ROAD ACCIDENT ANALYSIS

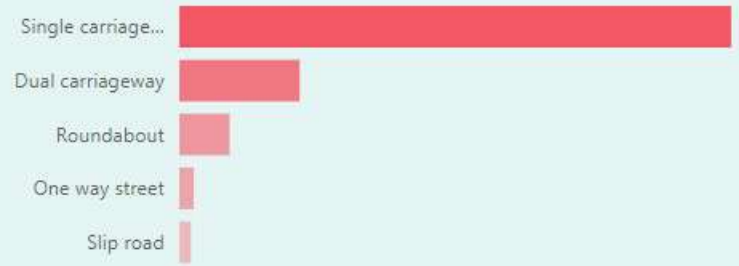
Dry Road

Fine

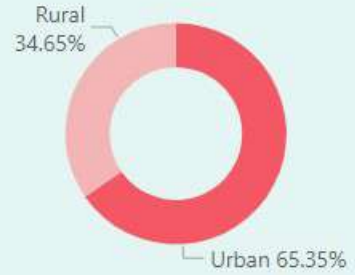
Total Casualities CY	Total Accidents CY	Fatal Casualities CY	Serious Casualities CY	Slight Casualities CY
128.4K	95.9K	1884	18.5K	108.1K
-10.2%	-10.1%	-28.9%	-13.7%	-9.2%

