FULL REPORT ON ROAD ACCIDENT FOR THE YEAR 2021 AND 2022.

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About Dataset

Context:

Clients wants to create a Road Accident Dashboard for the year 2021 and 2022 so they can have insight on the below requirements-

- **Primary KP**I - Total Casualties taken place after the accident.
- **Primary KPI's** - Total Casualties & percentage of total with respect to accident severity and maximum casualties by type of vehicle.
- **Secondary KPI's** - Total Casualties with respect to vehicle type.
- Monthly trend showing comparison of casualties for current year and previous year.
- Maximum casualties by road type.
- Distribution of total casualties by road surface.
- Relation between casualties by Area / Location & by Day/ Night.

STAKEHOLDERS

- Ministry of Transport
- Road Transport Department
- Police Force
- Emergency Services Department
- Road Safety Corps
- Transport Operators
- Traffic Management Agencies
- Public
- Media

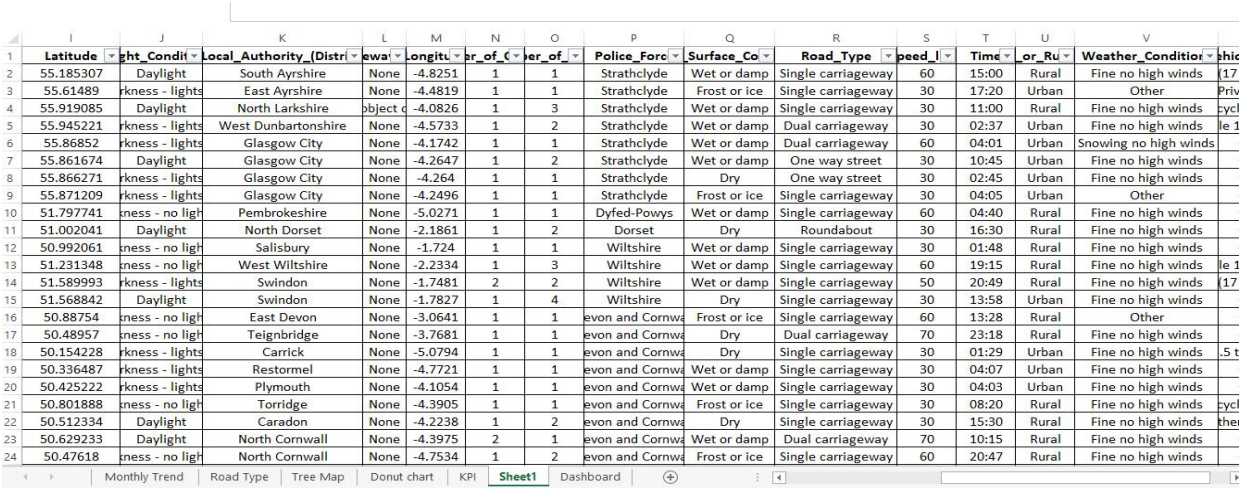
PROCESS:

Loading data packages in Excel

Placing them at the centre

	A	B	C	D	E	F	G	H	I	J
1	Accident_Inde	Accident Date	Month	Year	Day_of_Wee	Junction_Control	Junction_Detail	Accident_Seve	Latitude	ght_Condit
2	200997UD20101	01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.185307	Daylight
3	200997UC00201	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Roundabout	Slight	55.61489	rkness - lights
4	200997NC70101	01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.919085	Daylight
5	200997LA70101	01/01/2021	Jan	2021	Thursday	Auto traffic signal	Crossroads	Slight	55.945221	rkness - lights
6	200997BA70101	01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.86852	rkness - lights
7	200997AC00401	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Crossroads	Slight	55.861674	Daylight
8	200997AC00101	01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.866271	rkness - lights
9	200997AB00501	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	T or staggered junction	Slight	55.871209	rkness - lights
10	200963CP07809	01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	51.797741	kness - no ligh
11	2009559D00006	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Roundabout	Slight	51.002041	Daylight
12	200954EU00109	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.992061	kness - no ligh
13	200954ER00109	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Slip road	Slight	51.231348	kness - no ligh
14	200954DE00209	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Roundabout	Slight	51.589993	rkness - lights
15	200954DC00409	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	T or staggered junction	Slight	51.568842	Daylight
16	200950KH2A001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.88754	kness - no ligh
17	200950JA2C001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.48957	kness - no ligh
18	200950GP2B001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.154228	rkness - lights
19	200950GA2Q001	01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	50.336487	rkness - lights
20	200950EL2R001	01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	T or staggered junction	Slight	50.425222	rkness - lights
21	200950CH2N001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.801888	kness - no ligh
22	200950BN2E001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.512334	Daylight
23	200950BL2N001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.629233	Daylight
24	200950BB2G001	01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.47618	kness - no ligh

