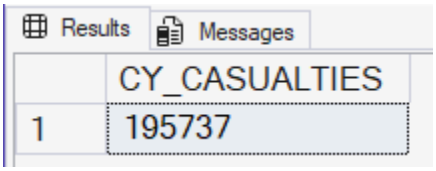
SQL Data Analysis

1) Current Year Casualties:

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

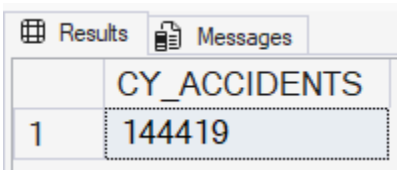


Results | Messages

	CY_CASUALTIES
1	195737

2) Current Year Accidents:

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

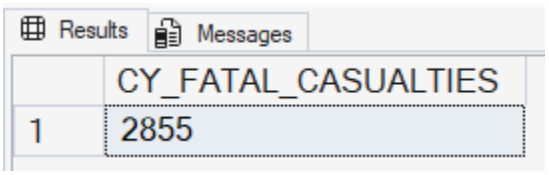


Results | Messages

	CY_ACCIDENTS
1	144419

3) Current Year Fatal Casualties

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

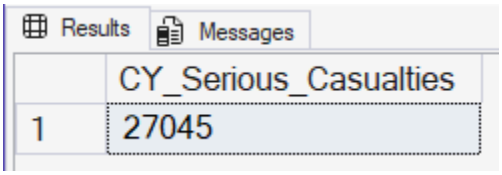


Results | Messages

	CY_FATAL_CASUALTIES
1	2855

4) Current Year Serious Casualties

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

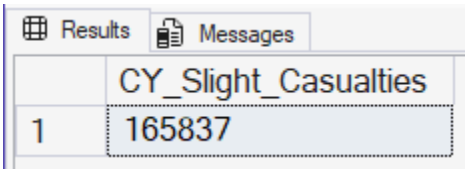


Results | Messages

	CY_Serious_Casualties
1	27045

5) CY Slight Casualties

```
SELECT SUM(number_of_casualties) AS CY_Slight_Casualties
FROM road_accident
WHERE accident_severity = 'Slight' AND YEAR(accident_date) = '2022';
```

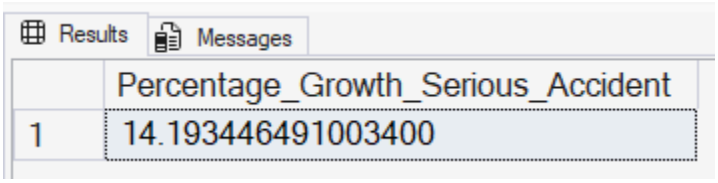


Results | Messages

	CY_Slight_Casualties
1	165837

6) Percentage Growth of Serious Casualties than previous Year

```
SELECT
CAST(SUM(number_of_casualties) AS decimal(12,2)) /
(SELECT CAST(SUM(number_of_casualties) AS decimal(12,2)) FROM road_accident) * 100
AS Percentage_Growth_Serious_Accident
FROM road_accident
WHERE accident_severity = 'Serious'
```



Results | Messages

	Percentage_Growth_Serious_Accident
1	14.193446491003400

7) 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 'Car'
		WHEN vehicle_type  IN ('Motorcycle 50cc and under' , 'Motorcycle over
500cc' , 'Motorcycle over 125cc and up to 500cc', 'Pedal cycle', 'Motorcycle 125cc
and under') THEN 'BIKE'
		WHEN vehicle_type  IN ('Minibus (8 - 16 passenger seats)', 'Bus or
coach (17 or more pass seats)') THEN 'BUS'
		WHEN vehicle_type  IN ('Van / Goods 3.5 tonnes mgw or under' , 'Goods
over 3.5t. and under 7.5t' , 'Goods 7.5 tonnes mgw and over') THEN 'VANS'
		ELSE 'Other'
	END AS vechile_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 'Car'
		WHEN vehicle_type IN ('Motorcycle 50cc and under' , 'Motorcycle over
500cc' , 'Motorcycle over 125cc and up to 500cc','Pedal cycle', 'Motorcycle 125cc
and under') THEN 'BIKE'
		WHEN vehicle_type IN ('Minibus (8 - 16 passenger seats)', 'Bus or coach
(17 or more pass seats)') THEN 'BUS'
		WHEN vehicle_type IN ('Van / Goods 3.5 tonnes mgw or under' , 'Goods
over 3.5t. and under 7.5t' , 'Goods 7.5 tonnes mgw and over') THEN 'VANS'
		ELSE 'Other'
	END
```

Results | Messages

	vechile_group	CY_Casualties
1	BUS	6573
2	Other	1446
3	Car	155804
4	BIKE	15610
5	VANS	15905
6	Agricultural	399

8) CY 2022 Casualties by Months

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

Results | Messages

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

9) CY 2022 Casualties by Road Type

```
SELECT road_type AS Road_Type, SUM(number_of_casualties) AS CY_Casualtes
FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY road_type
```

Results | Messages

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

10) CY 2022 Casualties by Rural & Urban Area

```
SELECT urban_or_rural_area AS 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 CY_Casualties
FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY urban_or_rural_area
```

Results | Messages

	Area	CY_Casualties
1	Rural	38.0541236455039
2	Urban	61.9458763544960

11) Casualties by Local Authority

```
SELECT top 10 local_authority AS Local_Authority, SUM(number_of_casualties) AS
Casualties
FROM road_accident
GROUP BY local_authority
ORDER BY Casualties DESC
```

Results | Messages

	Local_Authority	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