Road Accident Dashboard

Introduction

In this project, I have developed an Excel report showcasing a comprehensive car accident dashboard. The primary aim of this project is to analyze car accident data to provide meaningful insights and facilitate informed decision-making. The dashboard includes interactive charts and graphs, allowing users to explore various aspects of car accident statistics effectively.

Key Steps in the Project:

1. Data Cleaning:The initial raw data often contains inconsistencies, missing values, and errors. I performed thorough data cleaning to ensure the dataset's accuracy and reliability. This step involved handling missing data, correcting inaccuracies, and standardizing formats.

2. Data Preprocessing:After cleaning the data, I undertook data preprocessing to transform the dataset into a suitable format for analysis. This included normalization, encoding categorical variables, and feature engineering to enhance the data's analytical value.

3. Creating Pivot Tables: Using the preprocessed data, I created pivot tables to summarize and aggregate the information. These tables form the backbone of the dashboard, providing a structured and organized view of the data, which is essential for creating dynamic and interactive visualizations.

4. Interactive Charts and Graphs:Leveraging the pivot tables, I designed a series of interactive charts and graphs. These visual elements offer a clear and intuitive representation of the data, enabling users to identify trends, patterns, and critical insights related to car accidents.

The resulting Excel report not only provides a detailed overview of car accident statistics but also empowers users to drill down into specific details through interactive elements. This project demonstrates the power of data analysis and visualization in uncovering valuable insights from complex datasets.

Road Accident Dashboard

Total Casualities: 417882

Fatal Casualities:	Serious Casualities:	Slight Casualities:
7135	5931	351435

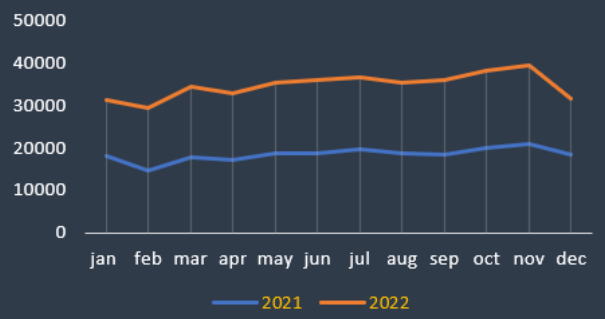
Urban_or_Rural_Area

- Rural
- Urban
- (blank)

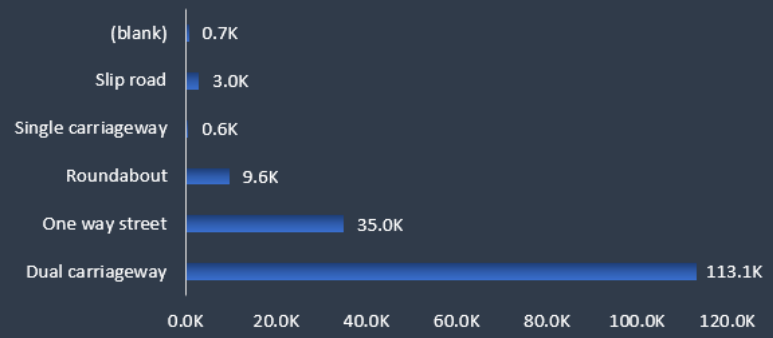
Casualities by Vehcile Type

	333484
	33472
	12798
	1032
	33672
	3424

CY Casualities vs PY Casualiteis Monthly Trend



Casualities by Road Type



Accident Date

All Periods MONTHS

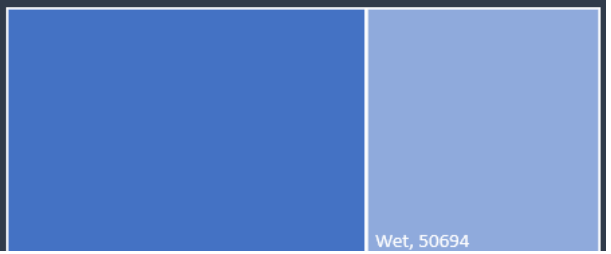
2021

MAR APR MAY JUN JUL

Casualities by Location/Area

Casualities by Light Condition

Casualities By Road Surface

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Urban_or_Rural_Area
Rural
Urban
(blank)
Casualities by Vehcile Type
333484
33472
12798
1032
33672
3424
CY Casualities vs PY Casualiteis Monthly Trend
50000
40000
30000
20000
10000
0
jan feb mar apr may jun jul aug sep oct nov dec
2021
2022
Casualities by Road Type
(blank) 0.7K
Slip road 3.0K
Single carriageway 0.6K
Roundabout 9.6K
One way street 35.0K
Dual carriageway 113.1K
0.0K 20.0K 40.0K 60.0K 80.0K 100.0K 120.0K
Accident Date
All Periods
MONTHS
2021
MAR APR MAY JUN JUL
Casualities by Location/Area
Rural
Casualities by Light Condition
Daylight
Dark
Casualities By Road Surface
Wet, 50694
Dry, 98182
Snow, 12967