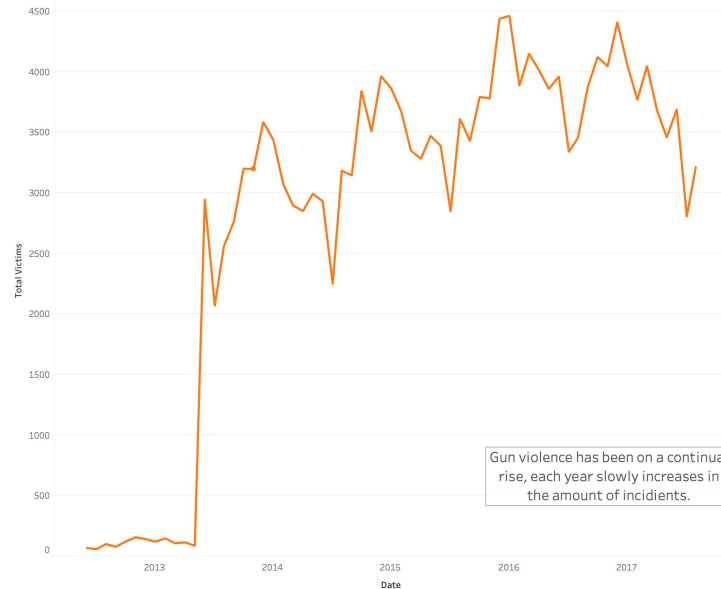


Gun Violence

Bailey Wang

Gun violence occurrence has a steady increase

Although there are dips, the numbers are quite high still



Data Cleaning

```
data['participant_age'] = data['participant_age'].apply(lambda x: apply_regex(r'^([0-9]+)$', x))
data['participant_gender'] = data['participant_gender'].apply(lambda x: apply_regex(r'^([A-Z-a-z]+)$', x))
data['participant_age_group'] = data['participant_age_group'].apply(lambda x: apply_regex(r'^([A-Z-a-z0-9-]+)$', x))
data['participant_status'] = data['participant_status'].apply(lambda x: apply_regex(r'^([A-Z-a-z]+)$', x))
data['gun_type'] = data['gun_type'].apply(lambda x: apply_regex(r'^([w-s-z]+)([a-z]+)([a-z-0-9]+)$', x))
data['gun_stolen'] = data['gun_stolen'].apply(lambda x: apply_regex(r'^([A-Z-a-z0-9-]+)$', x))
data['incident_characteristics'] = data['incident_characteristics'].apply(lambda x: apply_regex(r'^([^\|]+)$', x))
data['participant_type'] = data['participant_type'].apply(lambda x: apply_regex(r'^([A-Z-a-z0-9-]+)$', x))
data['participant_relationship'] = data['participant_relationship'].apply(lambda x: apply_regex(r'^([A-Z-a-z0-9-]+)$', x))
```

```
0      NaN
1      NaN
2      0::Unknown | 1::Unknown
3      NaN
4      0::Handgun | 1::Handgun
...
239672 0::Unknown
239673 0::Unknown
239674 0::Unknown
239675 0::Unknown
239676 0::Handgun | 1::Shotgun
```

```
0 []
1 []
2 [Unknown, Unknown]
3 []
4 [Handgun, Handgun]
...
239672 [Unknown]
239673 [Unknown]
239674 [Unknown]
239675 [Unknown]
239676 [Handgun, Shotgun]
```

```

0      0::Adult 18+||1::Adult 18+||2::Adult 18+||3::A...
1      0::Adult 18+||1::Adult 18+||2::Adult 18+||3::A...
2      0::Adult 18+||1::Adult 18+||2::Adult 18+||3::A...
3      0::Adult 18+||1::Adult 18+||2::Adult 18+||3::A...
4      0::Adult 18+||1::Adult 18+||2::Teen 12-17||3::...

      ...

239672      0::Adult 18+
239673      0::Adult 18+||1::Adult 18+
239674      0::Adult 18+
239675      0::Adult 18+
239676      0::Adult 18+||1::Adult 18+

```

```

0      [Adult 18+, Adult 18+, Adult 18+, Adult 18+, A...
1      [Adult 18+, Adult 18+, Adult 18+, Adult 18+]
2      [Adult 18+, Adult 18+, Adult 18+, Adult 18+, A...
3      [Adult 18+, Adult 18+, Adult 18+, Adult 18+]
4      [Adult 18+, Adult 18+, Teen 12-17, Adult 18+]

...

239672      [Adult 18+]
239673      [Adult 18+, Adult 18+]
239674      [Adult 18+]
239675      [Adult 18+]
239676      [Adult 18+, Adult 18+]

