratory analysis of the Mother Jones dataset and initial visualizations

Joined additional datasets and research for context of shootings

Usability

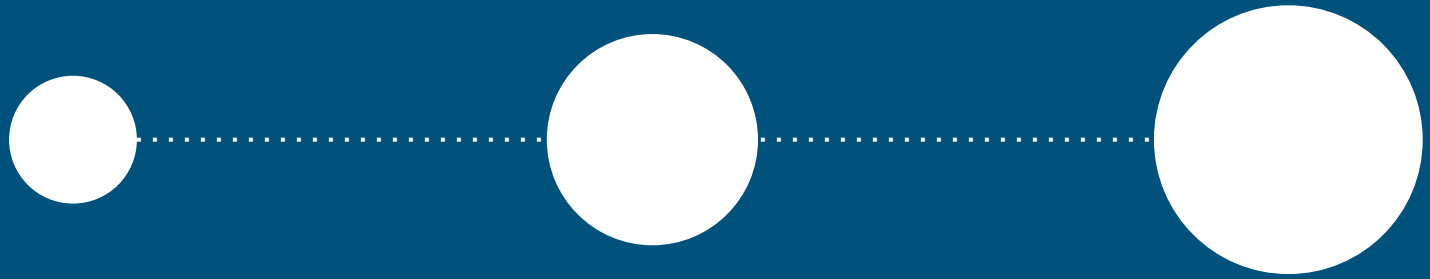
Testing performed by both experienced and inexperienced dashboard users

Users wanted context (data sources, definitions), clarity (hover, labels), and guidance (Tableau tips, filters)

Production

Introduce data visualization and focused goals with landing page

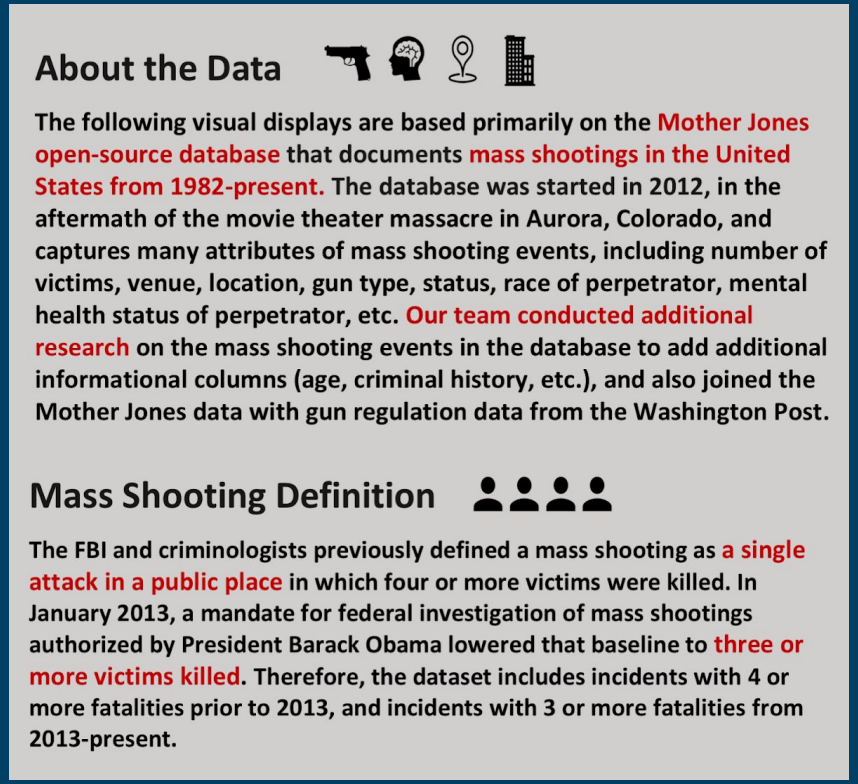
Added more intuitive interactions and removed extraneous info



