# ROAD ACCIDENT DATA ANALYTICS

## **ROAD ACCIDENT ANALYSIS**

Road Surface

**Weather Conditions** 

**Total CY Casualties** 

195.7K

-11.9%

**Total CY Accidents** 

144.4K

-11.7%

CY Casualties by Road\_Type

Single carriageway

Dual carriageway

Roundabout One way street 3K

Slip road 3K

**CY Fatal Casualties** 

2.9K

145K

**CY Serious Casualties** 

27.0K

61.95%

-16.2%

**CY Slight Casualties** 

165.8K

-10.6%

#### Casualties by Vehicle Type



Agricultural 399



15610



Bus 6573



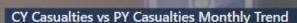
155804



Others 1446

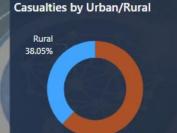


15905





32K





#### **Casualties by Light Cond**





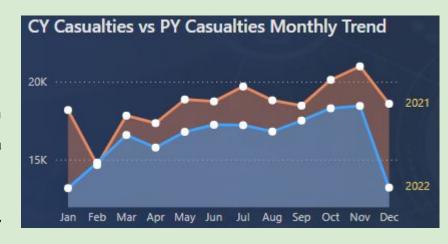


#### ROAD ACCIDENT DATA

## CY vs PY Casualties Monthly trend

- Overall Casualties: The number of casualties in both years appears to be relatively high, with peaks reaching around 20K.
- Seasonal Fluctuations: Both CY and PY exhibit seasonal variations in casualties. There seems to be a general increase in casualties during the winter months (December to February) and a decline during the summer months (June to August).

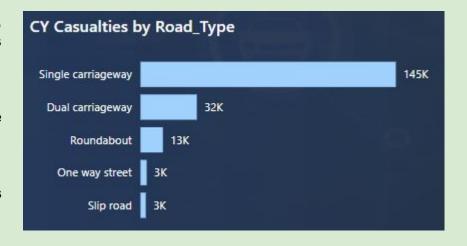
Despite fluctuations, the overall trend indicates a lower number of casualties in the current year compared to the previous year.



#### CY Casualties by Road type

- Single Carriageway Dominance: The most significant contributor to casualties is single carriageway roads, accounting for a substantial 145K casualties. This highlights the need for safety improvements on this type of road.
- Dual Carriageway Impact: While lower than single carriageway roads, dual carriageway roads still contribute significantly to casualties, with 32K cases.
- Roundabouts and Urban Roads: Roundabouts, one-way streets, and slip roads have relatively lower casualty numbers (13K, 3K, and 3K, respectively).

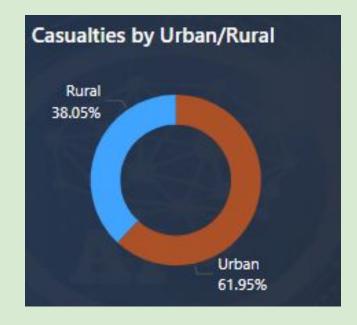
Overall, the data emphasizes the importance of road safety across all road types.



#### Casualties by urban/rural areas

- Urban Factors: The higher casualty rate in urban areas could be attributed to factors such as higher traffic density, increased pedestrian activity, and complex road networks.
- Rural Factors: Rural areas might have higher casualty rates due to factors like poor road conditions, limited infrastructure, and higher speeds.

Overall, the data emphasizes the importance of road safety in both urban and rural areas. Targeted interventions and safety measures are necessary to reduce casualties in both environments.



#### Casualties by light condition

- Daylight Dominance: The majority of casualties occur during daylight hours, accounting for 73.84% of the total. This indicates that a significant portion of road accidents happen during daylight conditions.
- Dark Conditions Impact: While lower than daylight, casualties in dark conditions (26.16%) still represent a substantial number. This suggests that factors like poor visibility and reduced driver awareness contribute to accidents during darker hours.
- Enhanced Road Infrastructure: Improve road infrastructure, including lighting and signage, to enhance visibility and reduce accidents in dark conditions.

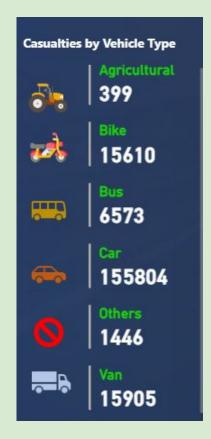
Overall, the data emphasizes the importance of road safety initiatives in both daylight and dark conditions. Targeted interventions are necessary to reduce casualties across different lighting environments.



## Casualties by vehicle type

- Cars Dominate Accidents: Cars are the primary vehicle involved in accidents, accounting for the majority of casualties with 155,804 cases. This highlights the need for safety measures and awareness among car drivers.
- Bikes and Vans: Bikes and vans follow cars in terms of casualty numbers, with 15,610 and 15,905 cases respectively. This indicates a significant risk for both bikers and van drivers.
- Agricultural Vehicles and Others: While lower than other categories, agricultural vehicles (399) and the "Others" category (1,446) still contribute to casualties, emphasizing the need for safety considerations across all vehicle types.

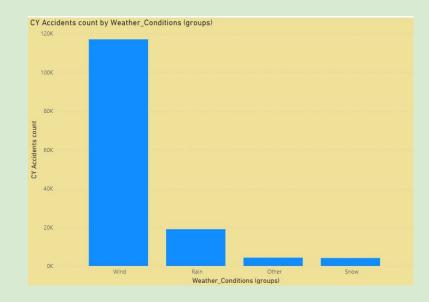
Overall, the data emphasizes the importance of road safety across all vehicle types.



## CY accident count by weather conditions

- Wind Dominance: The most significant contributor to accidents is windy weather, accounting for a substantial majority of the total accidents. This indicates that windy conditions significantly impact road safety.
- **Snow Impact:** Snow has the lowest impact on accidents among the listed weather conditions, suggesting that snowy weather might not be a major factor in the region or during the analyzed period.
- Rain and Other Weather: While lower than wind, rain and other weather conditions also contribute to accidents, highlighting the need for caution and preparedness during adverse weather.

Overall, the data emphasizes the importance of road safety during windy conditions.



## CY accident count by road surface conditions

- Dry Conditions Dominate: The most significant contributor to accidents is dry road conditions, with a count exceeding 100K accidents. This indicates that a substantial majority of accidents occur on dry roads.
- Wet Conditions Impact: While lower than dry conditions, wet roads also contribute to a significant number of accidents. This suggests that wet conditions increase the risk of accidents.
- **Snow/Ice Impact:** Snow/ice conditions have the lowest impact on accidents among the listed conditions.

Overall, the data emphasizes the importance of road safety even during dry conditions.

