Project Document

Project name:

Qlik Analysis Of Road Safety And Accident Patterns In India.

Define Problem/Problem Understanding:

A road accident is a common incident seen in India and the frequency of these accidents is increasing daily. Some of these are excessive growth in traffic congestion; poor quality of roads; Compromised observance to traffic laws and regulations. Inexcusable cases of reckless driving, speeding, and the almost unkotic behaviour towards traffic lights compound it. This is mainly because the said vulnerable groups are always on the receiving end and are mostly involved in such accidents. Measures that has been taken in increasing road safety education, enhancing the vigour in law implementation and the designs that has been made on the roads are some of the approaches that should be adopted in reducing this growing vice that makes traveling on roads most dangerous activity for many people.

Downloading the Dataset:

I downloaded the dataset successfully from the link provided.

Understand the data:

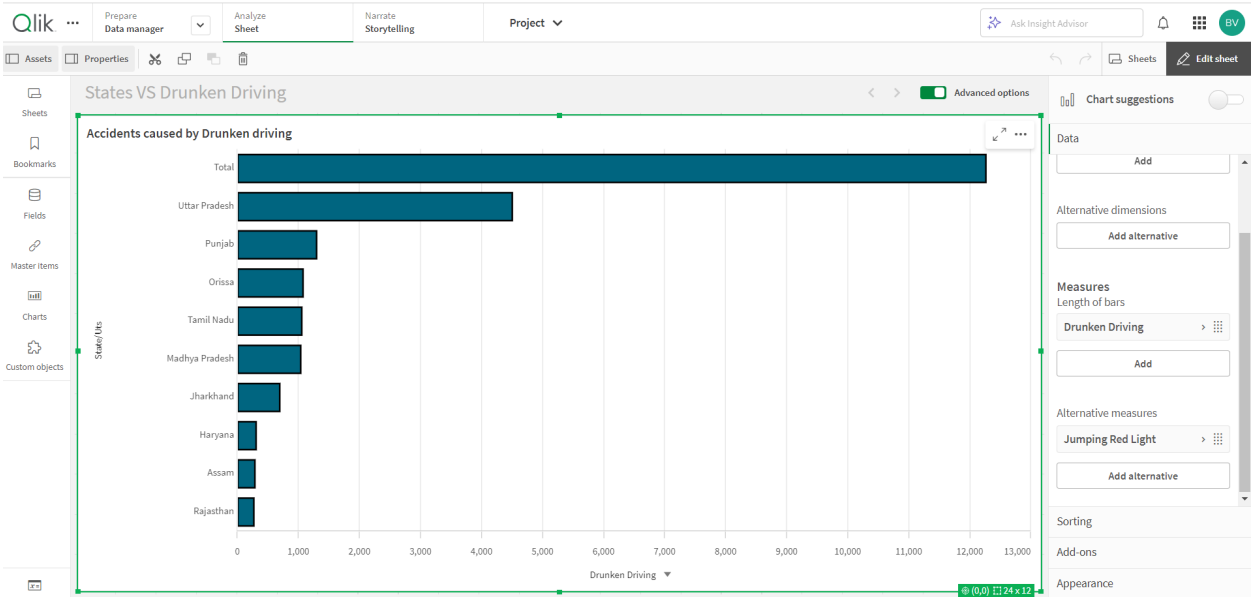
The datasets include different types of statistics concerning the occurrence of road accidents in India in 2019. The data contains specific information about other classifications like Controlled and Uncontrolled, and persons Injured and Killed by age and gender. For instance, in the uncontrolled sites, one could expect approximately 2773 total accidents with large variations in the yearly rate mentioned by a large Standard Deviation Figures. Furthermore, evidence shows that, other forms of accidents on average claimed 6020 people's lives, further affirming the significant consequences of road accidents in India. The datasets also reveal on the distribution of age and gender of the deceased for instance the number of females involving those aged 60 years and above who died. This includes the amount of data that can be utilised in effective assessment of trends, risk areas, and even in development of strategies that can in the long run improve the general road safety in India.

