Author : A Pavan
Date: 14-6-21
Place: Bangalore

Business Analytics & Data Science Internship

Technical TASK 4 :- Exploratory Data Analysis - Terrorism

In this task, we will be performing exploratory data analysis on the data-set :
"GlobalTerrorismdb"

PROBLEM STATEMENT:
  a) Perform 'Exploratory Data Analysis' on data-set 'Global Terrorism'
  b) As a security/defense analyst, try to find out the hot zone of terrorism.
  c) What all security issues and insights you can derive by EDA?

STEPS FOLLOWED:
  a) Load the data-set into Excel/Spreadsheets
  b) Modifying the data
  c) Check and remove null values
  d) Data exploration
  e) Observations
  f) Forming pivot tables for required fields
  g) Importing those tables into Tableau
  h) Plotting various values
  i) Conclusions
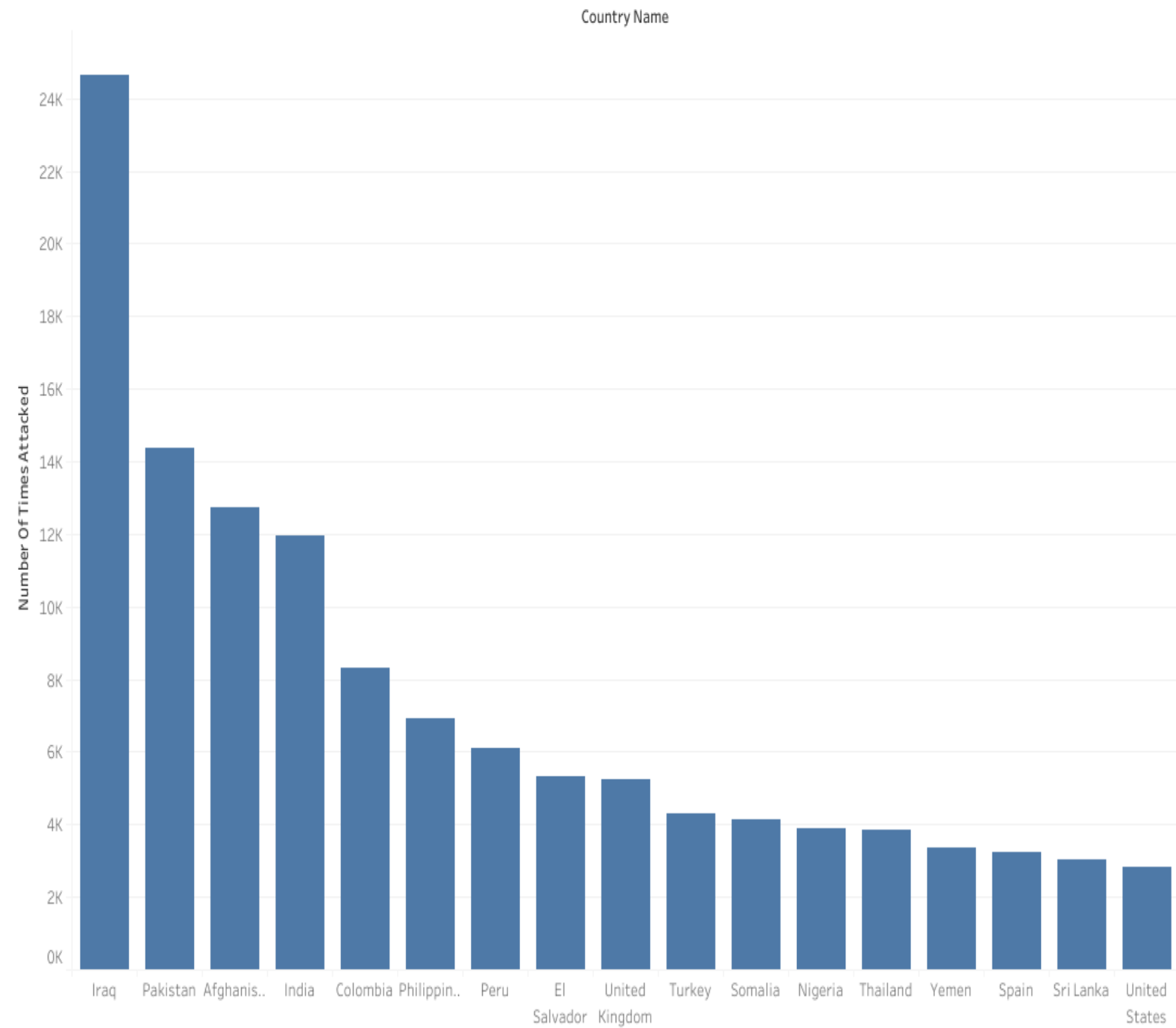
Visualization 1: Target type vs number of times attacked:

