

Road Accidents Report SQL Queries

Current Year Casualties

```
select sum(number_of_casualties) as current_year_casualties
from road_accident
where year(accident_date) = '2022'
```

Results	Messages
current_year_casualties	
1	195737

Testing filter applying

Current Year Casualties for Dry Road

```
select sum(number_of_casualties) as current_year_casualties
from road_accident
where year(accident_date) = '2022' and road_surface_conditions = 'Dry'
```

Results	Messages
current_year_casualties	
1	131976

Current Year Accidents

```
select count(distinct accident_index) as current_year_accidents
from road_accident
where year(accident_date) = '2022'
```

Results	Messages
current_year_accidents	
1	144419

Current Year Fatal Casualties

```
select sum(number_of_casualties) as current_year_fatal_casualties
from road_accident
where year(accident_date) = '2022' and accident_severity = 'Fatal'
```

Results	Messages
current_year_fatal_casualties	
1	2855

Total Fatal Casualties

```
select sum(number_of_casualties) as current_year_fatal_casualties
from road_accident
where accident_severity = 'Fatal'
```

Results	Messages
	fatal_casualties
1	7135

Current Year Serious Casualties

```
select sum(number_of_casualties) as current_year_serious_casualties
from road_accident
where year(accident_date) = '2022' and accident_severity = 'Serious'
```

Results	Messages
	current_year_serious_casualties
1	27045

Total Serious Casualties

```
select sum(number_of_casualties) as serious_casualties
from road_accident
where accident_severity = 'Serious'
```

Results	Messages
	serious_casualties
1	59312

Current Year Slight Casualties

```
select sum(number_of_casualties) as current_year_slight_casualties
from road_accident
where year(accident_date) = '2022' and accident_severity = 'Slight'
```

Results	Messages
	current_year_slight_casualties
1	165837

Total Slight Casualties

```
select sum(number_of_casualties) as slight_casualties
from road_accident
where accident_severity = 'Slight'
```

Results	Messages
	slight_casualties
1	351436

Fatal Casualties % of Total

```
select cast(sum(number_of_casualties) as decimal(10,2)) * 100 /
(select cast(sum(number_of_casualties) as decimal(10,2)) from road_accident) as PCT
from road_accident
where accident_severity = 'Fatal'
```

Results	Messages
	PCT
1	1.7074157120533

Serious Casualties % of Total

```
select cast(sum(number_of_casualties) as decimal(10,2)) * 100 /  
(select cast(sum(number_of_casualties) as decimal(10,2)) from road_accident) as PCT  
from road_accident  
where accident_severity = 'Serious'
```

Results Messages	
PCT	
1	14.1934464910034

Slight Casualties % of Total

```
select cast(sum(number_of_casualties) as decimal(10,2)) * 100 /  
(select cast(sum(number_of_casualties) as decimal(10,2)) from road_accident) as PCT  
from road_accident  
where accident_severity = 'Slight'
```

Results Messages	
PCT	
1	84.0991377969431

Casualties by Vehicle Type

```
select  
case  
when vehicle_type in ('Agricultural vehicle') then 'Agricultural'  
when vehicle_type in ('Car' , 'Taxi/Private hire car') then 'Cars'  
when vehicle_type in ('Motorcycle 125cc and under' , 'Motorcycle 50cc and under' ,  
'Motorcycle over 125cc and up to 500cc' , 'Motorcycle over 500cc' , 'Pedal cycle') then  
'Bike'  
when vehicle_type in ('Bus or coach (17 or more pass seats)' , 'Minibus (8 - 16 passenger  
seats)') then 'Bus'  
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 'Van'  
else 'Other'  
end as vehicle_group,  
sum(number_of_casualties) as casualties  
from road_accident  
group by  
case  
when vehicle_type in ('Agricultural vehicle') then 'Agricultural'  
when vehicle_type in ('Car' , 'Taxi/Private hire car') then 'Cars'  
when vehicle_type in ('Motorcycle 125cc and under' , 'Motorcycle 50cc and under' ,  
'Motorcycle over 125cc and up to 500cc' , 'Motorcycle over 500cc' , 'Pedal cycle') then  
'Bike'  
when vehicle_type in ('Bus or coach (17 or more pass seats)' , 'Minibus (8 - 16 passenger  
seats)') then 'Bus'  
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 'Van'  
else 'Other'  
end
```

	vehicle_group	casualties
1	Bike	33764
2	Bus	12798
3	Cars	333485
4	Agricultural	1032
5	Van	33472
6	Other	3332

Current Year Casualties by Vehicle Type

```

select
case
when vehicle_type in ('Agricultural vehicle') then 'Agricultural'
when vehicle_type in ('Car' , 'Taxi/Private hire car') then 'Cars'
when vehicle_type in ('Motorcycle 125cc and under' , 'Motorcycle 50cc and under' ,
'Motorcycle over 125cc and up to 500cc' , 'Motorcycle over 500cc' , 'Pedal cycle') then
'Bike'
when vehicle_type in ('Bus or coach (17 or more pass seats)' , 'Minibus (8 - 16 passenger
seats)') then 'Bus'
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 'Van'
else 'Other'
end as vehicle_group,
sum(number_of_casualties) as current_year_casualties
from road_accident
where year(accident_date) = '2022'
group by
case
when vehicle_type in ('Agricultural vehicle') then 'Agricultural'
when vehicle_type in ('Car' , 'Taxi/Private hire car') then 'Cars'
when vehicle_type in ('Motorcycle 125cc and under' , 'Motorcycle 50cc and under' ,
'Motorcycle over 125cc and up to 500cc' , 'Motorcycle over 500cc' , 'Pedal cycle') then
'Bike'
when vehicle_type in ('Bus or coach (17 or more pass seats)' , 'Minibus (8 - 16 passenger
seats)') then 'Bus'
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 'Van'
else 'Other'
end

