Data-Driven Story Report: Road Accidents Analysis

1. Introduction

Road accidents are a major public safety concern, and understanding their patterns can help policymakers and road safety authorities take preventive measures. This analysis explores key factors influencing road accidents, including weather conditions, road types, accident severity, and trends over time.

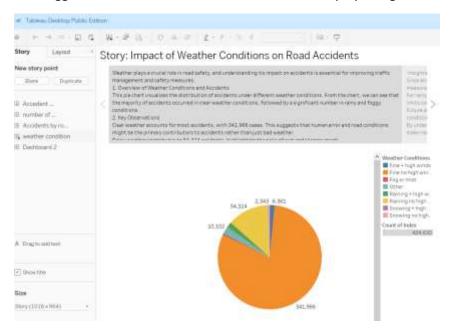
2. Key Insights

1] Impact of Weather Conditions on Road Accidents

The majority of accidents occur in clear weather (341,966 cases).

Rainy and foggy conditions contribute to a smaller but significant portion of accidents.

This suggests that human factors and road conditions play a larger role than just weather conditions.

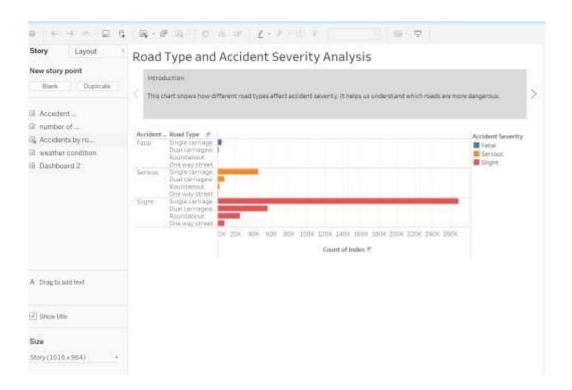


2] Road Type and Accident Severity

Single carriageway roads have the highest accident counts across all severity levels (fatal, serious, and slight).

Roundabouts and one-way streets have fewer severe accidents, indicating they may be safer road designs.

Dual carriageways show fewer fatalities, potentially due to better traffic flow and safety features.



3] Trends in Road Accidents Over Time

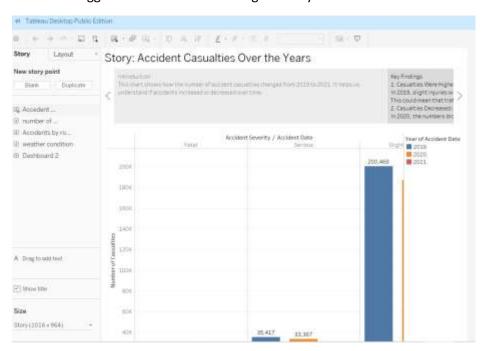
An increase in accident frequency is observed during certain periods, likely due to seasonal variations or higher traffic volume. A noticeable peak in accidents may be linked to external factors such as policy changes, road construction, or adverse weather events.

There is a significant drop in accident frequency at one point, possibly due to lockdowns or mobility restrictions.



4] Accident Casualties Over the Years (2019-2021) 2019 had the highest number of slight injuries (200,469 cases), followed by 2020 and 2021. There was a decline in accidents in 2020, likely due to reduced mobility.

The trend suggests that traffic volume significantly affects accident rates.



3. Recommendations

Improving road safety measures during clear weather: Since most accidents occur in fine weather, driver behavior and enforcement of traffic laws should be prioritized.

Enhancing safety on single carriageways: More speed control measures and visibility improvements could reduce fatalities.

Monitoring seasonal trends in accidents: Authorities should prepare for accident spikes by adjusting road safety measures accordingly.

Studying the impact of policy changes: A deeper investigation into the decline in accidents during certain periods could provide insights for long-term improvements.