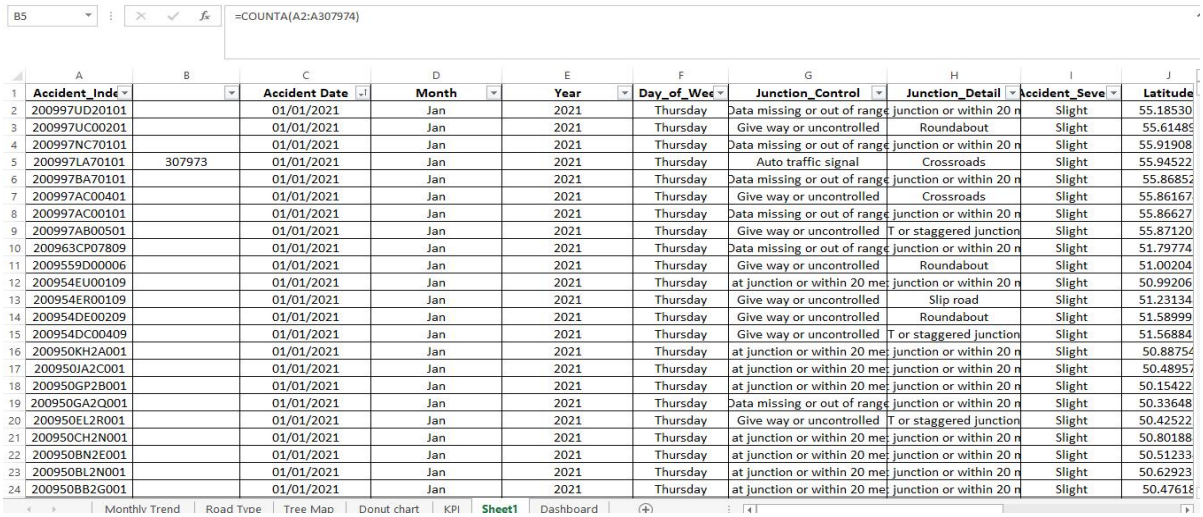
Monthly Trend | Road Type | Tree Map | Donut chart | KPI | Sheet1 | Dashboard