```

Data Summary

Total Incidents
239,677

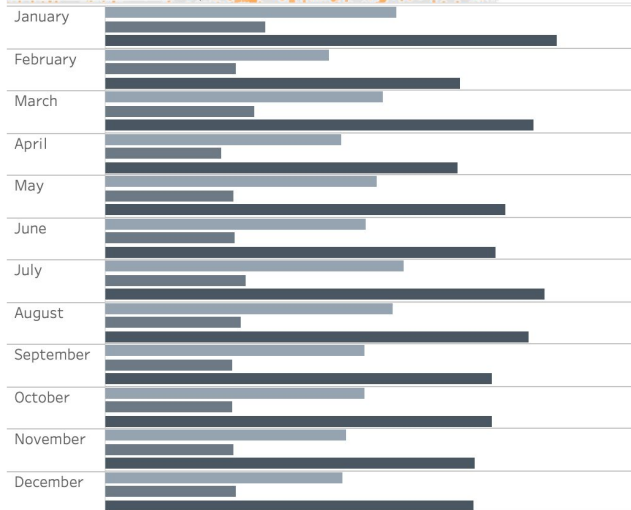
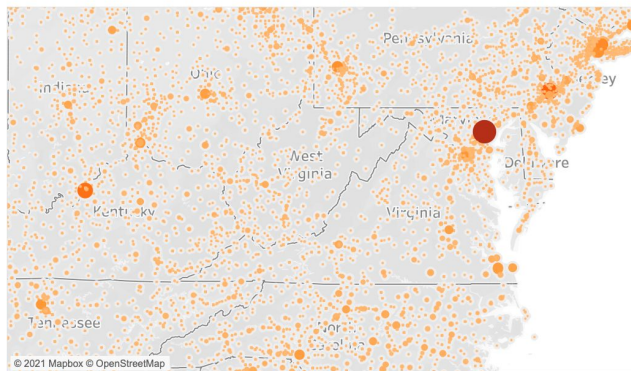
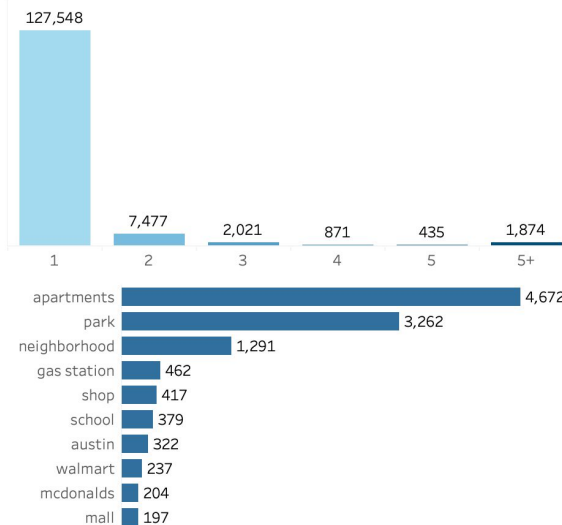
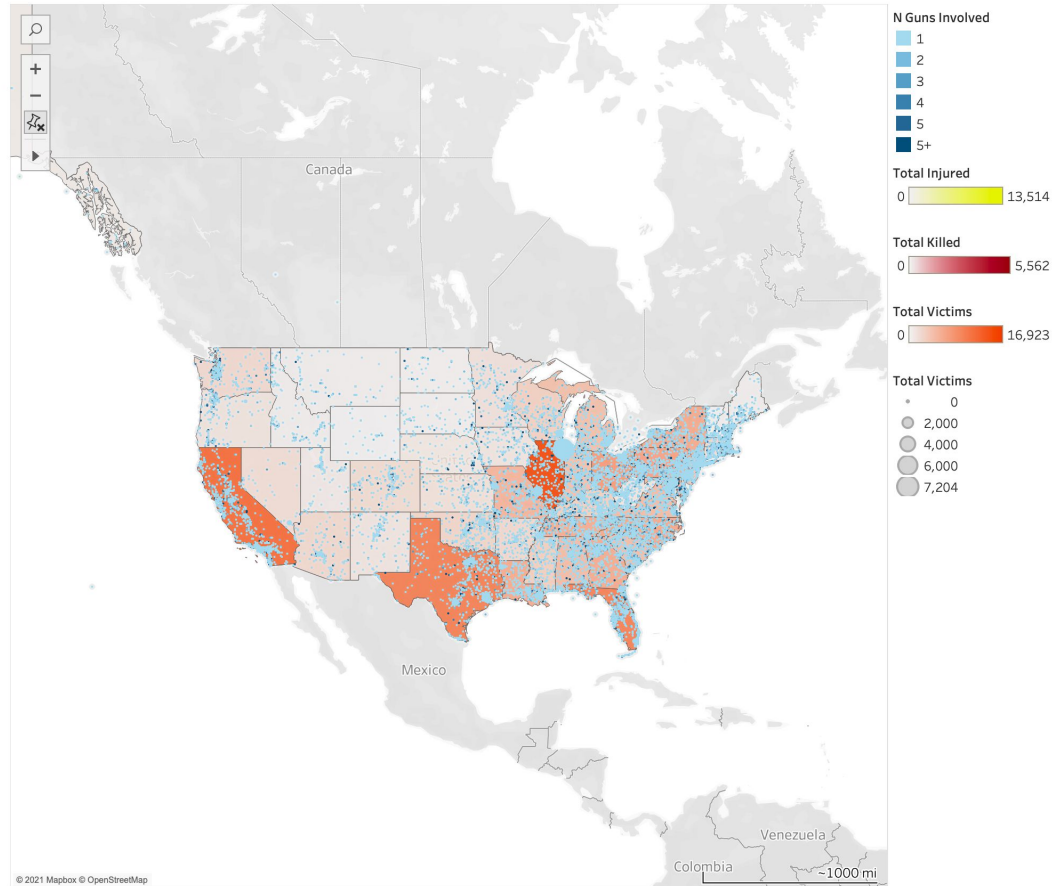