target type
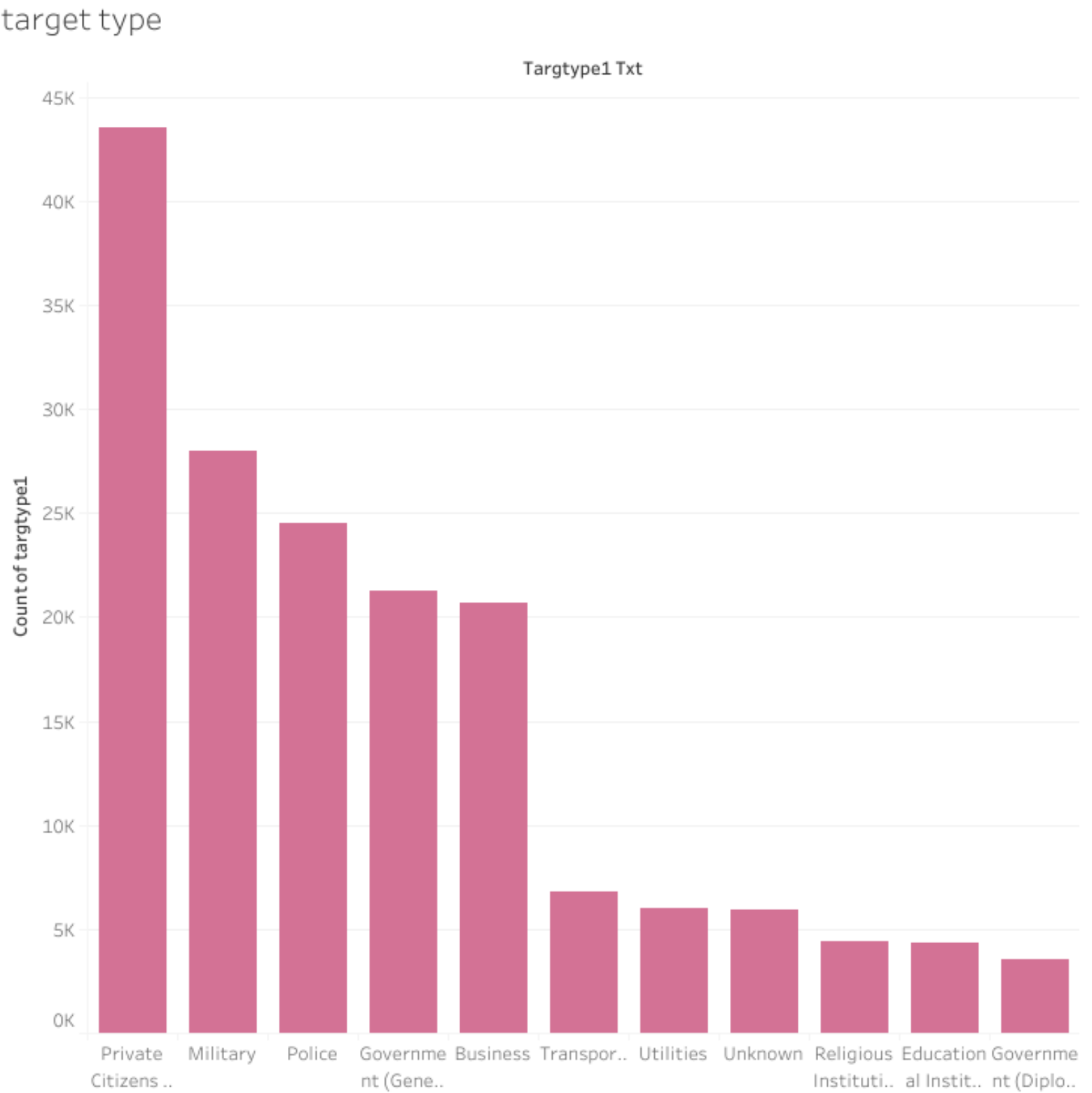
Inference:

Private citizens are most vulnerable to attacks, followed by military personnel.