	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	Latitude	ght_Condit	Local_Authority_(Distri	ewa	Longitu	r_of_C	er_of_	Police_Forc	Surface_Co	Road_Type	peed_l	Time	or_Ru	Weather_Condition
2	55.185307	Daylight	South Ayrshire	None	-4.8251	1	1	Strathclyde	Wet or damp	Single carriageway	60	15:00	Rural	Fine no high winds
3	55.61489	rkness - lights	East Ayrshire	None	-4.4819	1	1	Strathclyde	Frost or ice	Single carriageway	30	17:20	Urban	Other
4	55.919085	Daylight	North Larkshire	bject d	-4.0826	1	3	Strathclyde	Wet or damp	Single carriageway	30	11:00	Rural	Fine no high winds
5	55.945221	rkness - lights	West Dunbartonshire	None	-4.5733	1	2	Strathclyde	Wet or damp	Dual carriageway	30	02:37	Urban	Fine no high winds
6	55.86852	rkness - lights	Glasgow City	None	-4.1742	1	1	Strathclyde	Wet or damp	Dual carriageway	60	04:01	Urban	Snowing no high winds
7	55.861674	Daylight	Glasgow City	None	-4.2647	1	2	Strathclyde	Wet or damp	One way street	30	10:45	Urban	Fine no high winds
8	55.866271	rkness - lights	Glasgow City	None	-4.264	1	1	Strathclyde	Dry	One way street	30	02:45	Urban	Fine no high winds
9	55.871209	rkness - lights	Glasgow City	None	-4.2496	1	1	Strathclyde	Frost or ice	Single carriageway	30	04:05	Urban	Other
10	51.797741	kness - no ligh	Pembrokeshire	None	-5.0271	1	1	Dyfed-Powys	Wet or damp	Single carriageway	60	04:40	Rural	Fine no high winds
11	51.002041	Daylight	North Dorset	None	-2.1861	1	2	Dorset	Dry	Roundabout	30	16:30	Rural	Fine no high winds
12	50.992061	kness - no ligh	Salisbury	None	-1.724	1	1	Wiltshire	Wet or damp	Single carriageway	30	01:48	Rural	Fine no high winds
13	51.231348	kness - no ligh	West Wiltshire	None	-2.2334	1	3	Wiltshire	Wet or damp	Single carriageway	60	19:15	Rural	Fine no high winds
14	51.589993	rkness - lights	Swindon	None	-1.7481	2	2	Wiltshire	Wet or damp	Single carriageway	50	20:49	Rural	Fine no high winds
15	51.568842	Daylight	Swindon	None	-1.7827	1	4	Wiltshire	Dry	Single carriageway	30	13:58	Urban	Fine no high winds
16	50.88754	kness - no ligh	East Devon	None	-3.0641	1	1	evon and Cornwa	Frost or ice	Single carriageway	60	13:28	Rural	Other
17	50.48957	kness - no ligh	Teignbridge	None	-3.7681	1	1	evon and Cornwa	Dry	Dual carriageway	70	23:18	Rural	Fine no high winds
18	50.154228	rkness - lights	Carrick	None	-5.0794	1	1	evon and Cornwa	Dry	Single carriageway	30	01:29	Urban	Fine no high winds
19	50.336487	rkness - lights	Restormel	None	-4.7721	1	1	evon and Cornwa	Wet or damp	Single carriageway	30	04:07	Urban	Fine no high winds
20	50.425222	rkness - lights	Plymouth	None	-4.1054	1	1	evon and Cornwa	Wet or damp	Single carriageway	30	04:03	Urban	Fine no high winds
21	50.801888	kness - no ligh	Torridge	None	-4.3905	1	1	evon and Cornwa	Frost or ice	Single carriageway	30	08:20	Rural	Fine no high winds
22	50.512334	Daylight	Caradon	None	-4.2238	1	2	evon and Cornwa	Dry	Single carriageway	30	15:30	Rural	Fine no high winds
23	50.629233	Daylight	North Cornwall	None	-4.3975	2	1	evon and Cornwa	Wet or damp	Dual carriageway	70	10:15	Rural	Fine no high winds
24	50.47618	kness - no ligh	North Cornwall	None	-4.7534	1	2	evon and Cornwa	Frost or ice	Single carriageway	60	20:47	Rural	Fine no high winds

Monthly Trend | Road Type | Tree Map | Donut chart | KPI | Sheet1 | Dashboard

The COUNTA function was used to count the total number of cells that are not empty



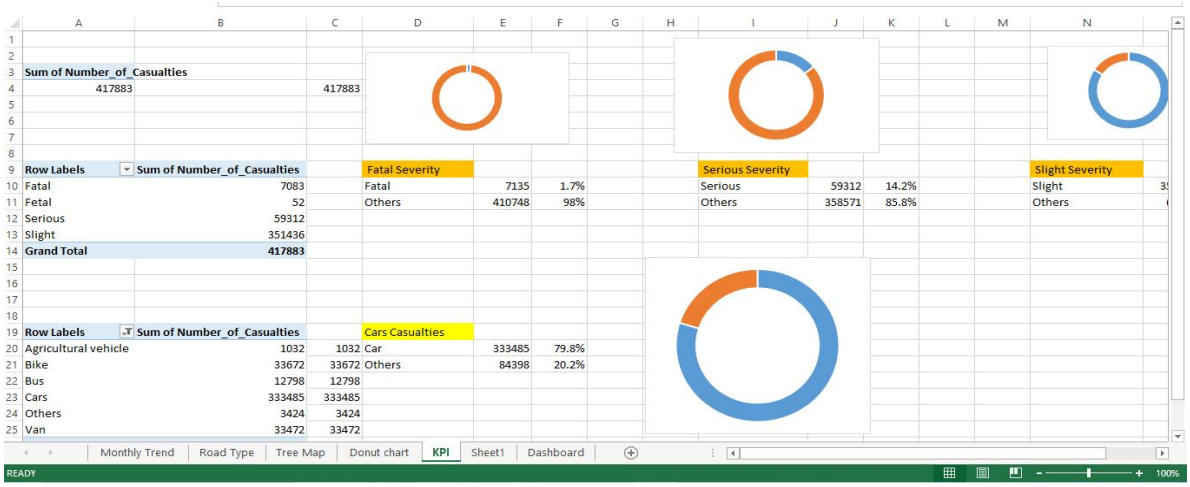
B5 =COUNTA(A2:A307974)