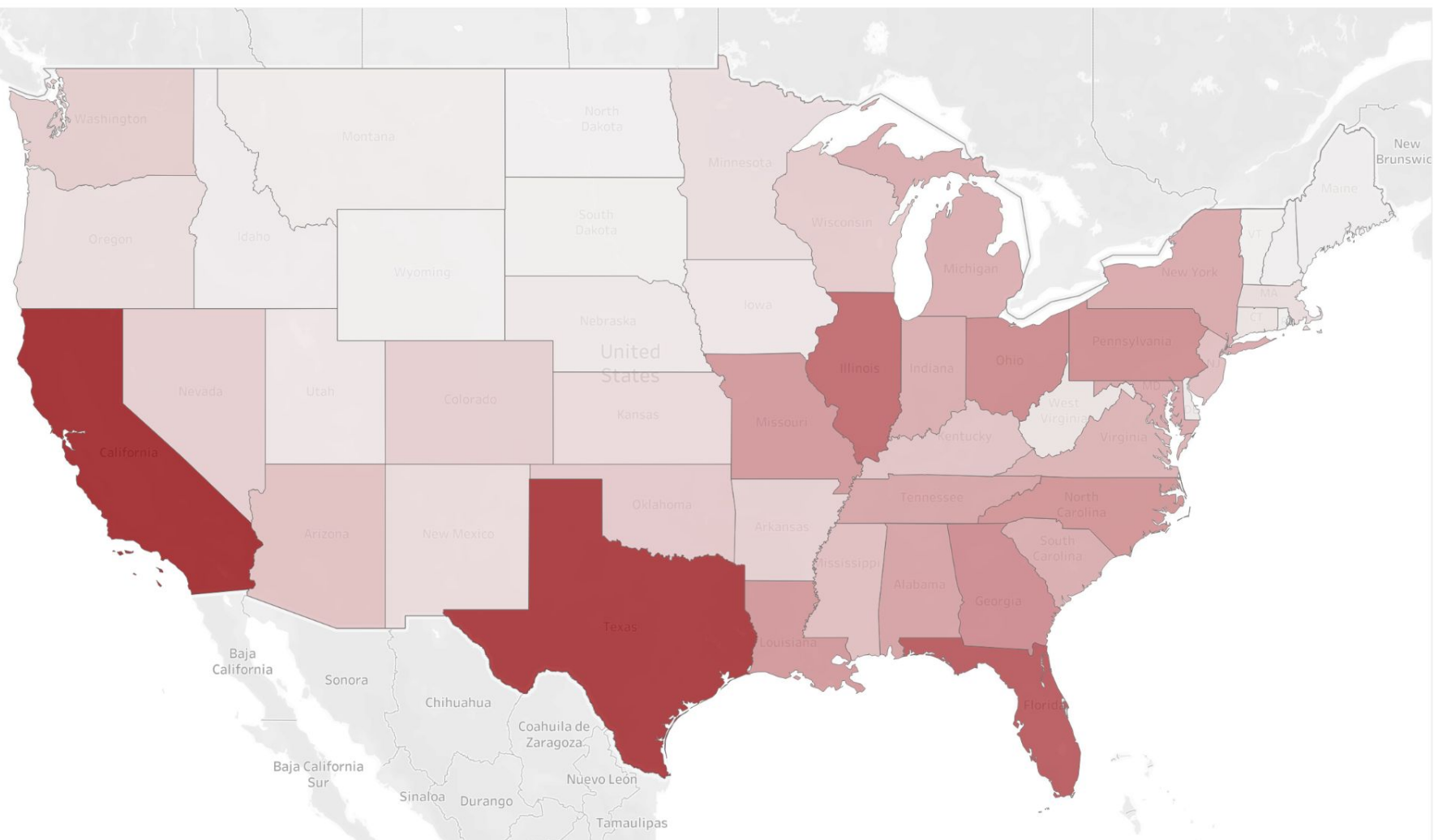
table summary

	2013	2014	2015	2016	2017	2018
Total Involved	1,298	81,845	73,692	81,690	80,622	17,471
Adult	1,123	75,104	67,004	74,415	73,047	15,742
Teen	144	5,365	5,602	6,307	6,670	1,527
Child	31	1,376	1,086	968	905	202
Total Victims	1,296	35,559	40,451	45,646	46,214	9,707
Injured	979	23,002	26,966	30,579	30,703	6,166
Killed	317	12,557	13,485	15,067	15,511	3,541
Suicide	10	1,245	1,169	1,217	1,346	357
Police	13	3,224	4,408	4,884	4,322	1,137
Mass shooting	253	270	332	383	345	54