Casualties by Location

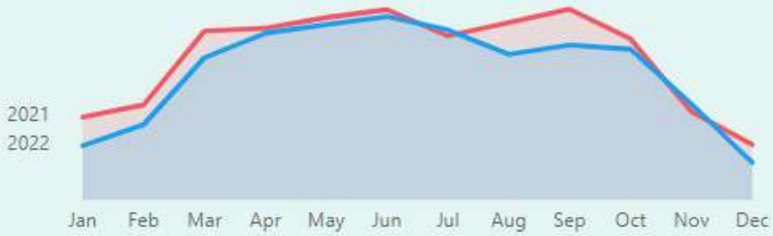
Casualties in Road Types



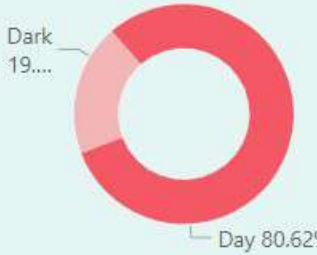
Area wise Casualties



Casualties Monthly Trend



Casualties in Light condition



Casualties by Vehicle type

Agricultu...	255
Bikes	10537
Buses	4356
Cars	101903
Others	962
Vans	10418

Road Accident Analysis

Current Year: 2022 | Other Year: 2021 | Select Accident Severity: All

Total Accidents
1,44,419
▼11.70% YoY

Total Casualties
195.7K
▼11.70% YoY

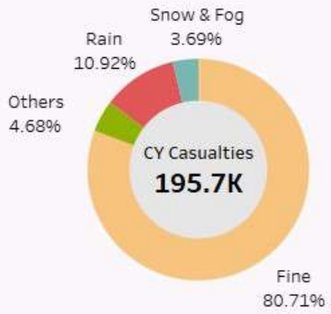
Fatal Casualties
2,855
▼26.40% YoY

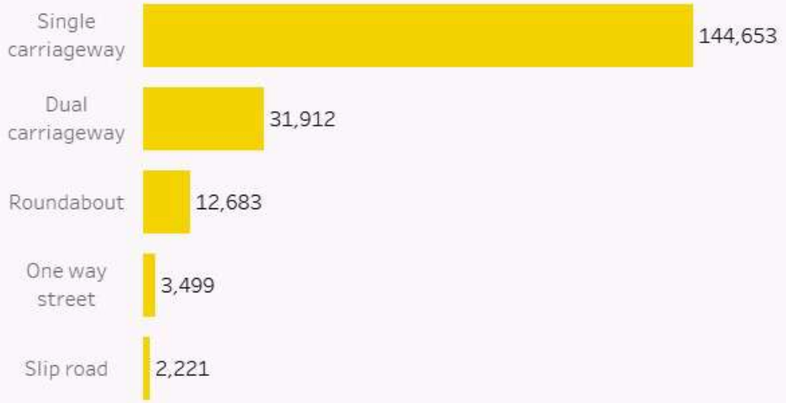
Serious Casualties
27,045
▼16.30% YoY

Slight Casualties
1,65,837
▼10.82% YoY

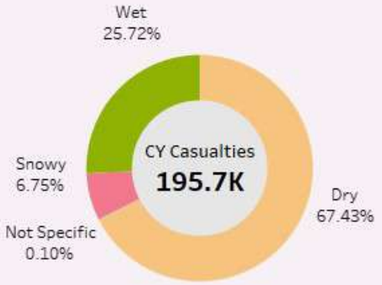
All Casualties by vehicle type

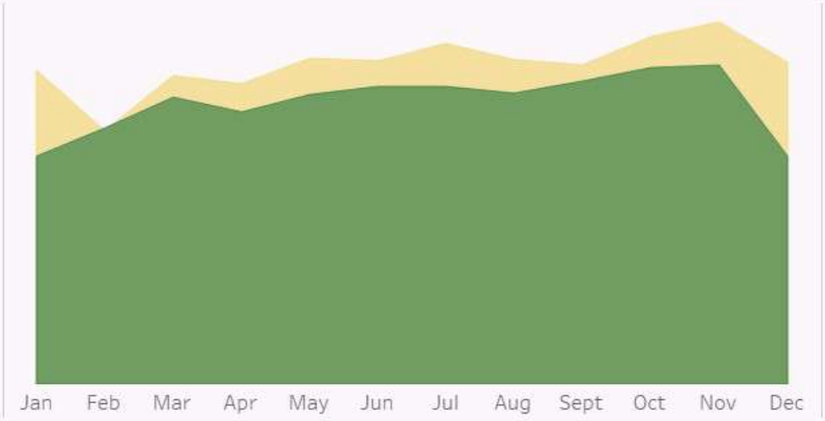
399	15,579	6,573	155,804	15,905	1,477
▼36.97%	▼13.89%	▲5.59%	▼12.31%	▼24.14%	▼9.46%





All Casualties by Location





ROAD ACCIDENT ANALYSIS

All

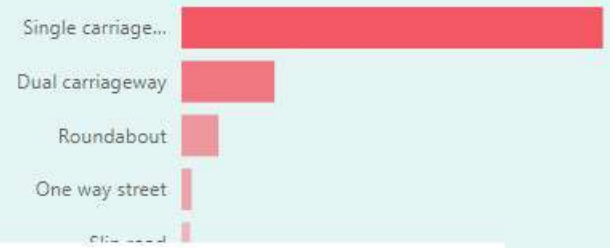
All

Total Casualities CY	Total Accidents CY	Fatal Casualities CY	Serious Casualities CY	Slight Casualities CY
195.7K	144.4K	2855	27.0K	165.8K
-11.9%	-11.7%	-33.3%	-16.2%	-10.6%

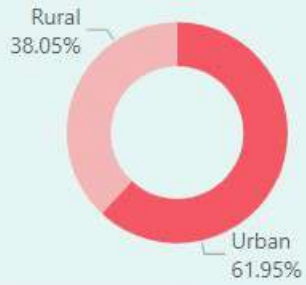
Casualties by Location

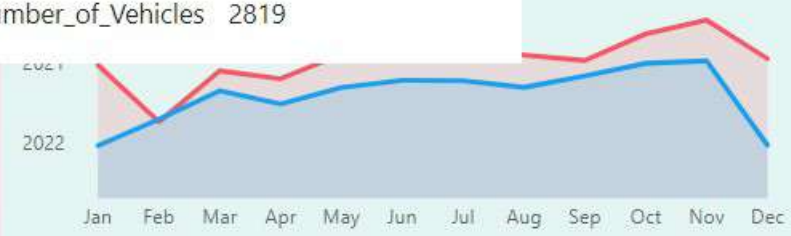
Local_Authority_(District)	Stoke-on-Trent
Average of Latitude	53.01775056229181
Average of Longitude	-2.1705755029980045
Sum of Number_of_Casualties	1990
Sum of Number_of_Vehicles	2819

