Road Accident Query Documentation

KPIS

1 Primary KPI

Total casualties

select sum(number\_of\_casualties) as Total\_Casualties from road\_accident;



2 Fatal Casualties

With Fatal\_Casualties As(

SELECT

SUM(Number\_of\_Casualties) as Fatal\_total\_casualties

From [Road Accident].dbo.road\_accident

WHERE accident\_severity = 'Fatal'

),

Total\_Fatal\_Casualties AS(

SELECT

sum(Number\_of\_Casualties) as total\_fatal\_casualties

From [Road Accident].dbo.road\_accident

),

Fatal\_Percentage As(

SELECT

fc.Fatal\_total\_casualties,

Concat(CEILING(fc.Fatal\_total\_casualties \* 100.0 / tfc.Total\_Fatal\_Casualties),'%') AS fatal\_Percentage

From Fatal\_Casualties fc

cross join Total\_Fatal\_Casualties tfc

)

SELECT

'Fatal' AS accident\_severity,

fc.Fatal\_total\_casualties,

fp.fatal\_Percentage

from Fatal\_Casualties fc

join Fatal\_Percentage fp ON 1=1;



3 Serious Casualty

With Serious\_Casualties As(

SELECT

SUM(Number\_of\_Casualties) as Serious\_total\_casualties

From [Road Accident].dbo.road\_accident

WHERE accident\_severity = 'Serious'

),

Total\_Serious\_Casualties AS(

SELECT

sum(Number\_of\_Casualties) as total\_serious\_casualties

From [Road Accident].dbo.road\_accident

),

Serious\_Percentage As(

SELECT

sc.Serious\_total\_casualties,

Concat(Round(sc.Serious\_total\_casualties \* 100 / tsc.Total\_Serious\_Casualties,1),'%') AS serious\_Percentage

From Serious\_Casualties sc

cross join Total\_Serious\_Casualties tsc

)

SELECT

'Serious' AS accident\_severity,

sc.Serious\_total\_casualties,

sp.serious\_Percentage

from Serious\_Casualties sc

join Serious\_Percentage sp ON 1=1;



4 Slight Casualties

With Slight\_Casualties AS(

SELECT

SUM(Number\_of\_Casualties) as slight\_total\_casualties

FROM [Road Accident].dbo.road\_accident

WHERE accident\_severity ='Slight'

),

Total\_Slight\_Casualtie AS(

SELECT SUM(Number\_of\_casualties) as Total\_Slight\_Casualties

from [Road Accident].dbo.road\_accident

),

Slight\_Percentage AS(

SELECT sc.slight\_total\_casualties,

CONCAT(ROUND(sc.slight\_total\_casualties\*100 / tsc.Total\_Slight\_Casualties, 1),'%') as Slight\_percentage

FROM Slight\_Casualties sc

cross join Total\_Slight\_Casualtie tsc

)

SELECT

'Slight' as Accident\_Severity,

sc.slight\_total\_casualties,

sp.Slight\_percentage

from Slight\_Casualties sc

join Slight\_Percentage sp ON 1=1;



Car Casualties

With Car\_Casualties AS(

SELECT

SUM(Number\_of\_casualties) as Total\_Car\_Casualtie

from [Road Accident].dbo.road\_accident

where vehicle\_type ='Car'

),

Total\_Car\_Casualties AS(

SELECT

SUM(Number\_of\_casualties) as total\_car\_casuaties

from [Road Accident].dbo.road\_accident

),

Car\_Percentage AS(

SELECT cc.Total\_Car\_Casualtie,

CONCAT(CEILING(cc.Total\_Car\_Casualtie \*100.0 / tcc.total\_car\_casuaties),'%') AS Car\_percentage

from Car\_Casualties cc

cross join Total\_Car\_Casualties tcc

)

SELECT

'Car' AS Vehical\_Type,

cc.Total\_Car\_Casualtie,

cp.Car\_percentage

from Car\_Casualties cc

join Car\_Percentage cp ON 1=1;



Secondary KPI: Total casualties with respect to vehicle type

Car

SELECT

SUM(Number\_of\_Casualties) as Car\_casualties

from [Road Accident].dbo.road\_accident

WHERE vehicle\_type = 'Car';



Van

SELECT

SUM(Number\_of\_Casualties) as Van\_casualties

from [Road Accident].dbo.road\_accident

WHERE vehicle\_type = 'Van';



Bus

SELECT

SUM(Number\_of\_Casualties) as Bus\_casualties

from [Road Accident].dbo.road\_accident

WHERE vehicle\_type = 'Bus';



Agricultural

SELECT

SUM(Number\_of\_Casualties) asAgricultural\_casualties

from [Road Accident].dbo.road\_accident

WHERE vehicle\_type = 'Agricultural';



Motorcycle

SELECT

SUM(Number\_of\_Casualties) as Motorcycle\_casualties

from [Road Accident].dbo.road\_accident

WHERE vehicle\_type = 'Motorcycle';



Other

SELECT

SUM(Number\_of\_Casualties) as Other\_casualties

from [Road Accident].dbo.road\_accident

WHERE vehicle\_type = 'Other';



CY Casualties vs PY Casualties Monthly Trend

SELECT

Month,

sum(case when Year = 2021 Then Number\_of\_Casualties Else 0 END) as Previous\_Year\_Casualties,

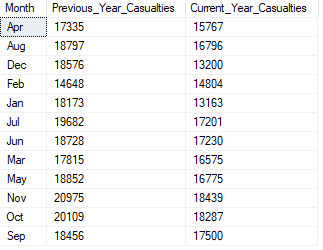
sum(case when Year = 2022 Then Number\_of\_Casualties Else 0 END) as Current\_Year\_Casualties

From

[Road Accident].dbo.road\_accident

GROUP BY Month

Order by month;



Casualties by road type

SELECT

Road\_Type2,

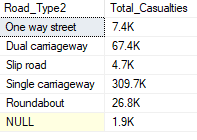
concat(cast(round(sum(Number\_of\_Casualties)/1000.0,1)As decimal(10,1)),'K') as Total\_Casualties

From

[Road Accident].dbo.road\_accident

Group by road\_type2

Order by Total\_Casualties desc;



Casualties by road surface

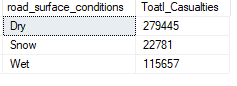
Select road\_surface\_conditions,

sum(Number\_of\_Casualties) as Toatl\_Casualties

From

[Road Accident].dbo.road\_accident

group by road\_surface\_conditions;



Casualties by area/location

select urban\_or\_rural\_area,

concat(cast(Round(SUM(Number\_of\_Casualties)/1000.0,1)as decimal(10,1)),'%') as Total\_Casualties

From

[Road Accident].dbo.road\_accident

group by urban\_or\_rural\_area

order by urban\_or\_rural\_area;

A screenshot of a graph

Description automatically generated

Casualties by light condition

Select light\_conditions,

concat(cast(Round(SUM(Number\_of\_Casualties)/1000.0,2)as decimal(10,1)),'%') as Total\_casualties

from

[Road Accident].dbo.road\_accident

group by light\_conditions

order by light\_conditions;