	A	B	C	D	E	F	G	H	I	J
1	Accident_Inde		Accident Date	Month	Year	Day_of_Wee	Junction_Control	Junction_Detail	Accident_Seve	Latitude
2	200997UD20101		01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.18530
3	200997UC00201		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Roundabout	Slight	55.61489
4	200997NC70101		01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.91908
5	200997LA70101	307973	01/01/2021	Jan	2021	Thursday	Auto traffic signal	Crossroads	Slight	55.94522
6	200997BA70101		01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.86852
7	200997AC00401		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Crossroads	Slight	55.86167
8	200997AC00101		01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	55.86627
9	200997AB00501		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	T or staggered junction	Slight	55.87120
10	200963CP07809		01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	51.79774
11	2009559D00006		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Roundabout	Slight	51.00204
12	200954EU00109		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.99206
13	200954ER00109		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Slip road	Slight	51.23134
14	200954DE00209		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	Roundabout	Slight	51.58999
15	200954DC00409		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	T or staggered junction	Slight	51.56884
16	200950KH2A001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.88754
17	200950JA2C001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.48957
18	200950GP2B001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.15422
19	200950GA2Q001		01/01/2021	Jan	2021	Thursday	Data missing or out of range	junction or within 20 m	Slight	50.33648
20	200950EL2R001		01/01/2021	Jan	2021	Thursday	Give way or uncontrolled	T or staggered junction	Slight	50.42522
21	200950CH2N001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.80188
22	200950BN2E001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.51233
23	200950BL2N001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.62923
24	200950BB2G001		01/01/2021	Jan	2021	Thursday	at junction or within 20 me	junction or within 20 m	Slight	50.47618

Monthly Trend | Road Type | Tree Map | Donut chart | KPI | Sheet1 | Dashboard

Analysing the Data in Excel :

KPI SHEET:



Sum of Number_of_Casualties		
417883		417883

Row Labels	Sum of Number_of_Casualties
Fatal	7083
Fatal	52
Serious	59312
Slight	351436
Grand Total	**417883**

Fatal Severity		
Fatal	7135	1.7%
Others	410748	98%

Serious Severity		
Serious	59312	14.2%
Others	358571	85.8%

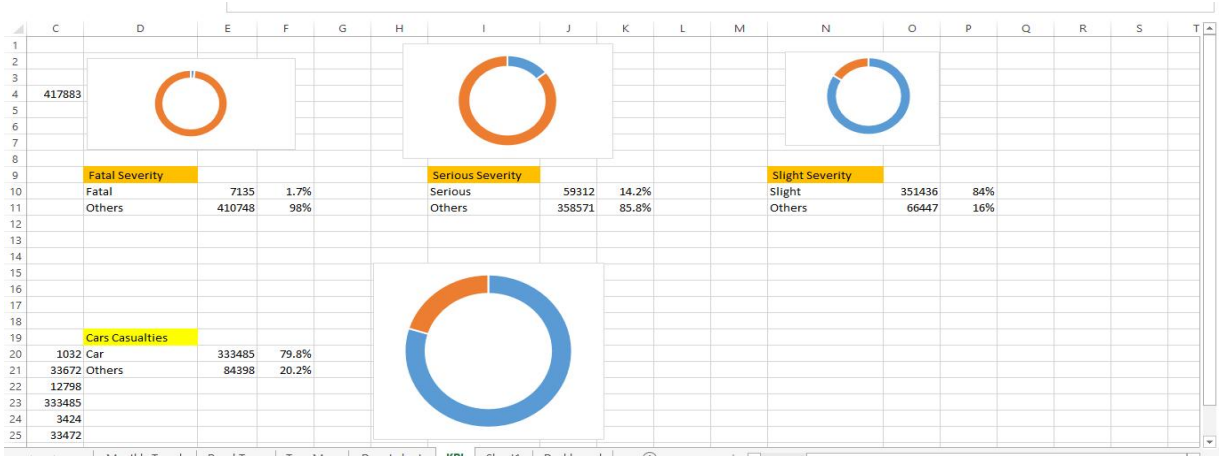
Slight Severity	
Slight	3
Others	

Row Labels	Sum of Number_of_Casualties	
Agricultural vehicle	1032	1032
Bike	33672	33672
Bus	12798	12798
Cars	333485	333485
Others	3424	3424
Van	33472	33472