Design Iteration: Context

Usability Result: Most users wanted additional background on the purpose of the visualization and the dataset

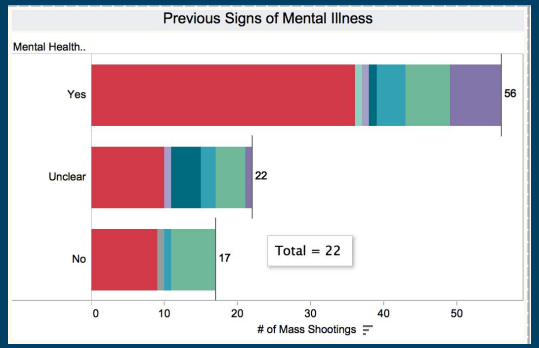
Action: Add a splash page to set the stage

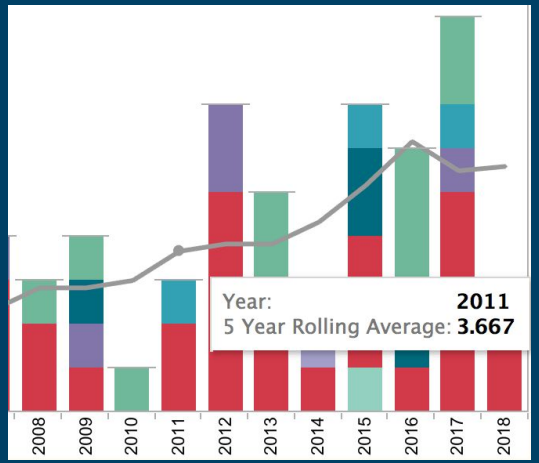


Design Iteration: Clarity

Usability Result: Many users found it difficult to interpret the details of the visualization

Action: Clean up the variable names, provide more detail on hover, and add reference lines for key information

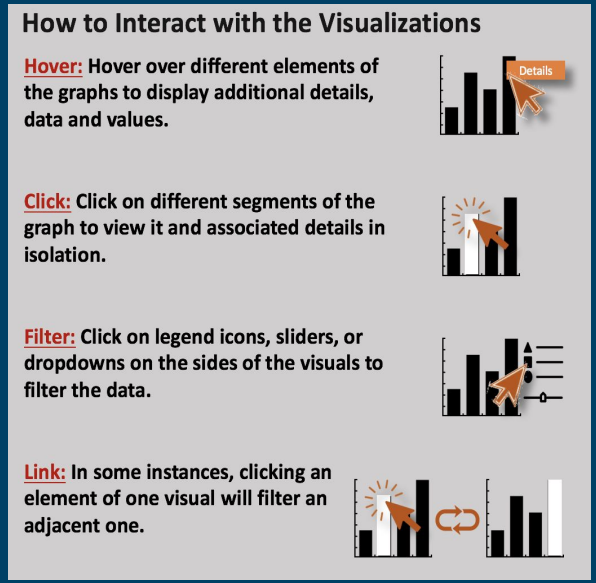


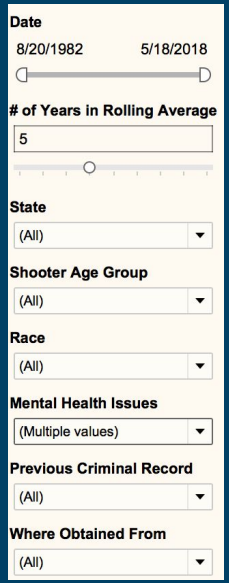


Design Iteration: Guidance

Usability Result: People unfamiliar with Tableau did not find the interactions intuitive

