

Road Accident Data Analysis

Objective: To analyse causes and outcomes of road accidents in Indian cities.

Tools

Python, Pandas, Matplotlib, Seaborn

Deliverable

Actionable insights for road safety improvement



Data & Methodology

Data Source: Road accident dataset of Indian million-plus cities.

Analysis Steps

01

Data Cleaning & Preprocessing

02

Exploratory Data Analysis

03

Visualisation

04

Business Insights Generation

Focus: Identify patterns in causes and outcomes.

Key Findings

Top Accident-Prone Cities

Chennai

Delhi

Jabalpur

Bengaluru

Indore

Most Common Causes

- Impacting Vehicle/Object
- Road Features
- Traffic Control

Injury and Fatality Insights

Outcome	Major Factors	Count
Minor Injuries	Road Features, Weather	29,983
Grievous Injuries	Vehicle Impact, Violation	20,532
Persons Killed	Traffic Violation, Control	13,542

  Insight: Traffic violations and poor control measures are directly linked to higher fatalities.

Conclusion & Recommendations

1 Strengthen Traffic Control Systems

Implement robust traffic management and enforcement mechanisms across all cities.

2 Improve Road Infrastructure & Junction Management

Upgrade road design and junction layouts to reduce accident-prone areas.

3 Enhance Public Safety Awareness

Launch targeted campaigns to educate drivers and pedestrians on road safety.

4 Use Data-Driven Monitoring

Implement continuous monitoring to prevent recurring patterns and identify emerging risks.

 Data saves lives when turned into action.

Thanks to Unified Mentor Private Limited.