Number of guns used

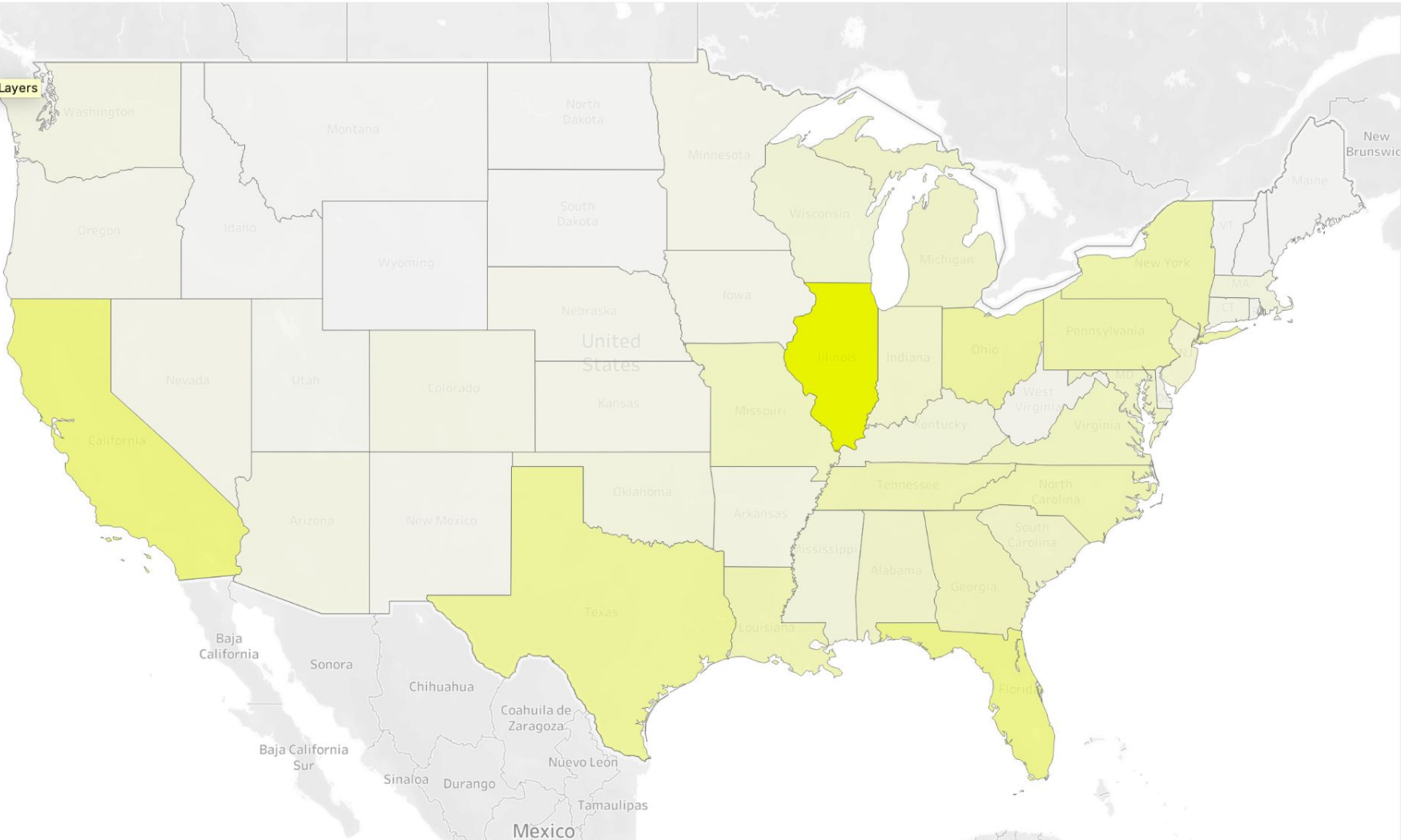


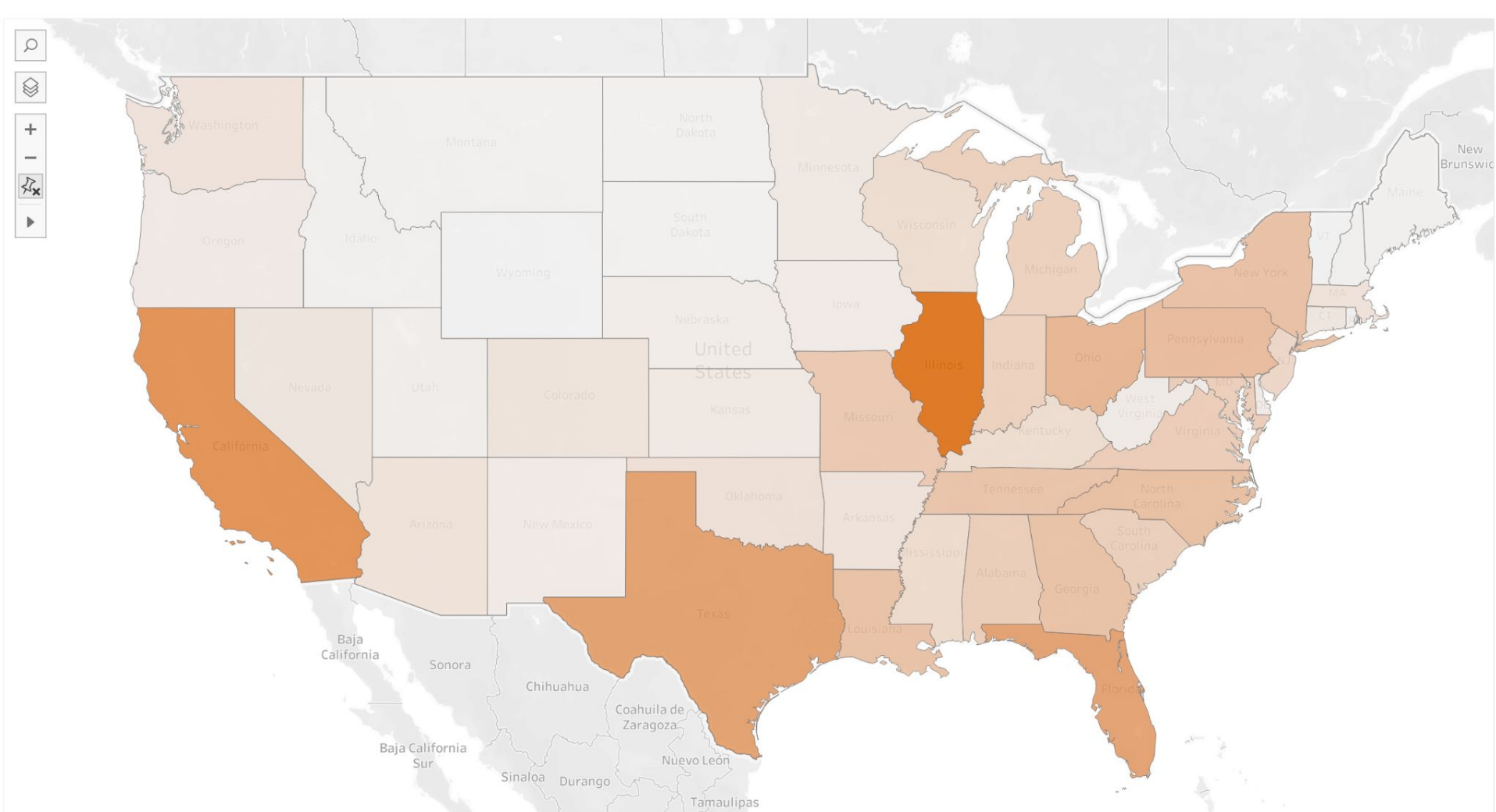


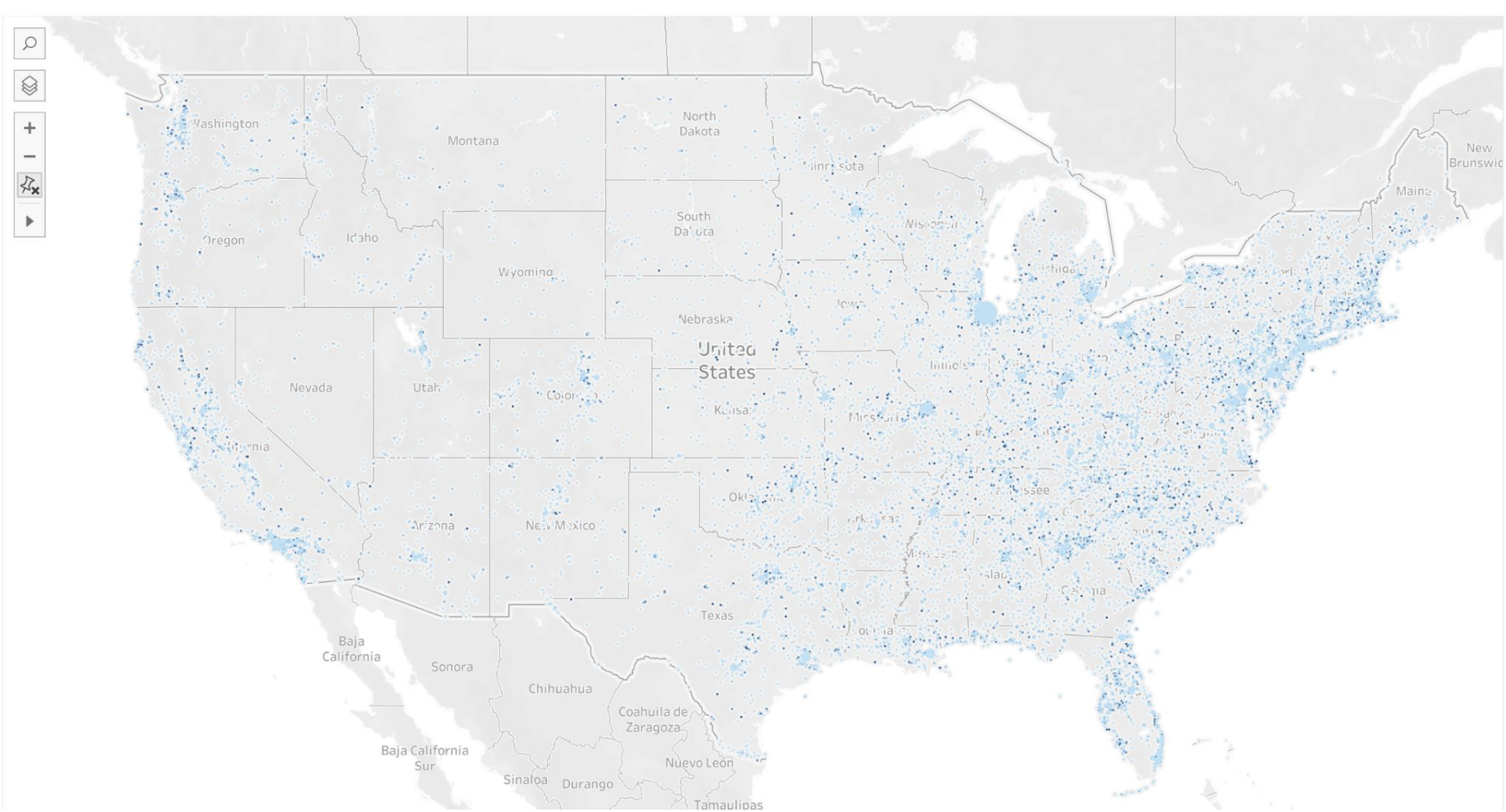




