ROAD ACCIDENT ANALYSIS



Casualties by

Total Casualities CY 128.4K -10.2%

Total Accidents CY 95.9K -10.1%

Fatal Casualities CY 1884 -28.9%

Serious Casualities CY 18.5K -13.7%

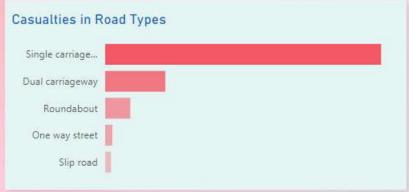
Slight Casualities CY 108.1K -9.2%

Area wise Casualties

Rural

34.65%









Vehicle type Agricultu...





Bikes



Buses 4356





Others

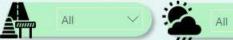


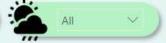
♥ Tableau Desktop Public Edition

Current Year Other Year Select Accident Severity **Road Accident Analysis** 2021 2022 All Casualties by vehicle type **Total Accidents** 1,44,419 ▼11.70% YoY 399 15,579 15,905 6,573 155,804 1,477 J F M A M J J A S O N D ₹36.97% ▼13.89% ▲5.59% ▼12.31% V24.14% **V**9.46% All Casualties by Location **Total Casualties** Single 144,653 Snow & Fog carriageway 195.7K Rain 3.69% 10.92% ▼11.70% YoY Dual 31,912 Others carriageway J F M A M J J A S O N D 4.68% CY Casualties 12,683 Roundabout 195.7K Fatal Casualties One way 3,499 street 2,855 lorthern Ireland 80.71% ▼26.40% YoY 2,221 Slip road J F M A M J J A S O N D Serious Casualties Wet 25.72% 27,045 ▼16.30% YoY J F M A M J J A S O N D CY Casualties Snowy 195.7K 6.75% Dry 67.43% Not Specific Slight Casualties 0.10% 1,65,837 ▼10.82% YoY Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec J F M A M J J A S O N D @ Mapbox @ OSM

ne Slight Casualties Sparkline Vehicle casualty type kpi Voy kpi Vechile Images Weather Condn Donut Road Surface Condn Donut Casualties by Road type C

ROAD ACCIDENT ANALYSIS







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Current Year Other Year Select Accident Severity **Road Accident Analysis** 2021 ▼ Fatal 2022 Fatal Casualties by vehicle type **Total Accidents** 1,44,419 ▼11.70% YoY 176 239 33 50 2,350 J F M A M J J A S O N D ▼12.50% ▼46.99% ₹54.95% **V**23.03% ▲50.00% ▼32.29% Fatal Casualties by Location **Total Casualties** Single 2,113 Snow & Fog carriageway 195.7K 3.01% 7.95% ▼11.70% YoY Dual Others 677 carriageway 4.03% J F M A M J J A S O N D CY Casualties Roundabout 35 2.9K Fatal Casualties 15 Slip road 2,855 lorthern Ireland 85.01% ▼26.40% YoY One way 14 J F M A M J J A S O N D street Serious Casualties Wet 26.65% 27,045 ▼16.30% YoY J F M A M J J A S O N D CY Casualties Snowy 2.9K 67.60% Not Specific Slight Casualties 0.04% 1,65,837 ▼10.82% YoY Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec J F M A M J J A S O N D @ Mapbox @ OSM

ne Slight Casualties Sparkline Vehicle casualty type kpi Voy kpi Vechile Images Weather Condn Donut Road Surface Condn Donut Casualties by Road type Casualties by location

Road Accident Analysis

Road Accident Analysis

Road Accident Analysis

Road Surface Condn Donut Casualties by Road type

Road Surface Condn Donut Casualties by Road type

Road Accident Analysis

Road Accident Analysis

Road Accident Analysis Kpis Calculation Using Sql Server

```
☐ ■ Databases

                                                                             ⊞ ■ System Databases
use Road_Acc;

    ⊞ ■ Database Snapshots

■ Road_Acc

                                                                              select top 20 * from dbo.Data;

☐ ■ Tables

                                                                                 External Tables

    ⊞ Graph Tables

                                                                                ⊞ dbo.Data
                                                                               m = External Persurees
select SUM(number_of_casualties) as CY_Casualties from Data where
                                                                            ■ Results ■ Messages
YEAR(accident_date)='2022' and road_surface_conditions='Dry';
                                                                                 CY_Casualties
                                                                                 195737
                                                                             CY_Accidents
select count(distinct accident_index) as CY_Accidents from Data where
                                                                                  144419
YEAR(accident_date)='2022'
                                                                                CY_Fatal_Casualties
select SUM(number_of_casualties) as CY_Fatal_Casualties from Data
                                                                                2855
where YEAR(accident_date)='2022' and accident_severity='Fatal';
                                                                            ■ Results ■ Messages
select SUM(number_of_casualties) as CY_Serious_Casualties from Data
                                                                                 CY_Serious_Casualties
                                                                                 27045
where YEAR(accident_date)='2022' and accident_severity='Serious';
                                                                             100 % -
select SUM(number_of_casualties) as CY_Slight_Casualties from Data
                                                                              ■ Results  Messages
where YEAR(accident_date)='2022' and accident_severity='Slight';
                                                                                   CY Slight Casualties
                                                                                   165837
select
cast(SUM(number of casualties) as decimal (10,2))*100/(select
                                                                           cast(SUM(number_of_casualties) as decimal (10,2)) from Data)
                                                                                CY_Percent_Serious_Casualties
                                                                                14.1934464910034
                                                                           1
as CY_Percent_Serious_Casualties
from Data
```