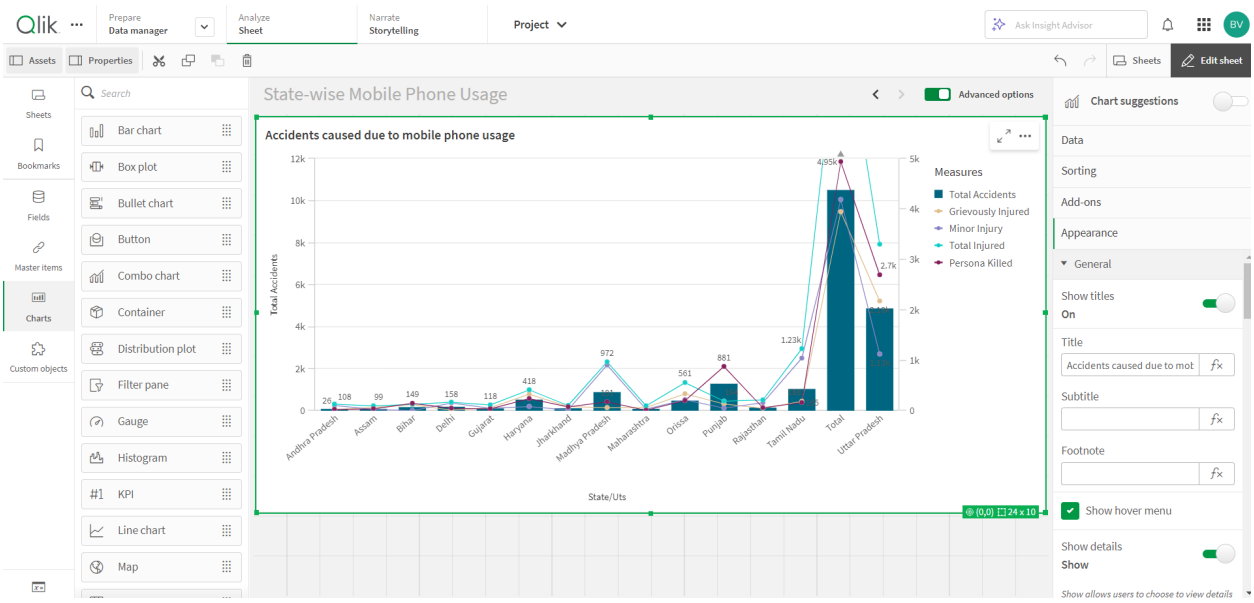
Data Preparation:

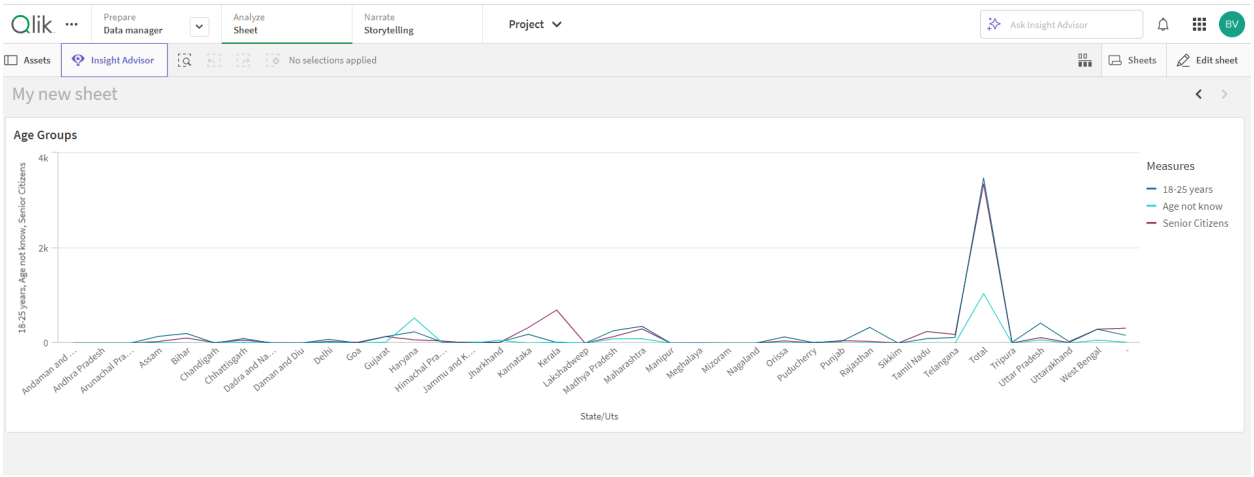
Before creating charts and graphs, data must be preprocessed to eradicate the inconsequential