Casualties in Road Types

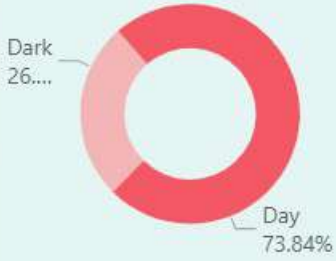


Area wise Casualties





Casualties in Light condition



Casualties by Vehicle type

Agricultu...	399
Bikes	15610
Buses	6573
Cars	155804
Others	1446
Vans	15905

Road Accident Analysis

Current Year: 2022 | Other Year: 2021 | Select Accident Severity: Fatal

Total Accidents
1,44,419
▼11.70% YoY

Total Casualties
195.7K
▼11.70% YoY

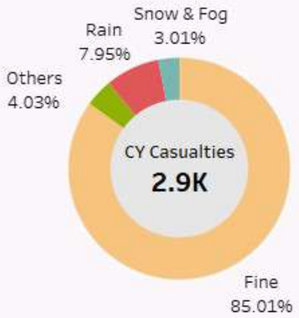
Fatal Casualties
2,855
▼26.40% YoY

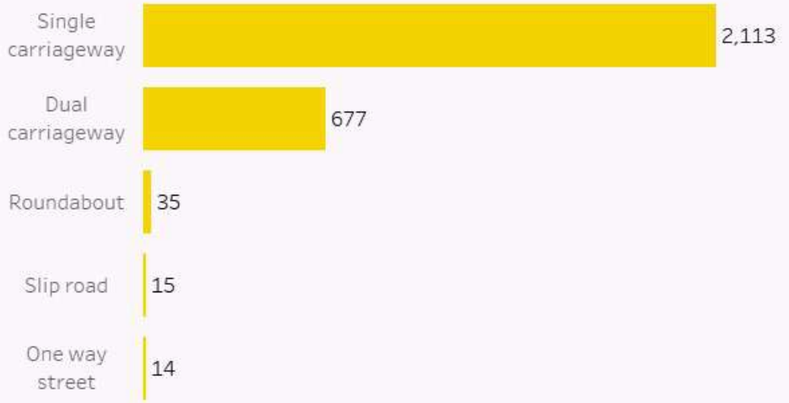
Serious Casualties
27,045
▼16.30% YoY

Slight Casualties
1,65,837
▼10.82% YoY

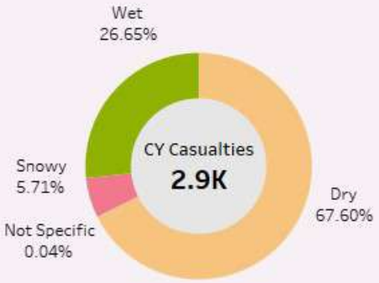
Fatal Casualties by vehicle type

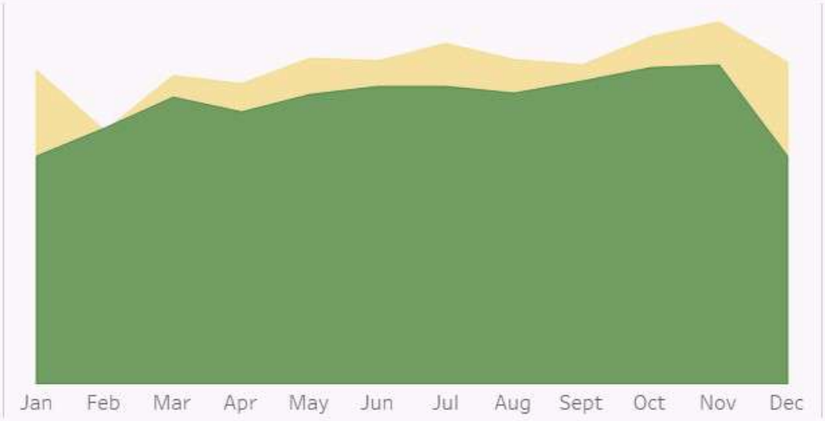
7	176	50	2,350	239	33
▼12.50%	▼46.99%	▼54.95%	▼23.03%	▲50.00%	▼32.29%