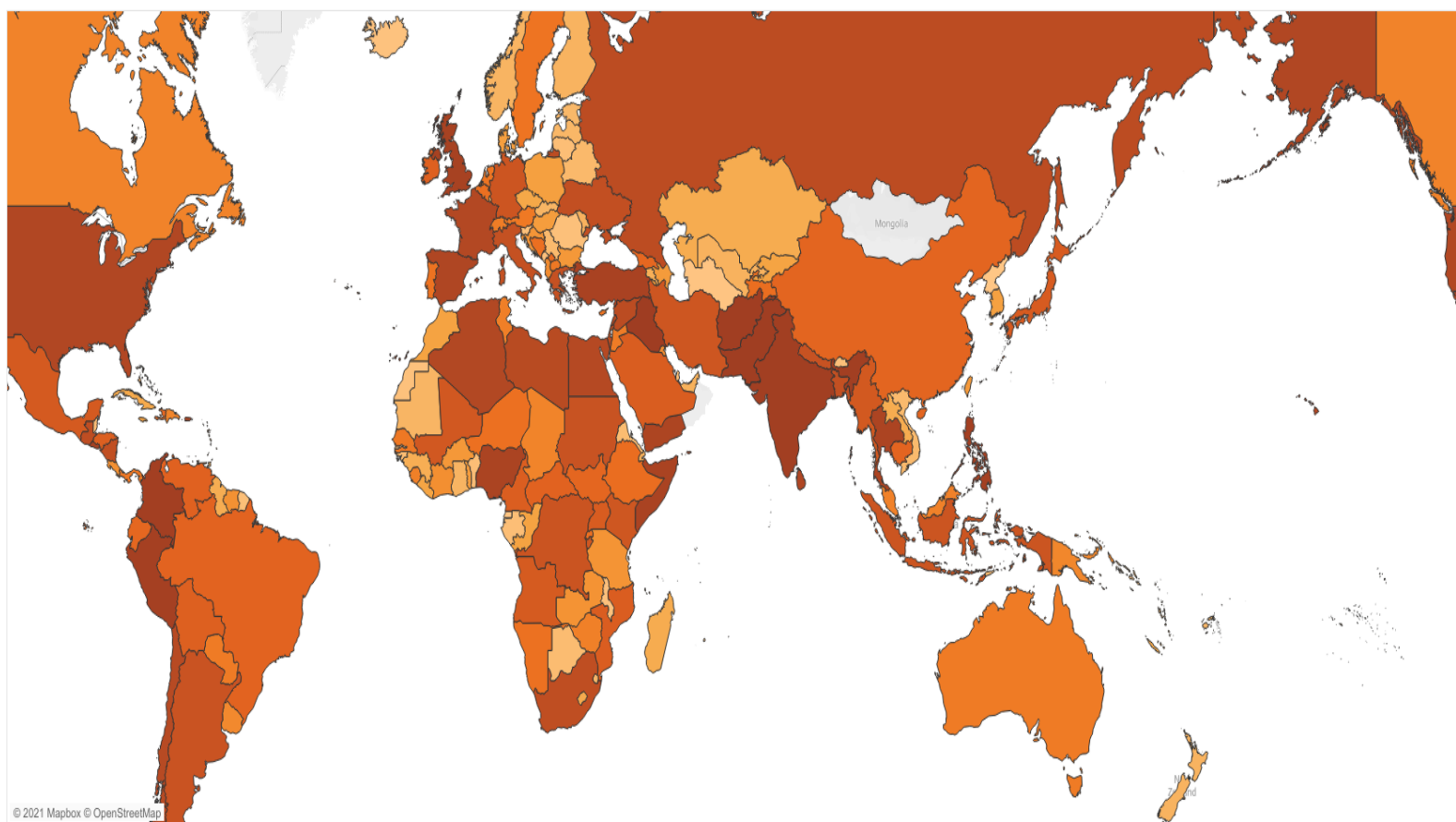# Visualization 2: Country vs Number of times attacked:

Sheet 9

Inference:
Iraq is the country which experienced highest number of attacks, followed by
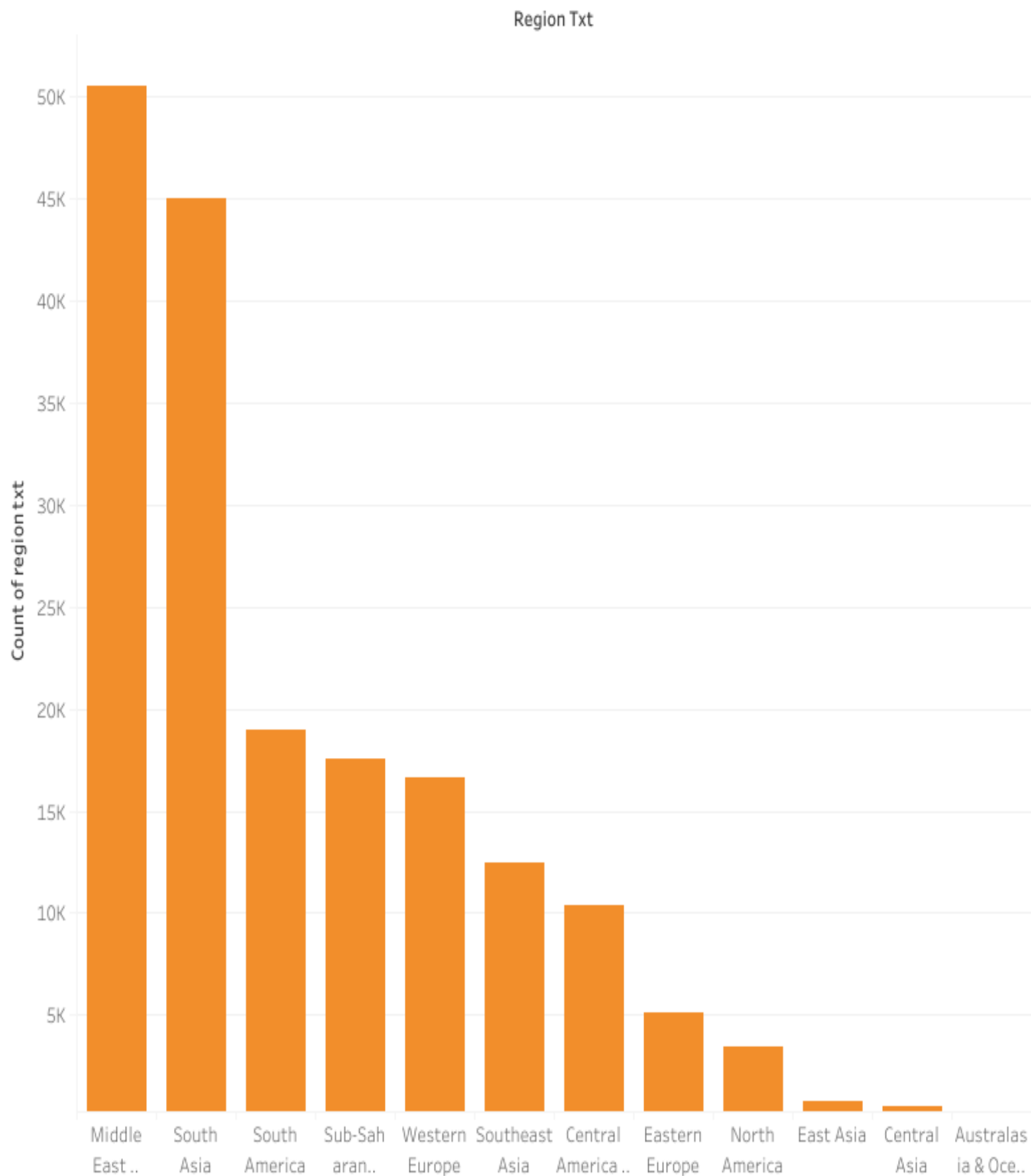Pakistan and Afghanistan

Visualization 3: Country-wise vs the number of attacks

country_wise attacked visualized

© 2021 Mapbox © OpenStreetMap

Visualization 4: No of times attacked w.r.t. a region

regions

Region Txt

Count of region txt

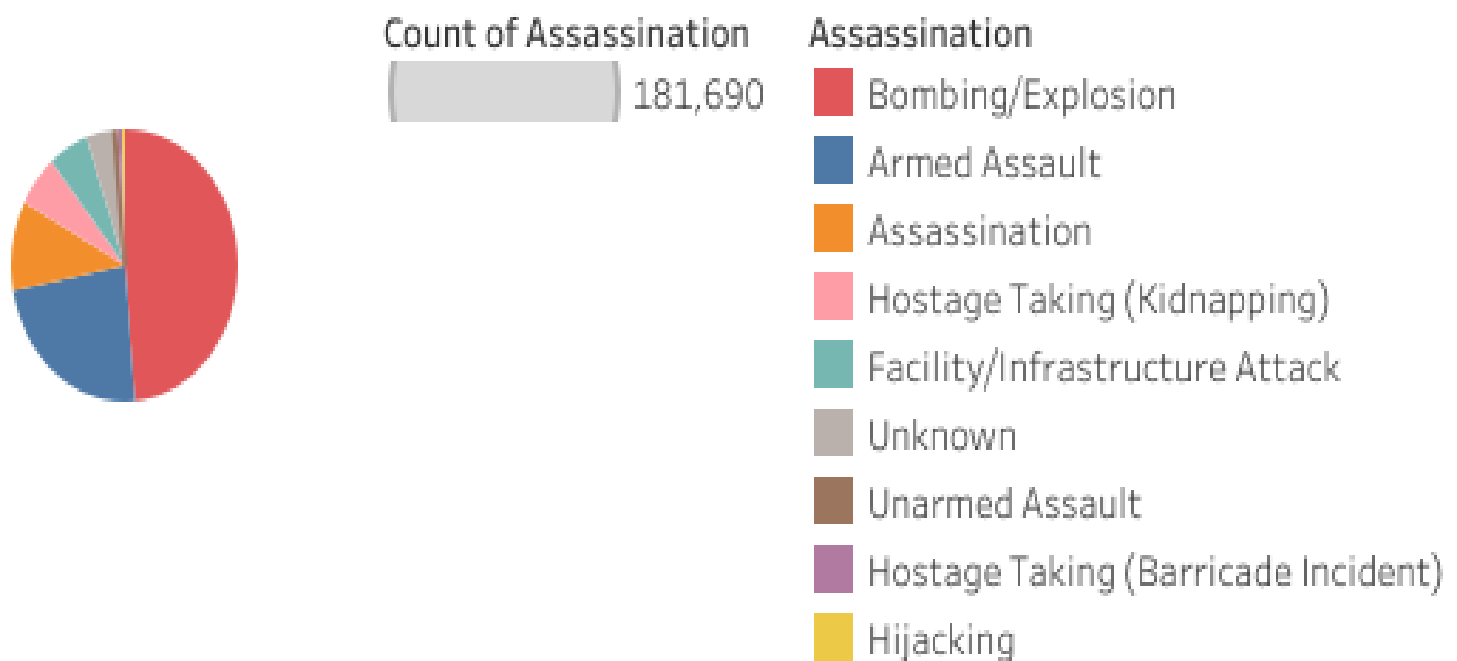| Region	Count
Middle East ..	
South Asia	
South America	
Sub-Sah aran..	
Western Europe	
Southeast Asia	
Central America ..	
Eastern Europe	
North America	
East Asia	
Central Asia	
Australas ia & Oce..	