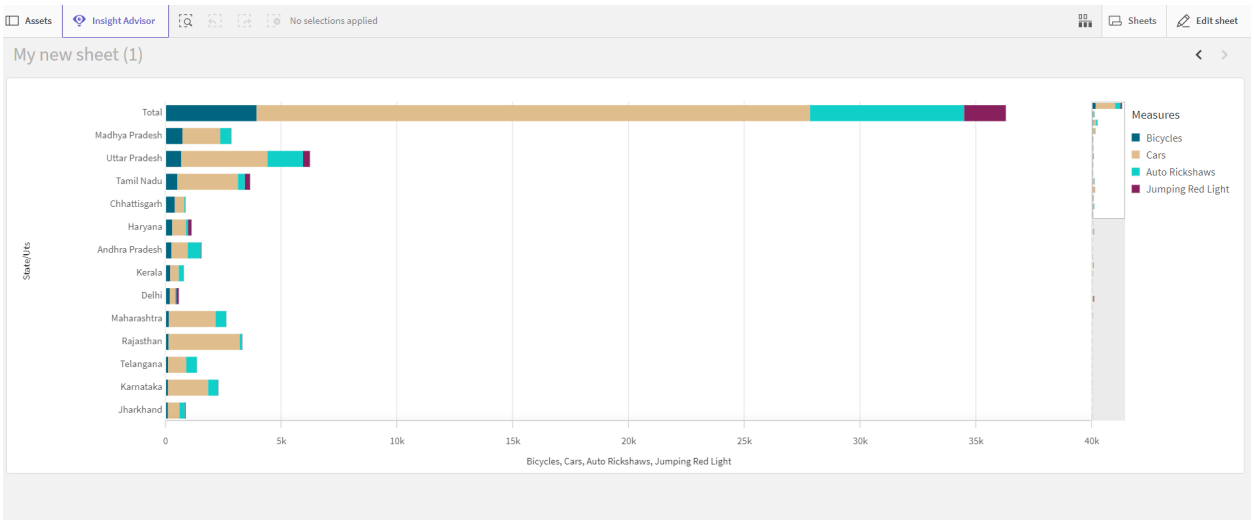
information which data gaps, converting the data into the structural format required for the visualization, discovering patterns and trends of the data by analyzing them, applying the necessary conditions on data so as to obtain subsets of data for analysis, preparing the data for visualization tools and software, and checking whether data is sufficient and suitable for the purpose of data visualization. It makes data easy to understand and prepares data for creating visualization for insights and information.

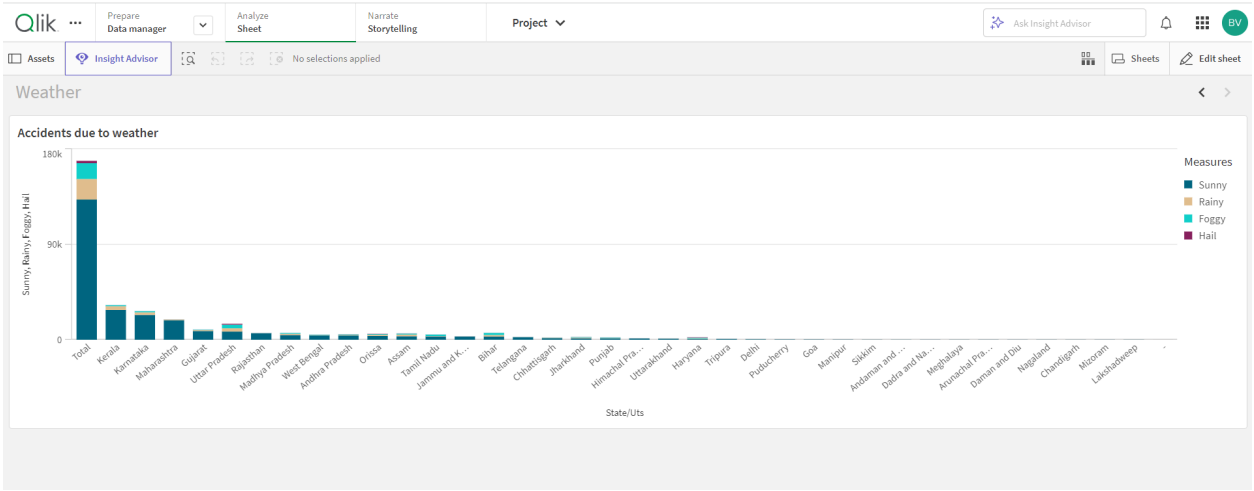
Data Visualization:

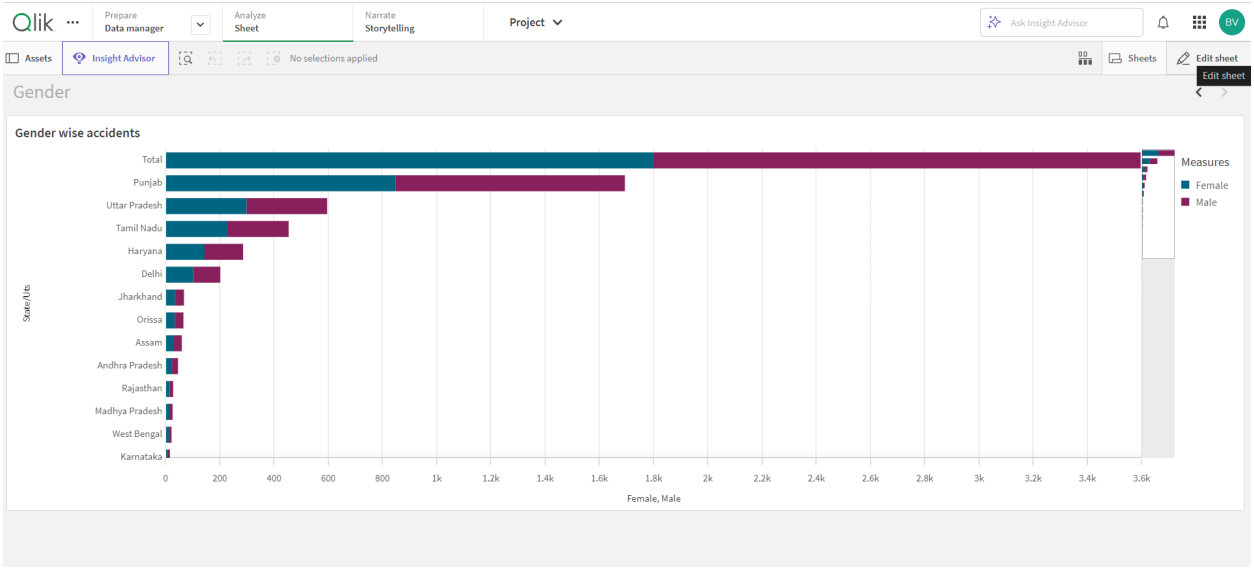


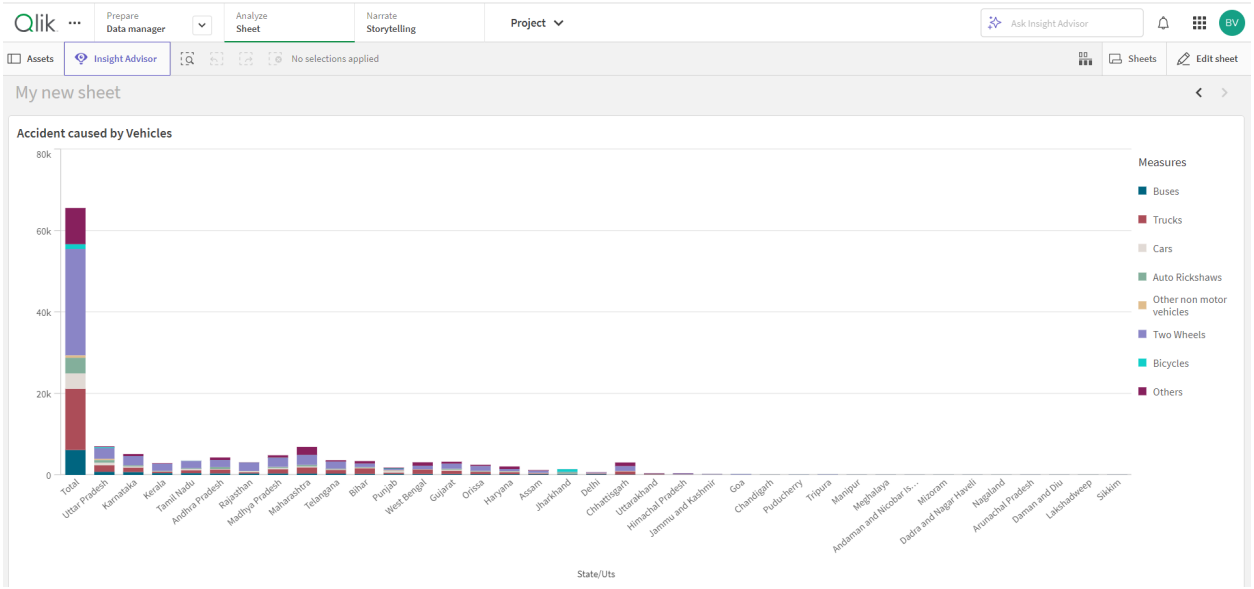

Qlik
Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
Assets
Properties
Sheets
Edit sheet
Search
Bar chart
Box plot
Bullet chart
Button
Combo chart
Container
Distribution plot
Filter pane
Gauge
Histogram
KPI
Line chart
Map
State-wise Mobile Phone Usage
Advanced options
Accidents caused due to mobile phone usage
Total Accidents
State/Uts
Measures
Total Accidents
Grievously Injured