Control Map Layers

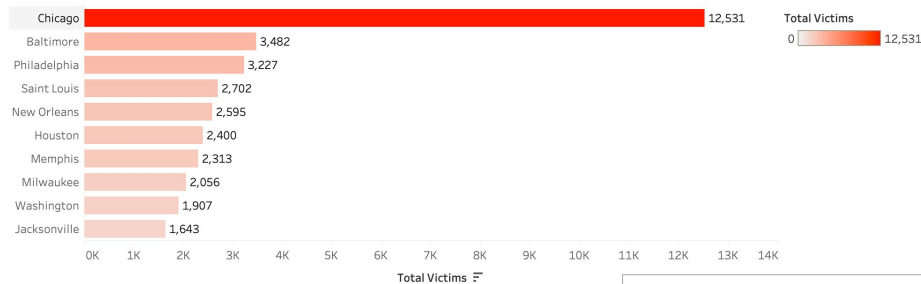




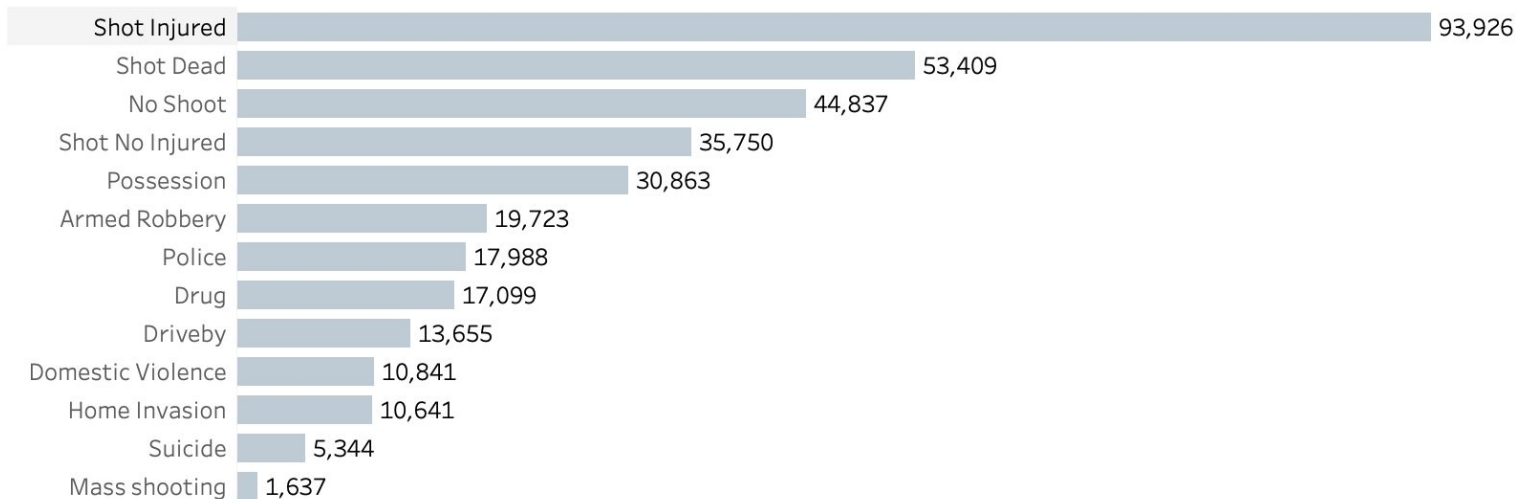


Ability to view the most dangerous cities adjusted based on year