Inference:
Middle east and south Asia are attacked the most

Visualization 5: Assassination Type

Assassination type

Count of Assassination
| | 181,690

Assassination
- Bombing/Explosion
- Armed Assault
- Assassination
- Hostage Taking (Kidnapping)
- Facility/Infrastructure Attack
- Unknown
- Unarmed Assault
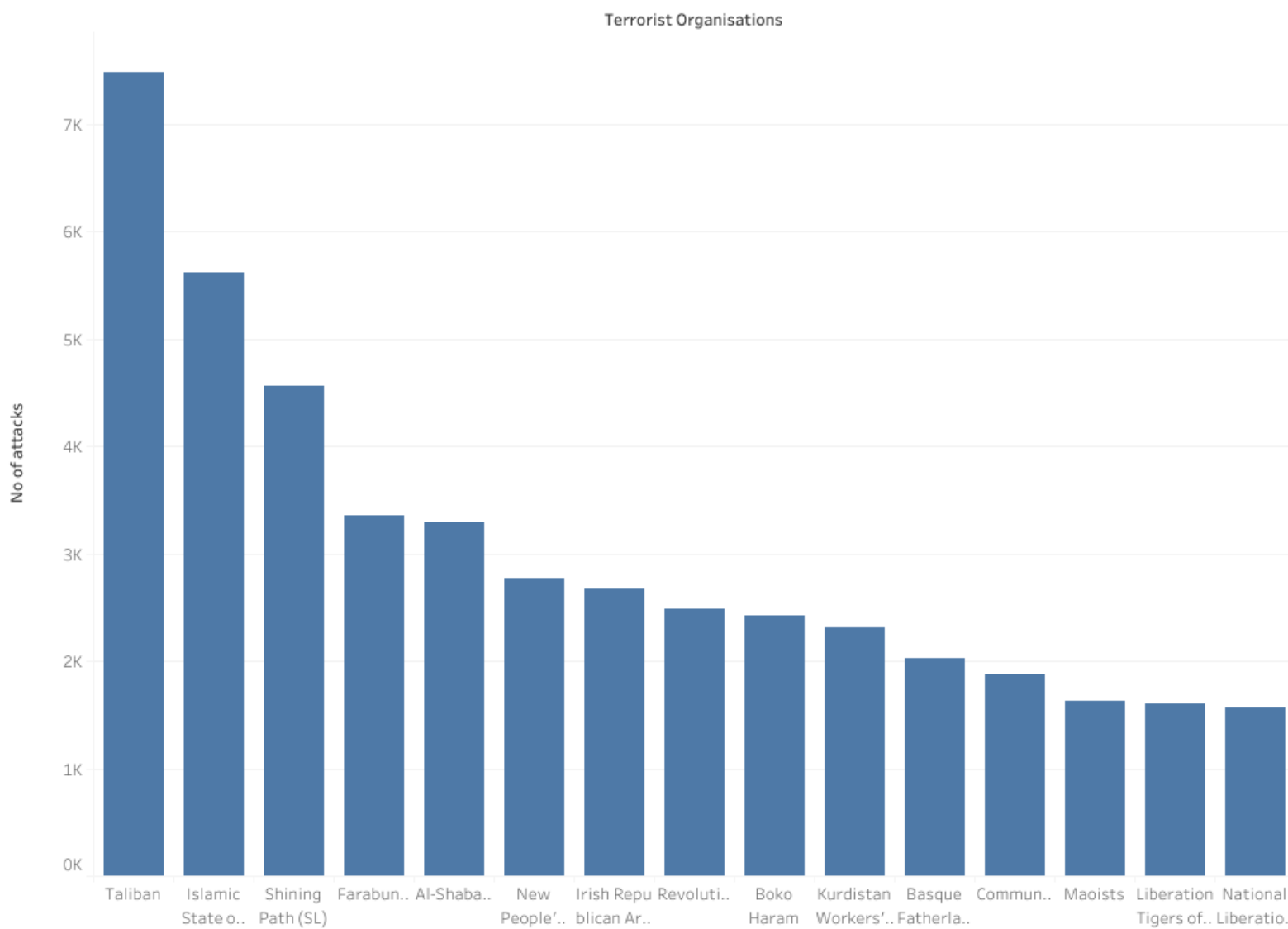- Hostage Taking (Barricade Incident)
- Hijacking

