

1. Total Casualties For Current Year and Year on Year Growth

(a) Current Year To Date Casualties -- CY Casualties Measure

```
Current Year Casualties = TOTALYTD(sum(Data[Number_of_Casualties]),Data[Accident Date])
```

// This DAX function gives the total casualties for the current Year.

(b) Previous Year Casualties -- PY Casualties Measure

```
Last Year Casualties = CALCULATE([Current Year Casualties],SAMEPERIODLASTYEAR(Data[Accident Date]))
```

// This DAX function gives the total casualties for the previous year.

(c) Year on Year Growth of Casualties - YoY Casualties Measure

```
YOY Accidents Growth = CONCATENATE(ROUND(divide([Current Year Casualties]-[Last Year Casualties],[Last Year Casualties])*100,2),"%")
```

// This DAX function gives the year-on-year growth percentage of the casualties.

The final outcome:

Current Year Casualties	Last Year Casualties	YOY Casualties Growth
195737	222146	-11.89%

2. Total Accidents for Current Year and Year on Year Growth

(a) Current Year Accidents Count -- CY Accidents Count Measure

```
Current Year Accident Count = CALCULATE(count(Data[Accident_Index]),DATESYTD(Data[Accident Date]))
```

// This DAX function gives the total number of accidents for the current Year.

(b) Previous Year Accidents Count -- PY Accidents Count Measure

```
Last Year Casualties = CALCULATE([Current Year Casualties],SAMEPERIODLASTYEAR(Data[Accident Date]))
```

// This DAX function gives the total number of accidents for the previous year.

(c) Year on Year Growth of Accidents - YoY Accidents Measure

```
YOY Accidents Growth = CONCATENATE(ROUND(divide([Current Year Accident Count]-[Last Year Accident Count],[Last Year Accident Count])*100,2),"%")
```

// This DAX function gives the year-on-year growth percentage of the accidents.

The final outcome:

Current Year Accident Count	Last Year Accident Count	YOY Accidents Growth
144419	163554	-11.7%

3. Total Fatal Casualties For Current Year and Year on Year Growth

(a) Current Year To Date Fatal Casualties -- CY Fatal Casualties Measure

```
Current Year Fatal Casualties = TOTALYTD(sum(Data[Number_of_Casualties]),Data[Accident Date],Data[Accident_Severity]="Fatal")
```

// This DAX function gives the total fatal casualties for the current Year.

(b) Previous Year Fatal Casualties -- PY Fatal Casualties Measure

```
Last Year Fatal Casualties = CALCULATE([Current Year Fatal Casualties],SAMEPERIODLASTYEAR(Data[Accident Date]),Data[Accident_Severity]="Fatal")
```

// This DAX function gives the total fatal casualties for the previous year.

(c) Year on Year Growth of Fatal Casualties - YoY Fatal Casualties Measure

```
YOY Fatal Casualties Growth = CONCATENATE(ROUND(divide([Current Year Fatal Casualties]-[Last Year Fatal Casualties],[Last Year Fatal Casualties])*100,2),"%")
```

// This DAX function gives the year-on-year growth percentage of the fatal casualties.

The final outcome:

Current Year Fatal Casualties	Last Year Fatal Casualties	YOY Fatal Casualties Growth
2855	4228	-32.47%

4. Total Serious Casualties For Current Year and Year on Year Growth

(a) Current Year To Date Serious Casualties -- CY Serious Casualties Measure

```
Current Year Serious Casualties = TOTALYTD(sum(Data[Number_of_Casualties]),Data[Accident Date],Data[Accident_Severity]="Serious")
```

// This DAX function gives the total serious casualties for the current Year.

(b) Previous Year Serious Casualties -- PY Serious Casualties Measure

```
Last Year Serious Casualties = CALCULATE([Current Year Serious Casualties],SAMEPERIODLASTYEAR(Data[Accident Date]),Data[Accident_Severity]=" Serious")
```

// This DAX function gives the total serious casualties for the previous year.

(c) Year on Year Growth of Serious Casualties - YoY Serious Casualties Measure

```
YOY Serious Casualties Growth = CONCATENATE(ROUND(divide([Current Year Serious Casualties]-[Last Year Serious Casualties],[Last Year Serious Casualties])*100,2),"%")
```

// This DAX function gives the year-on-year growth percentage of the serious casualties.

The final outcome:

Current Year Serious Casualties	Last Year Serious Casualties	YOY Serious Casualties Growth
27045	32267	-16.18%

5. Total Slight Casualties For Current Year and Year on Year Growth

(a) Current Year To Date Slight Casualties -- CY Slight Casualties Measure

```
Current Year Slight Casualties = TOTALYTD(sum(Data[Number_of_Casualties]),Data[Accident Date],Data[Accident_Severity]=" Slight")
```

// This DAX function gives the total slight casualties for the current Year.

(b) Previous Year Slight Casualties -- PY Slight Casualties Measure

```
Last Year Slight Casualties = CALCULATE([Current Year Slight Casualties],SAMEPERIODLASTYEAR(Data[Accident Date]),Data[Accident_Severity]=" Slight")
```

// This DAX function gives the total slight casualties for the previous year.

(c) Year on Year Growth of Slight Casualties - YoY Slight Casualties Measure

```
YOY Slight Casualties Growth = CONCATENATE(ROUND(divide([Current Year Slight Casualties]-[Last Year Slight Casualties],[Last Year Slight Casualties])*100,2),"%")
```

// This DAX function gives the year-on-year growth percentage of the slight casualties.

The final outcome:

Current Year Slight Casualties	Last Year Slight Casualties	YOY Slight Casualties Growth
165837	185599	-10.65%