where accident_severity='Serious';

```
select
case
       when vehicle type in ('Agricultural vehicle') then 'Agricultural'
       when vehicle_type in ('Motorcycle 50cc and under', 'Motorcycle 125cc and
       under', 'Motorcycle over 125cc and up to 500cc', 'Motorcycle over 500cc') then 'Bikes'
       when vehicle type in ('Bus or coach (17 or more pass seats)', 'Minibus (8-16 passenger seats)') then
       'Buses'
       when vehicle_type in ('Car', 'Taxi/Private hire car') then 'Cars'
       when vehicle_type in ('Goods 7.5 tonnes mgw and over', 'Goods over 3.5t and under 7.5t', 'Van/Goods
       3.5 tonnes mgw or under') then 'Vans'
       Else 'Others'
end as Vehicle group,
sum(number_of_casualties) as CY_casualties
from Data
where Year(accident_date)='2022'
group by
case
       when vehicle_type in ('Agricultural vehicle') then 'Agricultural'
       when vehicle_type in ('Motorcycle 50cc and under', 'Motorcycle 125cc and under', 'Motorcycle over
       125cc and up to 500cc', 'Motorcycle over 500cc') then 'Bikes'
       when vehicle_type in ('Bus or coach (17 or more pass seats)','Minibus (8-16 passenger seats)') then
       'Buses'
       when vehicle_type in ('Car', 'Taxi/Private hire car') then 'Cars'
       when vehicle_type in ('Goods 7.5 tonnes mgw and over', 'Goods over 3.5t and under 7.5t', 'Van/Goods
       3.5 tonnes mgw or under') then 'Vans'
       Else 'Others'
end
select DATENAME(month,accident_date) as Month_Name , sum(number_of_casualties) as Total_Casualties
from Data
                                                                       100 %
                                                                             + 4
where Year(accident date)='2021'
                                                                        Results Messages
group by DATENAME(month, accident_date);
                                                                                       CY_casualties
                                                                            Vehicle_group
                                                                                       13855
                                                                            Others
                                                                                       6042
                                                                            Buses
                                                                            Bikes
                                                                                       15579
                                                                                       4058
                                                                            Vans
                                                                                        399
                                                                            Agricultural
```

155804

Cars

```
select DATENAME(month,accident_date) as Month_Name ,
sum(number_of_casualties) as

Total_Casualties from Data
where Year(accident_date)='2021' group by

DATENAME(month,accident_date);
```

	Month_Name	Total_Casualties
1	February	14648
2	June	18728
3	August	18797
4	April	17335
5	May	18852
6	December	18576
7	January	18173
8	September	18456
9	October	20109
10	July	19682
11	November	20975
12	March	17815

select road_type , sum(number_of_casualties) as Total_Casualties from Data where $Year(accident_date)='2021'$ group by road_type;

	road_type	Total_Casualties
1	Single carriageway	165045
2	One way street	3890
3	Roundabout	14145
4	Slip road	3610
5	Dual carriageway	35456

select urban_or_rural_area , $cast(sum(number_of_casualties)$ as decimal (10,2)*100 / (select $cast(sum(number_of_casualties)$ as decimal (10,2)) from Data where year (accident_date)='2022') as CY_Percent_Area_Casualties from Data

 urban_or_rural_area
 CY_Percent_Area_Casualties

 1
 Rural
 38.0541236455039
 C

 2
 Urban
 61.9458763544960

where year(accident_date)='2022' group by urban_or_rural_area;

select Top 10 local_authority, sum(number_of_casualties) as total_casualties from Data group by local_authority order by total_casualties desc

	local_authority	total_casualties
1	Birmingham	8611
2	Leeds	5821
3	Bradford	4431
4	Manchester	4366
5	Liverpool	4052
6	Cornwall	3820
7	Sheffield	3737
8	Kirklees	3312
9	County Durham	3295
10	Westminster	3169