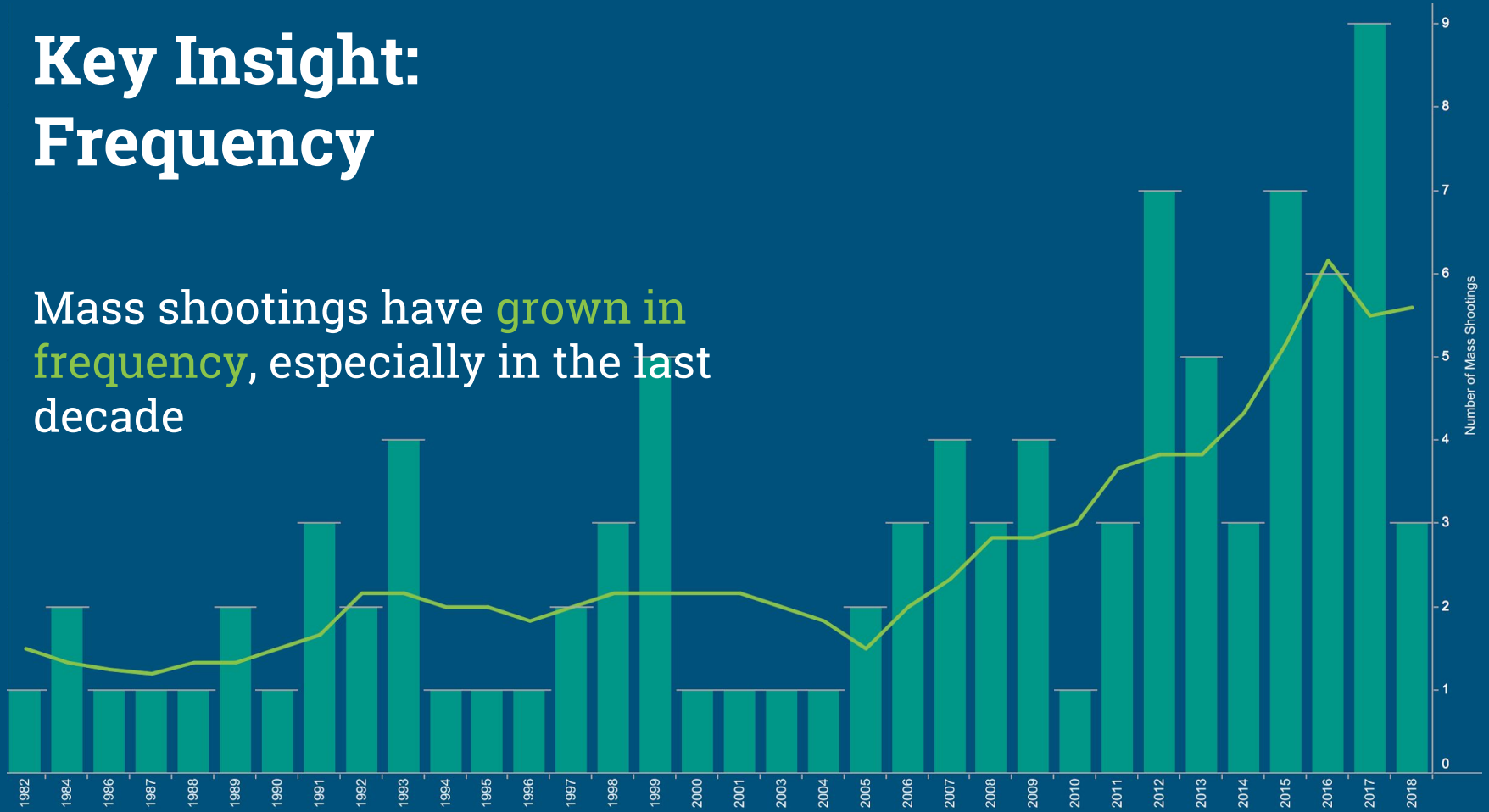
Action: Include tips on the splash page and add more explicit filters to the dashboards