Inference:
Bombing is the means terrorists use for many number of times, hence by controlling the accessibility of bombs/ explosives, large number of attacks could be avoided
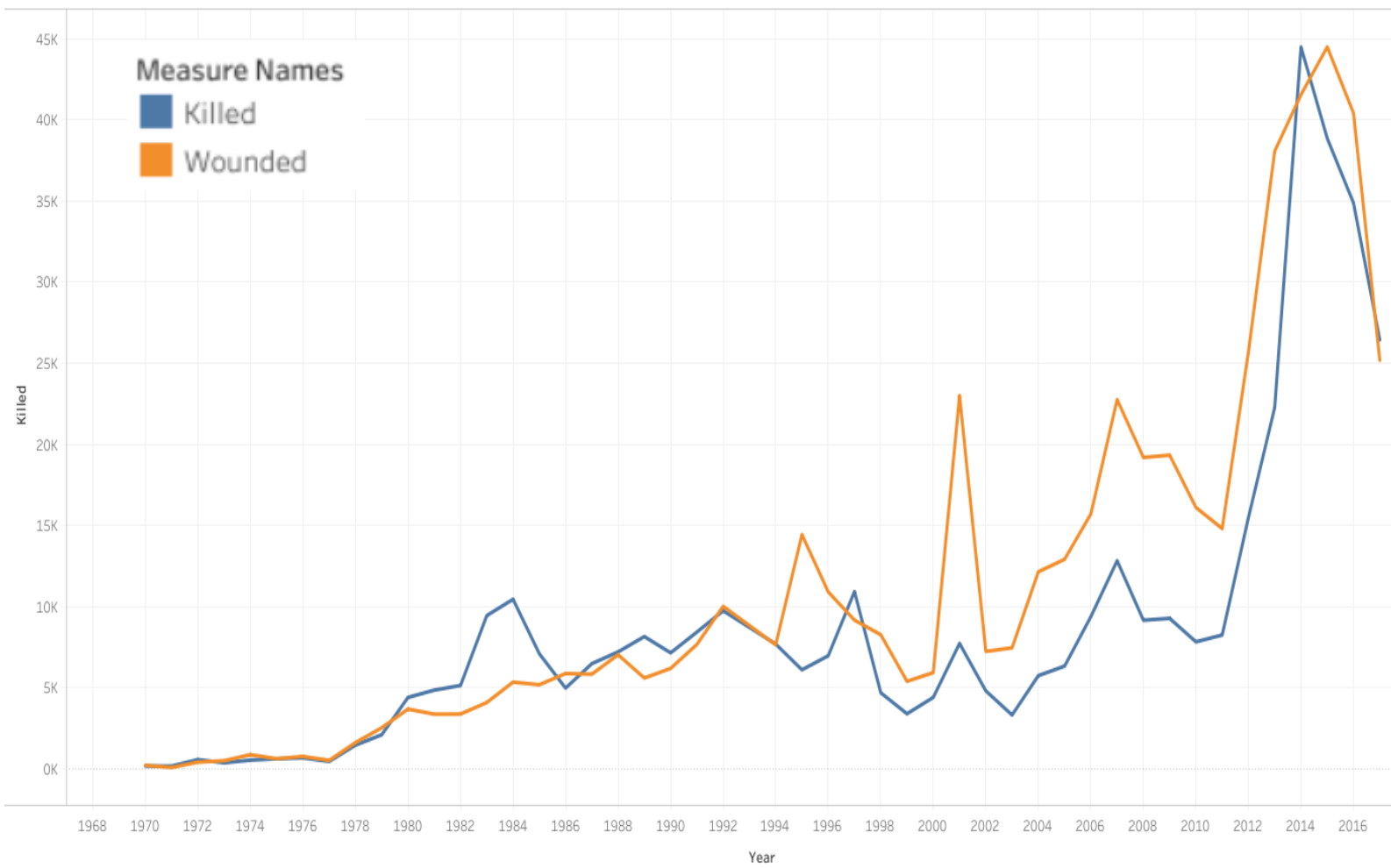
Visualization 6: Active terrorist organizations:

Terrorist Organisations

Inference:
Taliban, ISIL, SL are the most active organizations

Visualization 7: number of people killed and wounded over the years
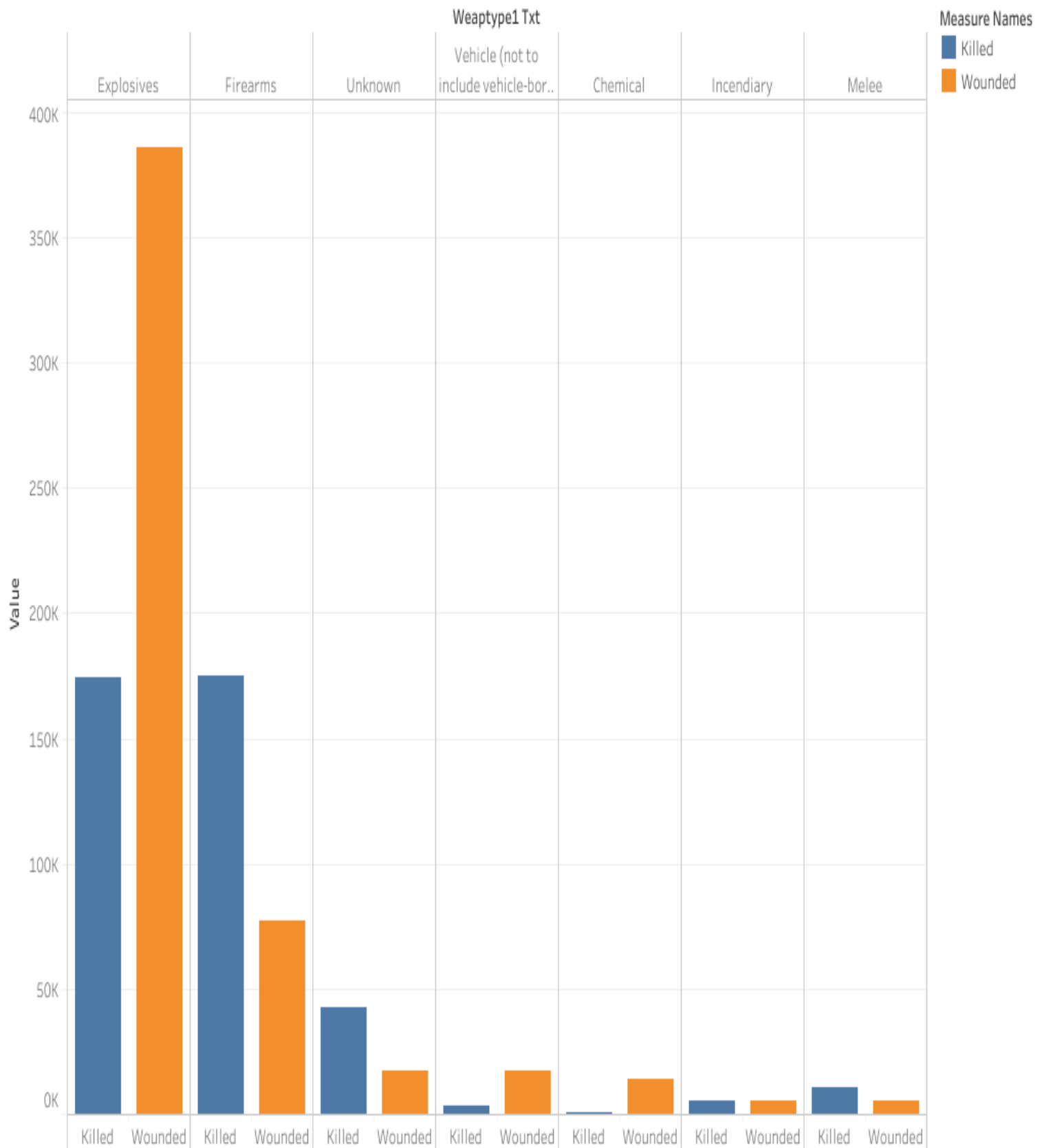
Year vs Killed, Wounded

Inference:
- Year 2014 saw an all time high for the number of people killed
- On 2015, highest number of people were wounded.

Visualization 8: weapon type vs number of people wounded and killed.
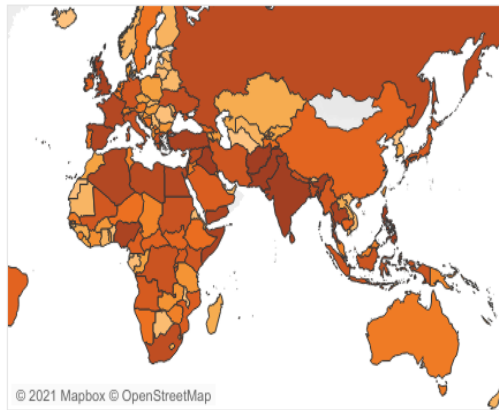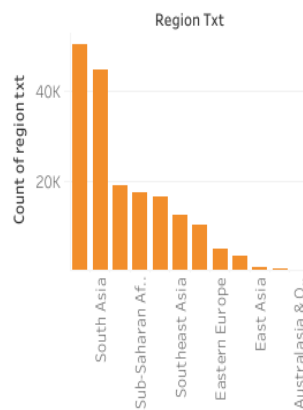
Weapon Types

