

ROAD ACCIDENT DASHBOARD

- **Project overview**

The project involves an examination of the main factors that contribute to road accidents. By closely studying these factors, valuable insights can be gained regarding the causes of accidents. The project will focus on identifying and analysing key elements responsible for these incidents. By doing so, a better understanding of the factors influencing road accidents can be achieved, leading to potential improvements in road safety.

- **Tool:** Power BI.

- **Key Finding:**

1. Total Casualties of CY with YoY growth:

From the analysis it was found the total Casualties of CY are 195.7K with a decrease of 11.9% as compared to PY.

2. Total CY Accidents with YoY:

As compared to PY, Accidents are reduced by 11.7% & Total no. of CY accidents are 144.4K.

3. Accident severity of CY with YoY accidents were classified into 3 types of severity:

- i. **Fatal:** Which were found out to be around 2.9K with a decrease of 33.3%.
- ii. **Serious:** Which were found out to be around 27K with a decrease of 16.2%.
- iii. **Slight:** Which were found out to be around 165.8K with a decrease of 10.6%.

4. Casualties with respect to Vehicle type for CY: Vehicle were categories into 6 types:

- i. **Agricultural Vehicle:** 399 Casualties.
- ii. **Bike:** 15610 Casualties.
- iii. **Bus:** 6573 Casualties.
- iv. **Car:** 155804 Casualties.
- v. **Van:** 15905 Casualties.
- vi. **Other:** 1446 Casualties.

- Through which we can notice that more number of accidents takes place in Cars, so more safety measures or precautions can be taken.

5. Casualties with respect to road type:

- Single Carriageway:** 145K Casualties.
 - Dual Carriageway:** 32K Casualties.
 - Roundabout:** 13K Casualties.
 - One Way Street:** 3K Casualties.
 - Slip road:** 3K Casualties.
- With this analysis we have a clear information that most amount of accident that has taken place at single carriageway around 145K.

6. Casualties by Area & Light Condition:

- It is observed that 38.05% of accidents takes place at Rural area while 61.95% in Urban area.
 - As far as light conditions are to be considered 73.84% take place in Day light & 26.16% in Dark.
7. A live map is been integrated to have a clear overview of area & location where accidents are increased & area that needs to be improved with an additional feature of having a clear number of accidents based on road surface & weather condition to have a comparison of casualties of CY & PY for a better understanding and to provide a better infrastructure and facilitate.

- **Visualization:**

The Power BI dashboard includes a variety of interactive visualizations which includes Area chart, Multi-row card, Cards, Stacked bar, Maps and Slicers, allows users to explore and analyse the data from different perspective.