Can also be adjusted by clicking a state on the map

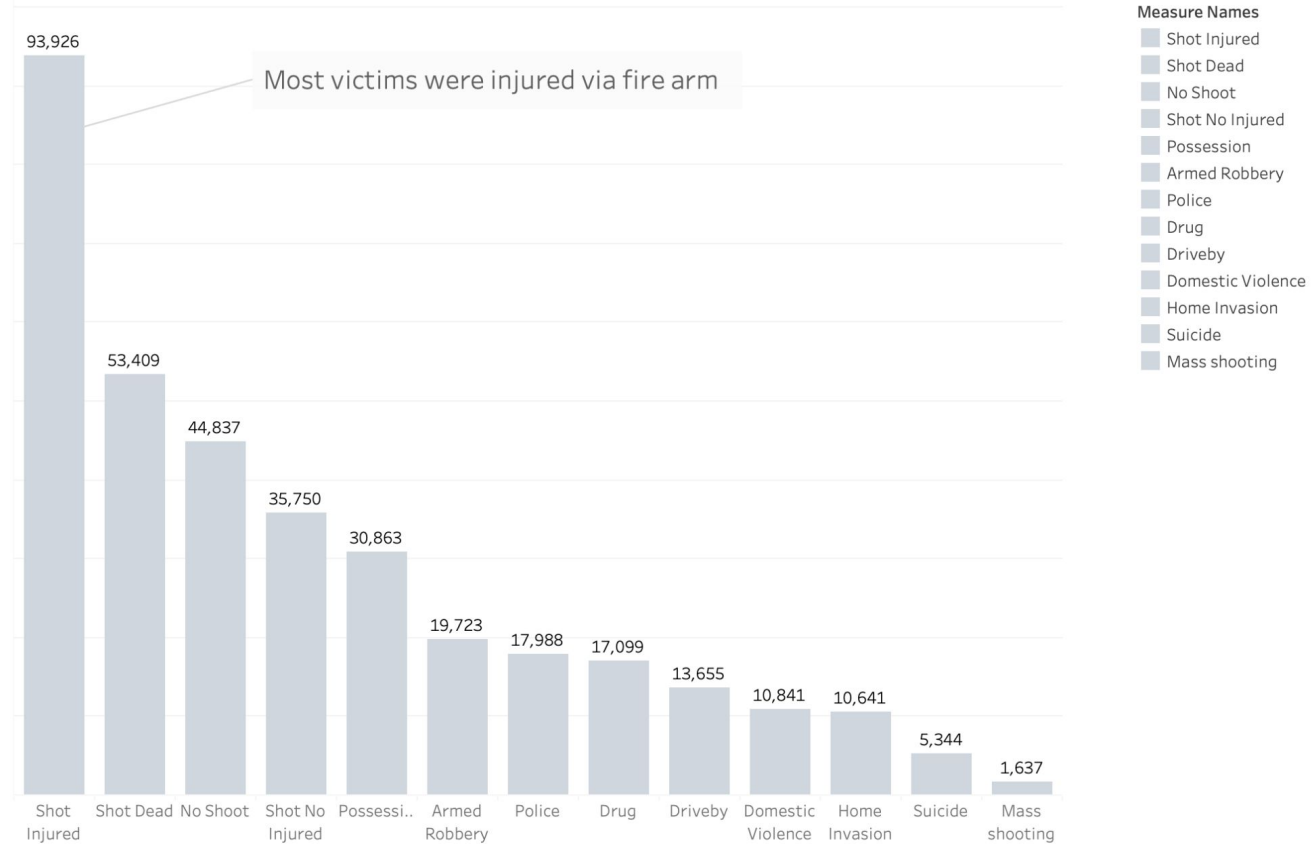


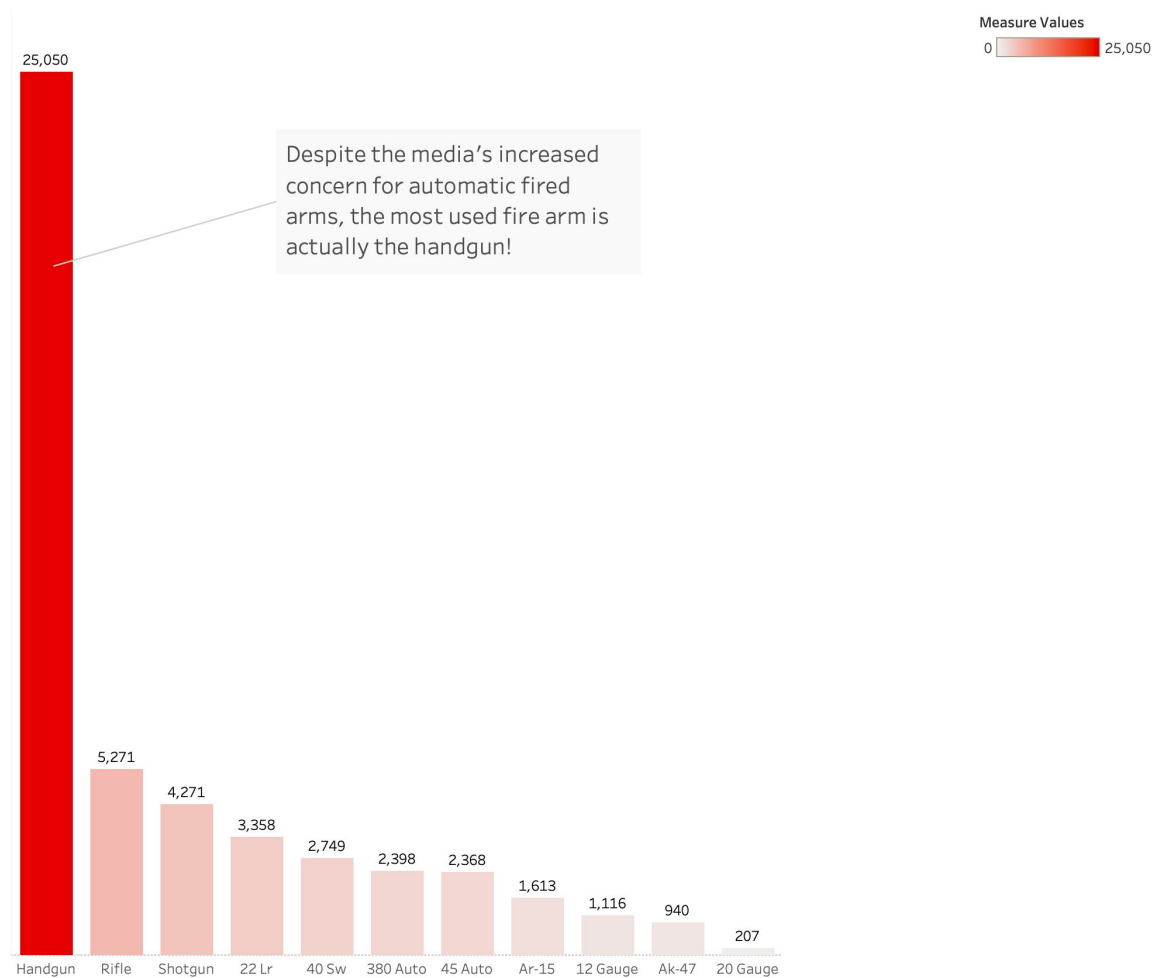
Here we see that the most dangerous city of all time is Chicago! There is the ability to filter based on year and/or state to see the top 10 most dangerous cities.