Minor Injury
Total Injured
Persona Killed
Chart suggestions
Data
Sorting
Add-ons
Appearance
General
Show titles
On
Title
Accidents caused due to mot
Subtitle
Footnote
Show hover menu
Show details
Show
Show allows users to choose to view details

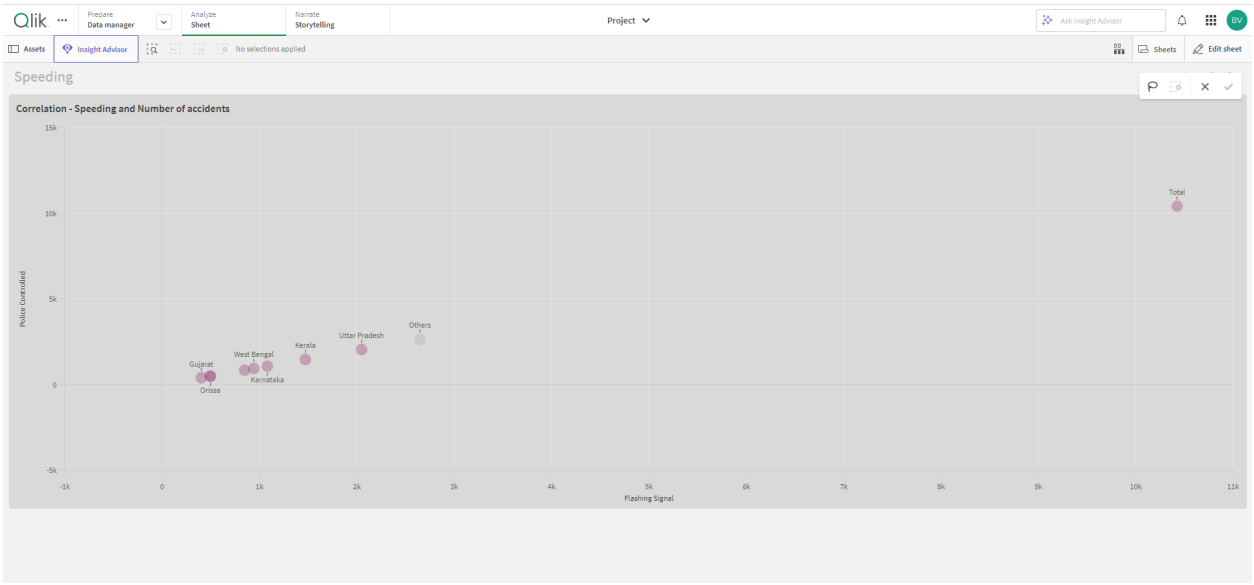

Qlik
Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
My new sheet
Age Groups
18-25 years, Age not know, Senior Citizens
State/Uts
Measures
18-25 years
Age not know
Senior Citizens