Inferences:
- whenever there's an explosion, the number of people wounded is more
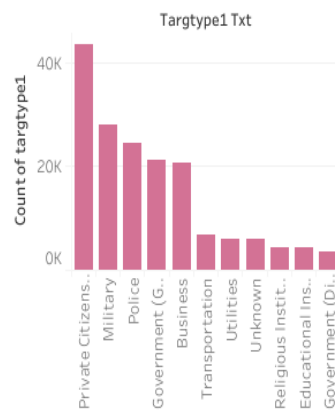- whenever firearms arms are used, more people are killed
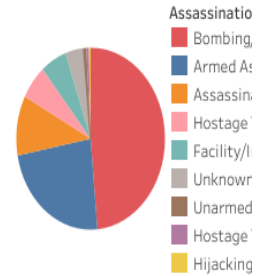
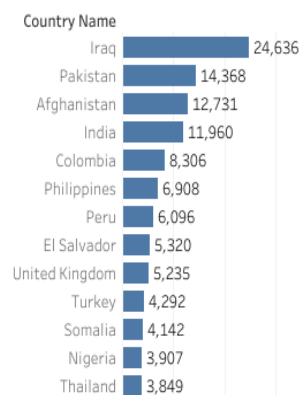# FINAL DASHBOARD:

country_wise attacked visualized

© 2021 Mapbox © OpenStreetMap

regions

Region Txt

South Asia, Sub-Saharan Af.., Southeast Asia, Eastern Europe, East Asia, Australasia & O..

target type

Targtype1 Txt

Private Citizens.., Military, Police, Government (G.., Business, Transportation, Utilities, Unknown, Religious Instit.., Educational Ins.., Government (Di..

Assassination type

Assassinatio..
- Bombing,..
- Armed As..
- Assassin..
- Hostage ..
- Facility/I..
- Unknow..
- Unarmed..
- Hostage ..
- Hijacking..

Country vs no of times attacked

Country Name

Country Name	
Iraq	24,636
Pakistan	14,368
Afghanistan	12,731
India	11,960
Colombia	8,306
Philippines	6,908
Peru	6,096
El Salvador	5,320
United Kingdom	5,235
Turkey	4,292
Somalia	4,142
Nigeria	3,907
Thailand	3,849

Terrorist organisation

Terrorist Organisations
- Taliban
- Islamic State of Iraq and t..
- Shining Path (SL)
- Farabundo Marti National..
- Al-Shabaab
- New People's Army (NPA)
- Irish Republican Army (IRA)
- Revolutionary Armed Forc..
- Boko Haram
- Kurdistan Workers' Party ..
- Basque Fatherland and Fr..
- Communist Party of India ..
- Maoists
- Liberation Tigers of Tamil ..

Year vs Killed, Wounded

Measure Names
- Killed
- Wounded

Weapon Types

Weaptype1 Txt

Explo.., Firea.., Unkn.., Vehicl e (not.., Chem.., Incen.., Melee

Measure Names
- Killed
- Wounded
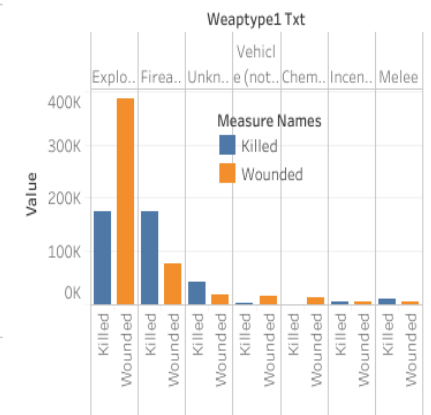
CONCLUSIONS:

- Private citizens are most vulnerable to attacks, followed by military personnel.

- Bombing is the means terrorists use for many number of times, hence by controlling the accessibility of   bombs/ explosives, large number of attacks could be avoided

- whenever there's an explosion, the number of people wounded is more

- whenever firearms arms are used, more people are killed

- Year 2014 saw an all time high for the number of people killed

- On 2015, highest number of people were wounded.

- Iraq is the country which experienced highest number of times attacked, followed by Pakistan and Afghanistan

- Middle east and south Asian regions are attacked the most

- Taliban, ISIL, SL are the most active organizations

- In terms of terrorist actions, the Middle East and North Africa are hot-spots in all areas.
  - Iraq has the highest terrorist rate in the world, with a sharp spike in terrorist activity after 2010.
  - Libya has a low terrorism activity overall, ranks second in terms of successful terrorist acts, and has seen a rise in terrorism rates since 2010.
  - Yemen has a low terrorism activity overall, ranks third in terms of effective terrorist acts, and has seen a rise in terrorism rates since 2010.