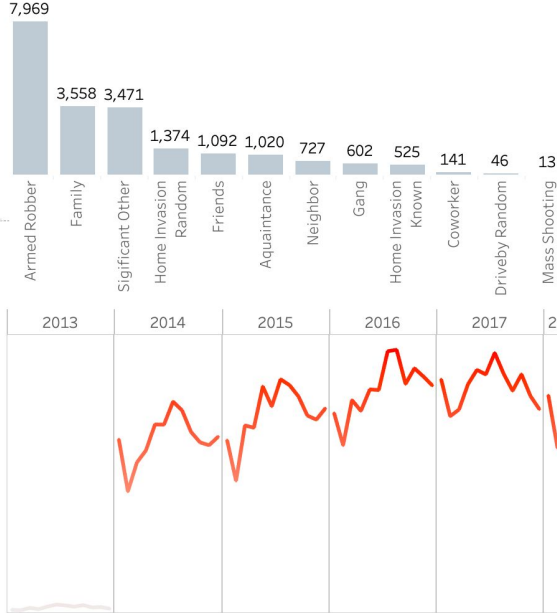
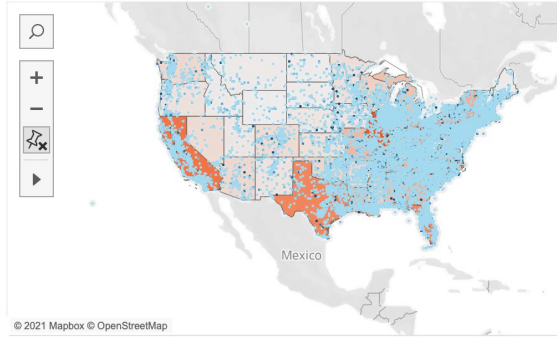
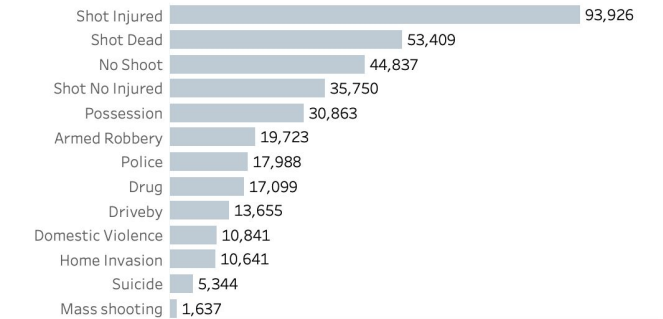
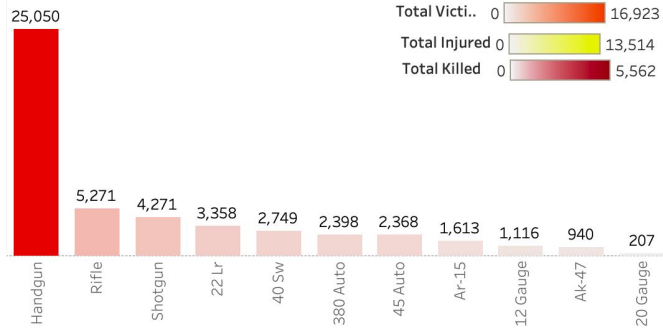
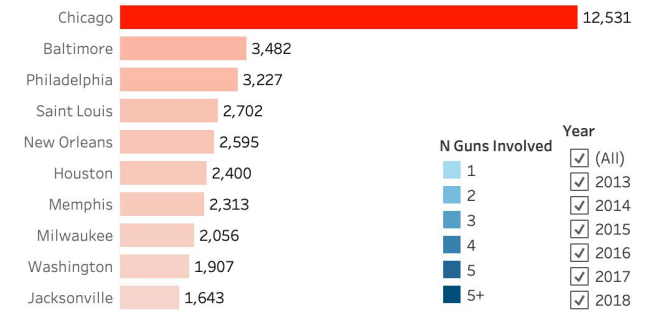


Measure Names

- Shot Injured
- Shot Dead
- No Shoot
- Shot No Injured
- Possession
- Armed Robbery
- Police
- Drug
- Driveby
- Domestic Violence
- Home Invasion
- Suicide
- Mass shooting







Conclusion

Handgun is the most used fire arm within these incidents

Majority of victims were injured from a shot compared to death

The five states with the highest fire arm incidents are:

Illinois
California
Texas
Florida
Ohio

The five cities or counties with the highest fire arm incidents are:

Chicago
Baltimore
Philadelphia
Saint Louis
New Orleans

Despite being the most reported on, mass shootings are the least likely to happen daily

Most common incident: Armed Robbery

Apartments are the most common location where gun violence occurs

Majority of cases only involve a singular fire arm