Fatal Casualties by Location

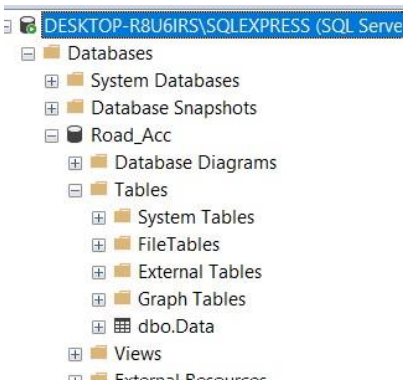




Road Accident Analysis Kpis Calculation Using Sql Server

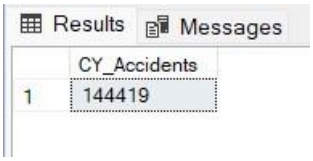
```
use Road_Acc;

select top 20 * from dbo.Data;
```

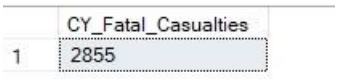



```
select SUM(number_of_casualties) as CY_Casualties from Data where
YEAR(accident_date)='2022' and road_surface_conditions='Dry';
```

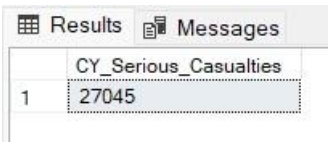

```
select count(distinct accident_index) as CY_Accidents from Data where
YEAR(accident_date)='2022'
```



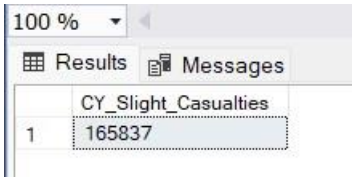

```
select SUM(number_of_casualties) as CY_Fatal_Casualties from Data
where YEAR(accident_date)='2022' and accident_severity='Fatal';
```



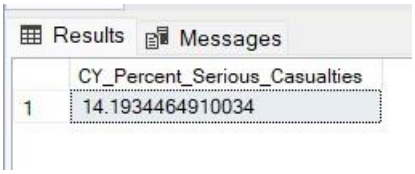

```
select SUM(number_of_casualties) as CY_Serious_Casualties from Data
where YEAR(accident_date)='2022' and accident_severity='Serious';
```




```
select SUM(number_of_casualties) as CY_Slight_Casualties from Data
where YEAR(accident_date)='2022' and accident_severity='Slight';
```




```
select
cast(SUM(number_of_casualties) as decimal (10,2))*100/(select
cast(SUM(number_of_casualties) as decimal (10,2)) from Data)
as CY_Percent_Serious_Casualties
from Data
where accident_severity='Serious';
```

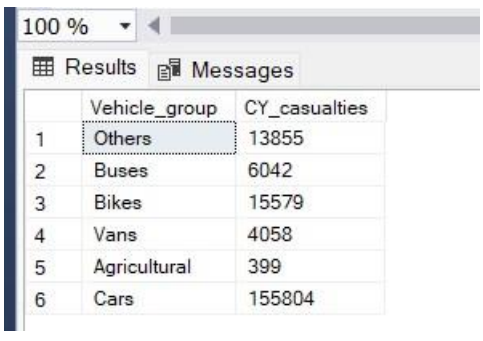


```sql
select
case
	when vehicle_type in ('Agricultural vehicle') then 'Agricultural'
	when vehicle_type in ('Motorcycle 50cc and under','Motorcycle 125cc and
	under','Motorcycle over 125cc and up to 500cc','Motorcycle over 500cc') then 'Bikes'

	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
where Year(accident_date)='2021'
group by DATENAME(month,accident_date);
```



	Vehicle_group	CY_casualties
1	Others	13855
2	Buses	6042
3	Bikes	15579
4	Vans	4058
5	Agricultural	399
6	Cars	155804

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

	urban_or_rural_area	CY_Percent_Area_Casualties
1	Rural	38.0541236455039
2	Urban	61.9458763544960

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

Results Messages

	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