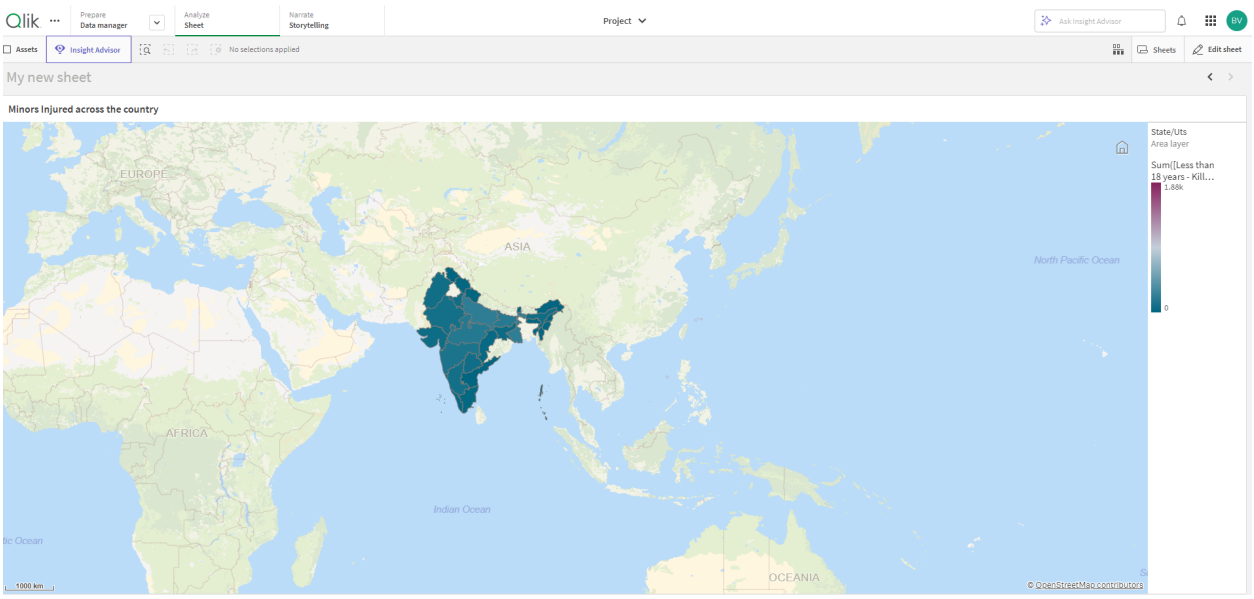

Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
My new sheet (1)
State/Uts
Bicycles, Cars, Auto Rickshaws, Jumping Red Light
Measures
Bicycles
Cars
Auto Rickshaws
Jumping Red Light

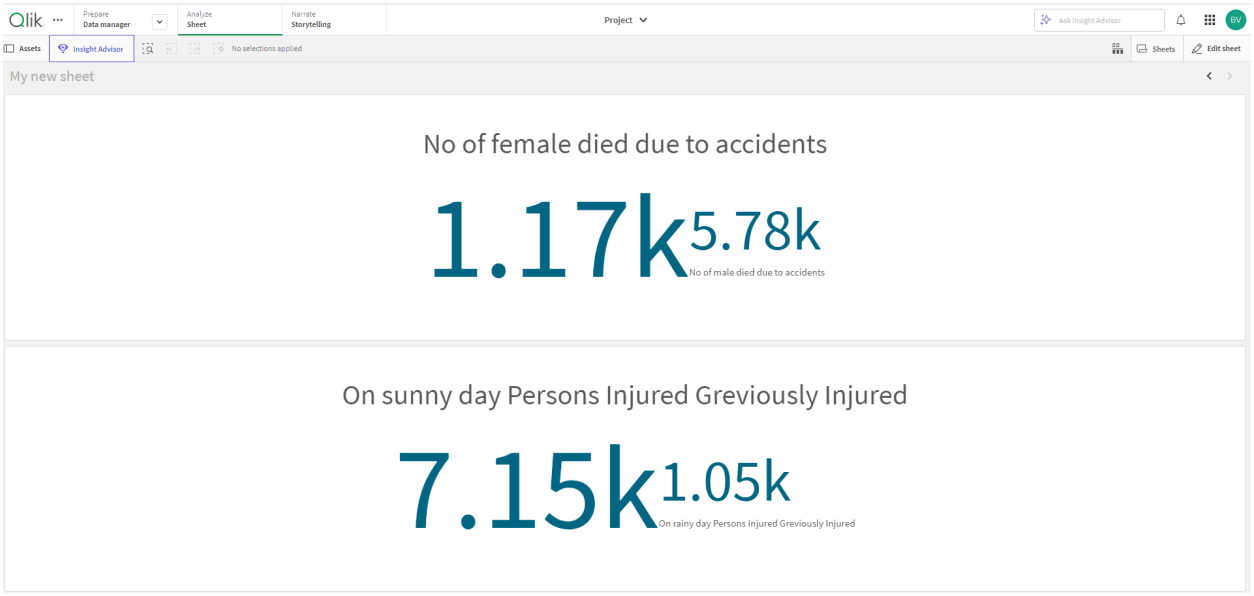

Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
BV
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
Weather
Accidents due to weather
180k
90k
0
Sunny, Rainy, Foggy, Hail
Total
Kerala
Karnataka
Maharashtra
Gujarat
Uttar Pradesh
Rajasthan
Madhya Pradesh
West Bengal
Andhra Pradesh
Orissa
Assam
Tamil Nadu
Jammu and K...
Bihar
Telangana
Chhattisgarh
Jharkhand
Punjab
Himachal Pra...
Uttarakhand
Haryana
Tripura
Delhi
Puducherry
Goa
Manipur
Sikkim
Andaman and ...
Dadra and Na...
Meghalaya
Arunachal Pra...
Daman and Diu
Nagaland
Chandigarh
Mizoram
Lakshadweep
State/Uts
Measures
Sunny
Rainy
Foggy
Hail


Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
BV
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
Edit sheet
Gender
Gender wise accidents
Total
Punjab
Uttar Pradesh
Tamil Nadu
Haryana
Delhi
Jharkhand
Orissa
Assam
Andhra Pradesh
Rajasthan
Madhya Pradesh
West Bengal
Karnataka
State/Uts
0
200
400
600
800
1k
1.2k
1.4k
1.6k
1.8k
2k
2.2k
2.4k
2.6k
2.8k
3k
3.2k
3.4k
3.6k
Female, Male
Measures
Female
Male


Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
BV
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
My new sheet
Accident caused by Vehicles
80k
60k
40k
20k
0
Measures
Buses
Trucks
Cars
Auto Rickshaws
Other non motor vehicles
Two Wheels
Bicycles
Others
Total
Uttar Pradesh
Karnataka
Kerala
Tamil Nadu
Andhra Pradesh
Rajasthan
Madhya Pradesh
Maharashtra
Telangana
Bihar
Punjab
West Bengal
Gujarat
Orissa
Haryana
Assam
Jharkhand
Delhi
Chhattisgarh
Uttarakhand
Himachal Pradesh
Jammu and Kashmir
Goa
Chandigarh
Puducherry
Tripura
Manipur
Meghalaya
Andaman and Nicobar Is...
Mizoram
Dadra and Nagar Haveli
Nagaland
Arunachal Pradesh
Daman and Diu
Lakshadweep
Sikkim
State/Uts


Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
BV
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
Speeding
Correlation - Speeding and Number of accidents
15k
10k
5k
0
-5k
Police Controlled
Total
Others
Uttar Pradesh
Kerala
West Bengal
Gujarat
Karnataka
Orissa
-1k
0
1k
2k
3k
4k
5k
6k
7k
8k
9k
10k
11k
Flashing Signal


Qlik
Prepare
Data manager
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
My new sheet
Minors Injured across the country
EUROPE
ASIA
North Pacific Ocean
AFRICA
Indian Ocean
OCEANIA
1000 km
© OpenStreetMap contributors
State/Uts
Area layer
Sum([Less than 18 years - Kill...
1.88k
0


