ROAD ACCIDENT REPORT SQL QUERIES

Primary KPIs

CY Casualties

```
SELECT SUM(number_of_casualties) AS CY_Casualties
FROM road_accident
WHERE YEAR(accident_date)='2022'
```

	CY_Casualties
1	195737

CY Accidents

```
SELECT COUNT(DISTINCT accident_index) AS CY_Accidents
FROM road_accident
WHERE YEAR(accident_date)='2022'
```

	CY_Accidents
1	144419

CY Fatal Casualties

```
SELECT SUM(number_of_casualties) AS CY_Fatal_Casualties
FROM road_accident
WHERE YEAR(accident_date)='2022' AND accident_severity = 'Fatal'
```

	CY_Fatal_Casualties
1	2855

CY Serious Casualties

```
SELECT SUM(number_of_casualties) AS CY_Serious_Casualties
FROM road_accident
WHERE YEAR(accident_date)='2022' AND accident_severity = 'Serious'
```

	CY_Serious_Casualties
1	27045

CY Slight Casualties

```
SELECT SUM(number_of_casualties) AS CY_Slight_Casualties
FROM road_accident
```

```
WHERE YEAR(accident_date)='2022' AND accident_severity = 'Slight'
```

	CY_Slight_Casualties
1	165837

Secondary KPIs

CY 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 CY_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	CY_Casualties
1	Bus	6573
2	Other	1446
3	Bike	15610
4	Van	15905
5	Agricultural	399
6	Cars	155804

CY Casualties Monthly Trend

```
SELECT DATENAME(MONTH, accident_date) AS Month_Name, SUM(number_of_casualties) AS
CY_Casualties
FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY DATENAME(MONTH, accident_date)
```

	Month_Name	CY_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

PY Casualties Monthly Trend

```
SELECT DATENAME(MONTH, accident_date) AS Month_Name, SUM(number_of_casualties) AS
PY_Casualties
FROM road_accident
WHERE YEAR(accident_date) = '2021'
GROUP BY DATENAME(MONTH, accident_date)
```

	Month_Name	PY_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) FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY road_type
```

	road_type	(No column name)
1	Single carriageway	144653
2	One way street	3499
3	Roundabout	12683
4	Slip road	2990
5	Dual carriageway	31912

Casualties by Urban/ Rural

```
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 Percentage_of_Total
FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY urban_or_rural_area
```

	urban_or_rural_area	Percentage_of_Total
1	Rural	38.0541236455039
2	Urban	61.9458763544960

Casualties by Light Conditions

```
SELECT
	CASE
		WHEN light_conditions IN ('Daylight') THEN 'Day'
		WHEN light_conditions IN ('Darkness - lighting unknown','Darkness - lights
lit','Darkness - lughts 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
CY_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 - lughts unlit','Darkness - no lighting') THEN 'Night'
		END
```

	light_condition	CY_Casualties_PCT
1	NULL	0.34
2	Day	73.84
3	Night	25.82

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
```

	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