# Insights and Analysis - Road Accident Data

## 1. Monthly Trends

- Peak Accident Months: July and August show the highest number of accidents, possibly due to rainy season, affecting visibility and road conditions.
- **Lowest Incidents**: December and January have fewer reported accidents, possibly due to **holiday periods and better enforcement**.

### 2. Road Type Analysis

- Highways recorded the highest number of severe accidents due to higher speed limits.
- **City roads** had more **minor collisions**, often due to traffic congestion and pedestrian crossings.
- Rural roads showed a higher fatality rate despite fewer accidents—suggesting slower emergency response or poor infrastructure.

#### 🧍 3. Cause of Accidents

- Top 3 Causes:
  - 1. Over-speeding
  - 2. Drunk Driving
  - 3. Distracted Driving (mobile use)
- Secondary causes included weather-related issues like fog and rain, and road defects.

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 Fatal Accidents: 15–25% of total accidents involved fatalities (depending on the dataset)

- **Non-Fatal but Serious Injuries**: A significant portion needed hospitalization—indicating a gap in road safety measures
- Minor injuries often occurred in urban locations with heavy traffic but lower speeds

#### **9** 5. Location Insights

- Urban areas had a higher number of total accidents.
- Rural areas, though less frequent in accident count, had more deadly outcomes due to delayed medical aid or poor road conditions.

#### (S) 6. Time-Based Trends

- Most accidents occurred during:
  - Morning rush (8–10 AM)
  - Evening peak (5–8 PM)
- Nighttime accidents (especially post 10 PM) had higher fatality rates, often due to drunk driving or poor visibility.

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Metric	Value (example)
Total Accidents	12,400
Fatal Accidents	2,980
Non-Fatal Incidents	9,420
Avg. Accidents/Month	1,033
Most Dangerous Road	NH-8 (Highway)