Qlik
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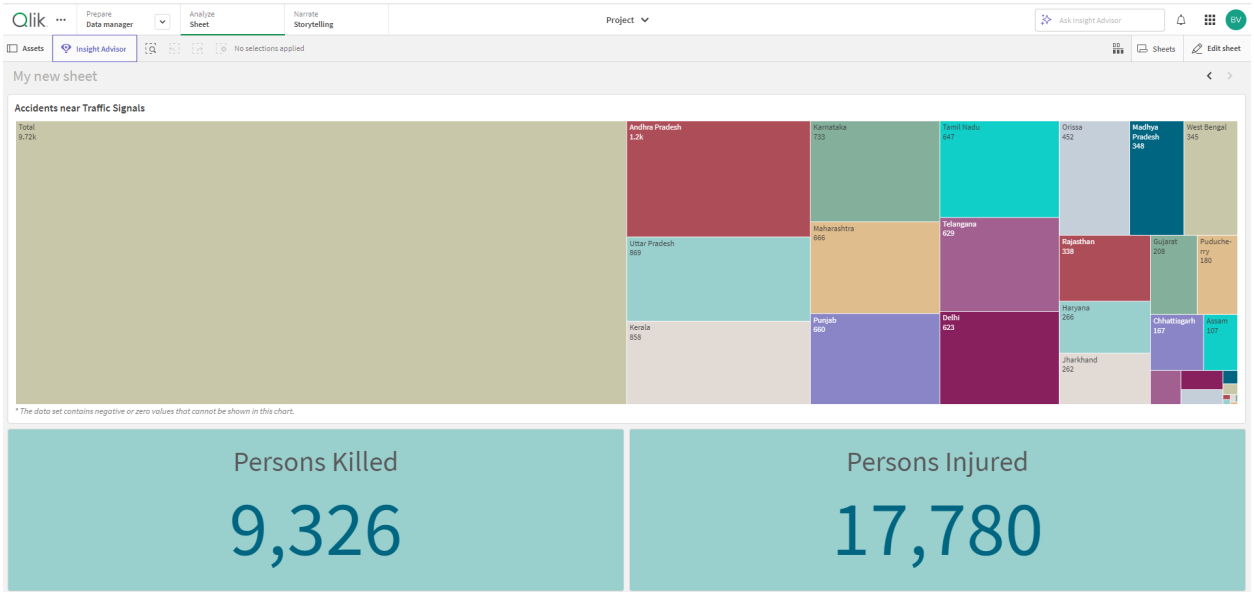
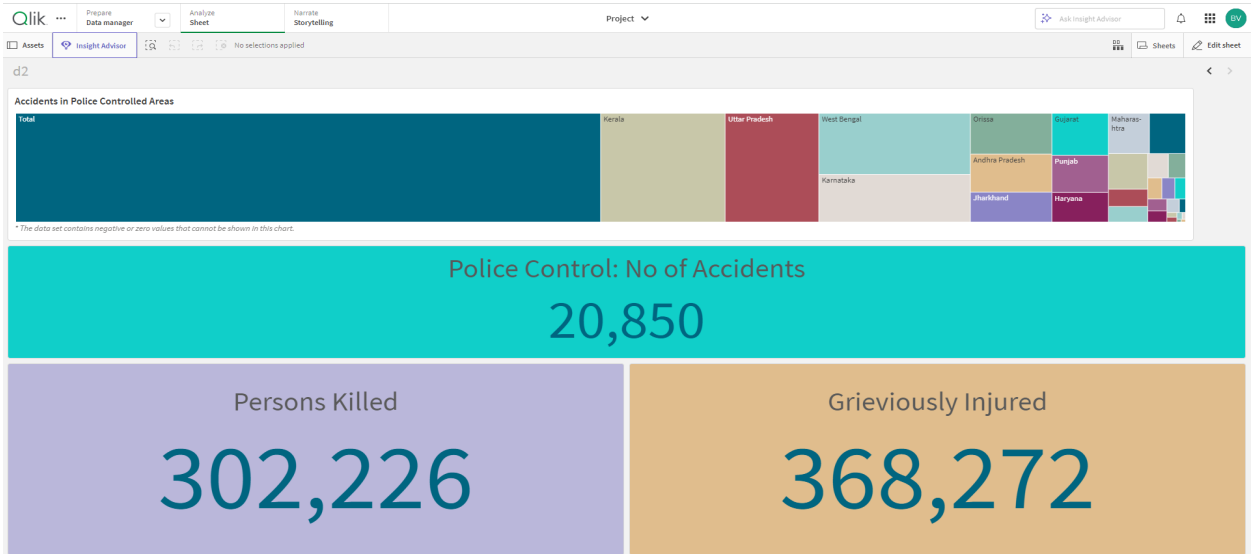
Analyze
Sheet
Narrate
Storytelling
Project
Ask Insight Advisor
Assets
Insight Advisor
No selections applied
Sheets
Edit sheet
My new sheet
No of female died due to accidents
1.17k
5.78k
No of male died due to accidents
On sunny day Persons Injured Greviously Injured
7.15k
1.05k
On rainy day Persons Injured Greviously Injured

Dashboard:

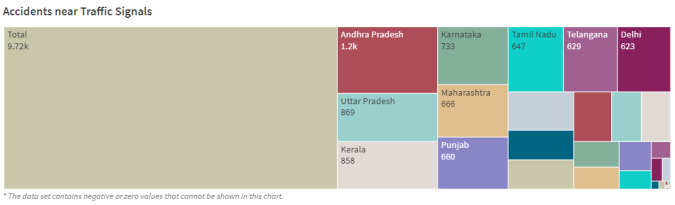




Storytelling:

Traffic Signal

Accidents near traffic signals:
Highest accidents states-Andhra Pradesh



No of Persons Killed

Persons Killed
9,326

No of person injured

Persons Injured
17,780

Police Controlled Area

Accidents near Police Controlled Areas

No of Accidents

Police Control: No of Accidents
20,850

No of Persons Killed

Persons Killed
302,226

Grieviously Injured
368,272

No of Grieviously Injured