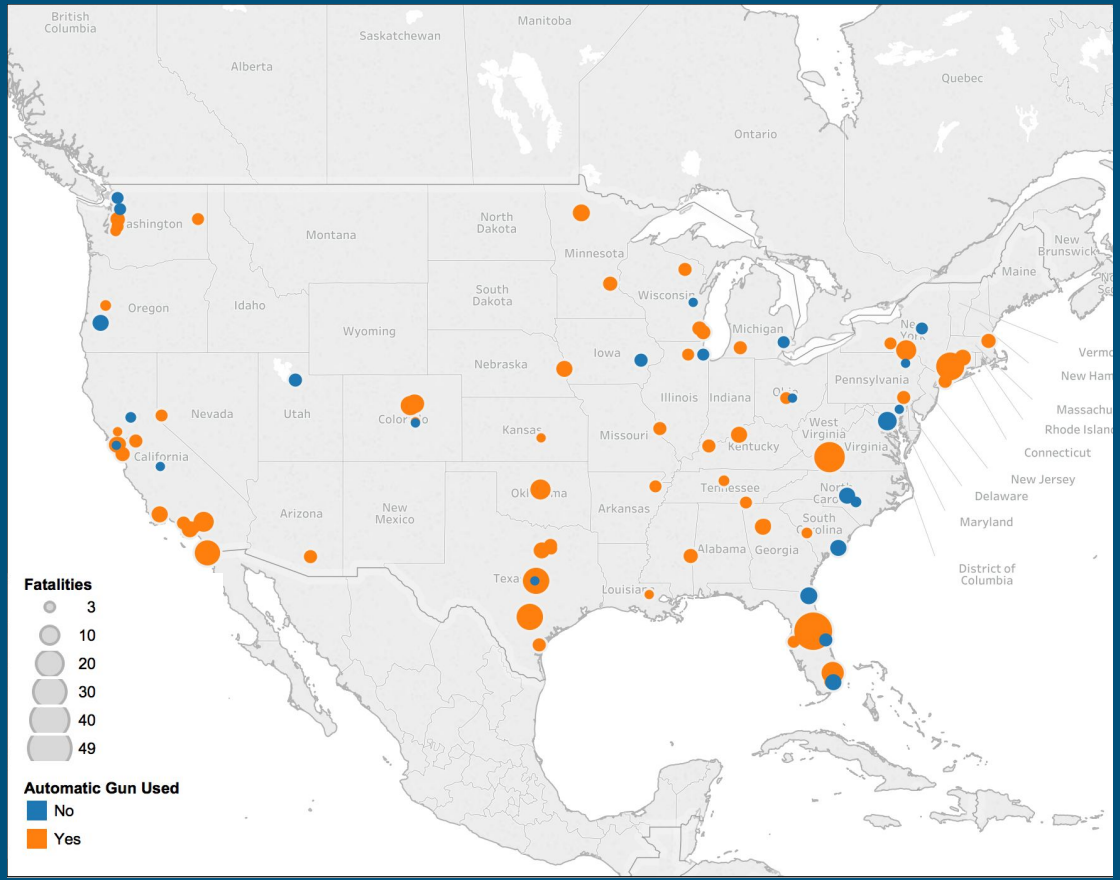
Key Insight: Frequency

Mass shootings have grown in frequency, especially in the last decade



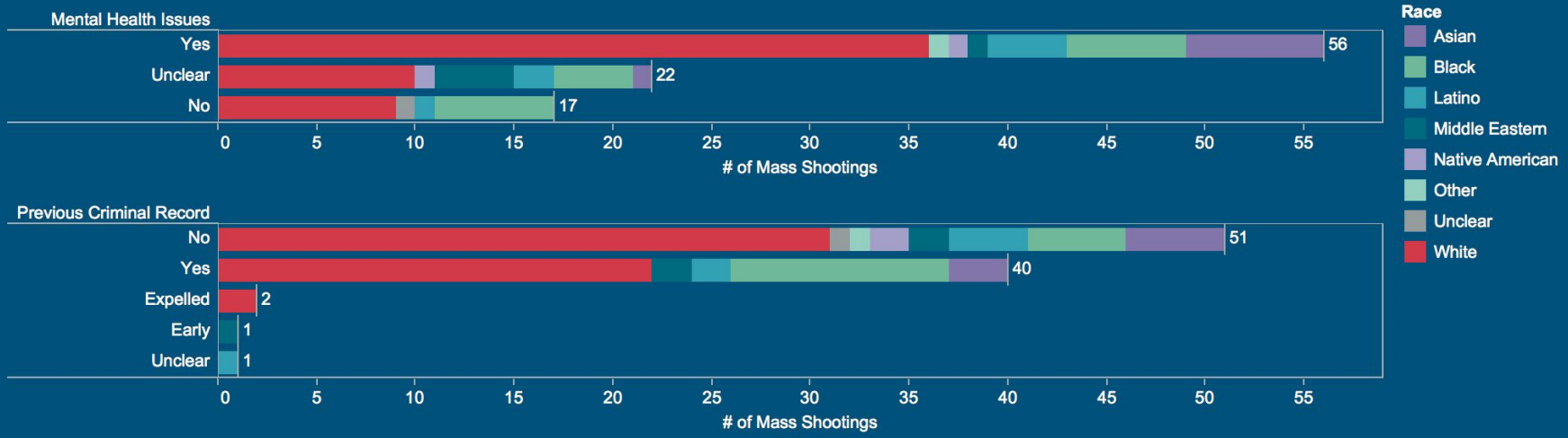
Key Insight: Geography

California, Florida, and Texas have had the most mass shootings



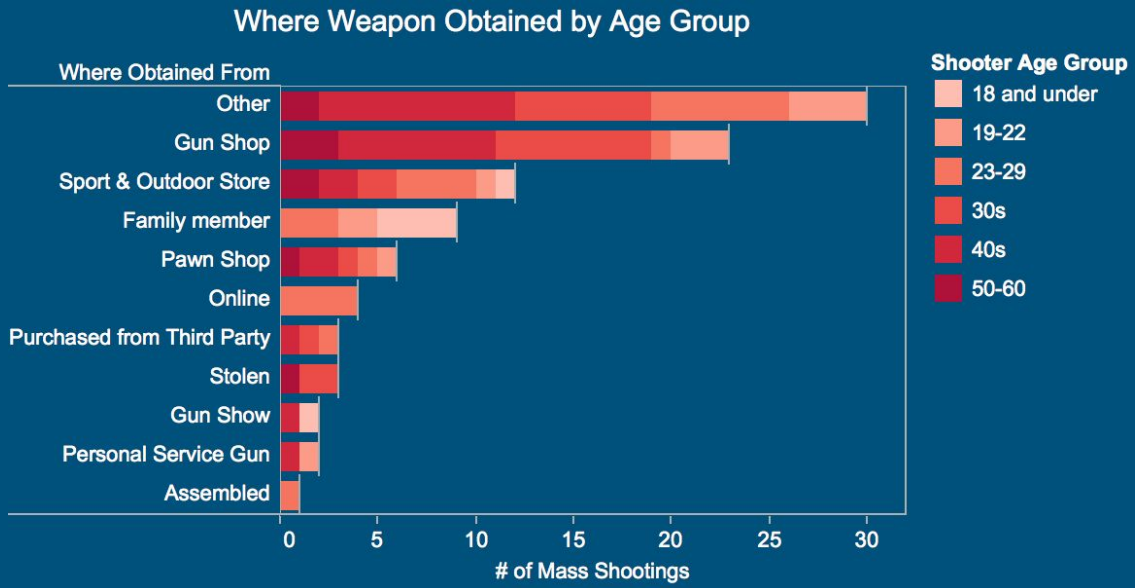
Key Insight: Shooter Background

The majority of mass shooters had previous signs of mental illness, and many had previous criminal records



Key Insight: Age groups

Younger shooters most commonly get guns from relatives while older shooters in general purchase the firearms legally



Visualization Demo