```

	vehicle_group	current_year_casualties
1	Bike	15610
2	Bus	6573
3	Cars	155804
4	Agricultural	399
5	Van	15905
6	Other	1446

Current Year Casualties Monthly Trend

```

select datename(month, accident_date) as month, sum(number_of_casualties) as casualties
from road_accident
where year(accident_date) = '2022'

```

```
group by datename(month, accident_date)
```

	month	casualties
1	February	14804
2	June	17230
3	August	16796
4	April	15767
5	May	16775
6	December	13200
7	January	13163
8	September	17500
9	October	18287
10	July	17201
11	November	18439
12	March	16575

Previous Year Casualties Monthly Trend

```
select datename(month, accident_date) as month, sum(number_of_casualties) as casualties
from road_accident
where year(accident_date) = '2021'
group by datename(month, accident_date)
```

	month	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

Casualties by Road Type

```
select road_type, sum(number_of_casualties) as casualties from road_accident
group by road_type
```

	road_type	casualties
1	Slip road	6600
2	Dual carriageway	67368
3	Single carriageway	309698
4	One way street	7389
5	Roundabout	26828

Current Year Casualties by Road Type

```
select road_type, sum(number_of_casualties) as casualties from road_accident
where year(accident_date) = '2022'
```

group by road_type

	road_type	casualties
1	Slip road	2990
2	Dual carriageway	31912
3	Single carriageway	144653
4	One way street	3499
5	Roundabout	12683

Previous Year Casualties by Road Type

```
select road_type, sum(number_of_casualties) as casualties from road_accident
where year(accident_date) = '2021'
group by road_type
```

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

Casualties by Urban/Rural Area

```
select urban_or_rural_area, sum(number_of_casualties) as casualties from road_accident
group by urban_or_rural_area
```

	urban_or_rural_area	casualties
1	Urban	255864
2	Rural	162019

Casualties by Urban/Rural Area % of Total

```
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 road_accident) as pct
from road_accident
group by urban_or_rural_area
```

	urban_or_rural_area	pct
1	Urban	61.2286214083846
2	Rural	38.7713785916153

Current Year Casualties by Urban/Rural Area

```
select urban_or_rural_area, sum(number_of_casualties) as casualties from road_accident
where year(accident_date) = '2022'
group by urban_or_rural_area
```

	urban_or_rural_area	casualties
1	Urban	121251
2	Rural	74486

Current Year Casualties by Urban/Rural Area % of Total

```
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 road_accident where
year(accident_date) = '2022') as pct
from road_accident
where year(accident_date) = '2022'
group by urban_or_rural_area
```

	urban_or_rural_area	pct
1	Urban	61.9458763544960
2	Rural	38.0541236455039

Previous Year Casualties by Urban/Rural Area

```
select urban_or_rural_area, sum(number_of_casualties) as casualties from road_accident
where year(accident_date) = '2021'
group by urban_or_rural_area
```

	urban_or_rural_area	casualties
1	Urban	134613
2	Rural	87533

Previous Year Casualties by Urban/Rural Area % of total

```
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 road_accident where
year(accident_date) = '2021') as pct
from road_accident
where year(accident_date) = '2021'
group by urban_or_rural_area
```

	urban_or_rural_area	pct
1	Urban	60.5966346456834
2	Rural	39.4033653543165

Current Year Casualties by Light Conditions

```
select
case
when light_conditions in ('Daylight') then 'Day'
when light_conditions in ('Darkness - lighting unknown', 'Darkness - lights lit',
'Darkness - light unlit', 'Darkness - no lighting') then 'Night'
end as Light_Condition,
cast(cast(sum(number_of_casualties) as decimal(10, 2)) * 100 /
(select cast(sum(number_of_casualties) as decimal(10, 2)) from road_accident
where year(accident_date) = '2022') as decimal(10, 2)) as casualties_pct
from road_accident
where year(accident_date) = '2022'
group by
case
when light_conditions in ('Daylight') then 'Day'
when light_conditions in ('Darkness - lighting unknown', 'Darkness - lights lit',
'Darkness - light unlit', 'Darkness - no lighting') then 'Night'
end
```

	Light_Condition	casualties_pct
1	Day	73.84
2	Night	25.82
3	NULL	0.34

Previous Year Casualties by Light Conditions

```
select
case
when light_conditions in ('Daylight') then 'Day'
when light_conditions in ('Darkness - lighting unknown', 'Darkness - lights lit',
'Darkness - light unlit', 'Darkness - no lighting') then 'Night'
end as Light_Condition,
cast(cast(sum(number_of_casualties) as decimal(10, 2)) * 100 /
(select cast(sum(number_of_casualties) as decimal(10, 2)) from road_accident
where year(accident_date) = '2021') as decimal(10, 2)) as casualties_pct
from road_accident
where year(accident_date) = '2021'
group by
case
when light_conditions in ('Daylight') then 'Day'
when light_conditions in ('Darkness - lighting unknown', 'Darkness - lights lit',
'Darkness - light unlit', 'Darkness - no lighting') then 'Night'
end
```

	Light_Condition	casualties_pct
1	Day	72.22
2	Night	27.39
3	NULL	0.40

Top 10 Locations by No of Casualties

```
select top 10 local_authority , sum(number_of_casualties) as total_casualties
from road_accident
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