

# Business Case: Highway Accidents

MasterLogistics, a leading provider of logistics solutions, is seeking to expand its operations to the southeastern region. To achieve this, it is essential to analyze traffic accidents on the region's federal highways.



# Management Request

For this expansion project, we require a detailed study of accident records on federal highways. It will be necessary to develop a dashboard containing data from the years 2018, 2019, and 2020.

The safety team has identified federal highways as high-accident zones, which prompted the request for an analytics dashboard.

# Key Dashboard Highlights

1

## Total Incidents

Quantify the total number of accidents that occurred.

2

## Fatalities and Injuries

Collect the number of individuals who were killed or injured.

3

## Geolocation Map

Create a map showing the location of each incident.

4

## Top 7 Causes

Evaluate the seven leading causes of traffic accidents.

5

## Accidents Involving More Than 3 Victims

Quantify incidents that involved more than three victims.

All information must be displayed on a single dashboard tab and be filterable by year (2018, 2019, 2020).

# Key Data Structure

- **id:** Unique accident identifier.
- **fecha-hora:** Date and time of the incident.
- **uf:** Federal Unit (State).
- **municipio:** Municipality where the accident occurred.
- **causa\_accidente:** Main cause of the accident.
- **tipo\_accidente:** Accident type classification.
- **clasificación\_accidente:** Accident severity.
- **personas:** Total number of people involved.
- **muertos:** Number of fatalities.
- **heridos:** Total number of injured (minor and serious).
- **vehículos:** Total number of vehicles involved.
- **latitud/longitud:** Geographic coordinates.

This data dictionary will be essential for building the dashboard.



# Expected Impact

The dashboard will enable MasterLogistics to make informed strategic decisions for its expansion into the southeastern region, enhancing road safety and optimizing logistics operations.