Cars Casualties		
Car	333485	79.8%
Others	84398	20.2%

Monthly Trend | Road Type | Tree Map | Donut chart | KPI | Sheet1 | Dashboard

READY 100%



417883			

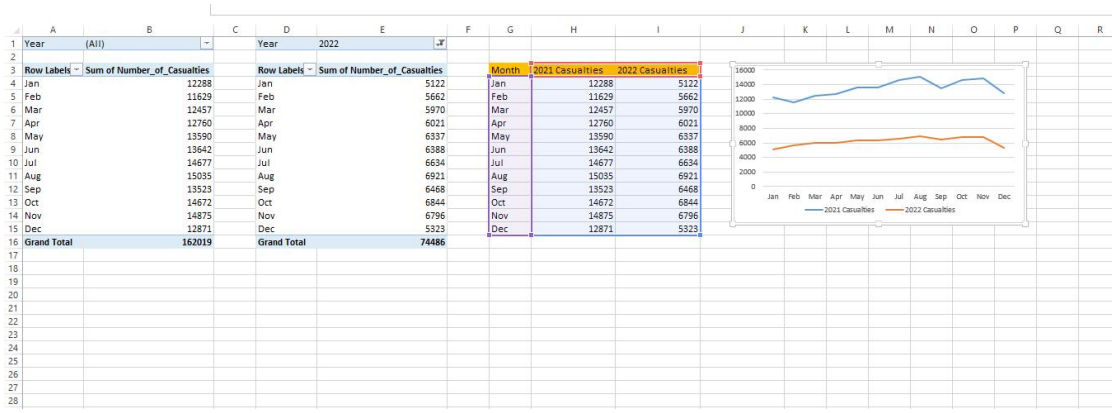
Fatal Severity		
Fatal	7135	1.7%
Others	410748	98%

Serious Severity		
Serious	59312	14.2%
Others	358571	85.8%

Slight Severity		
Slight	351436	84%
Others	66447	16%

	Cars Casualties		
1032	Car	333485	79.8%
33672	Others	84398	20.2%
12798			
333485			
3424			
33472			

MONTHLY TREND SHEET:



Year	(All)

Row Labels	Sum of Number_of_Casualties
Jan	12288
Feb	11629
Mar	12457
Apr	12760
May	13590
Jun	13642
Jul	14677
Aug	15035
Sep	13523
Oct	14672
Nov	14875
Dec	12871
Grand Total	**162019**

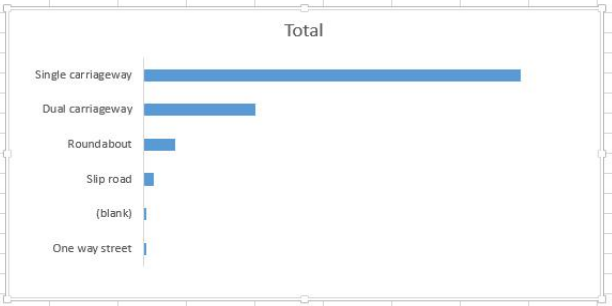
Year	2022

Row Labels	Sum of Number_of_Casualties
Jan	5122
Feb	5662
Mar	5970
Apr	6021
May	6337
Jun	6388
Jul	6634
Aug	6921
Sep	6468
Oct	6844
Nov	6796
Dec	5323
Grand Total	**74486**

Month	2021 Casualties	2022 Casualties
Jan	12288	5122
Feb	11629	5662
Mar	12457	5970
Apr	12760	6021
May	13590	6337
Jun	13642	6388
Jul	14677	6634
Aug	15035	6921
Sep	13523	6468
Oct	14672	6844
Nov	14875	6796
Dec	12871	5323

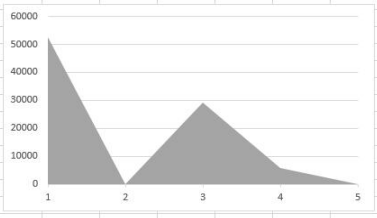
ROAD TYPE :

Row Labels	Sum of Number_of_Casualties
One way street	0.3k
(blank)	0.4k
Slip road	1.6k
Roundabout	5.1k
Dual carriageway	18.2k
Single carriageway	61.9k
Grand Total	**87533**

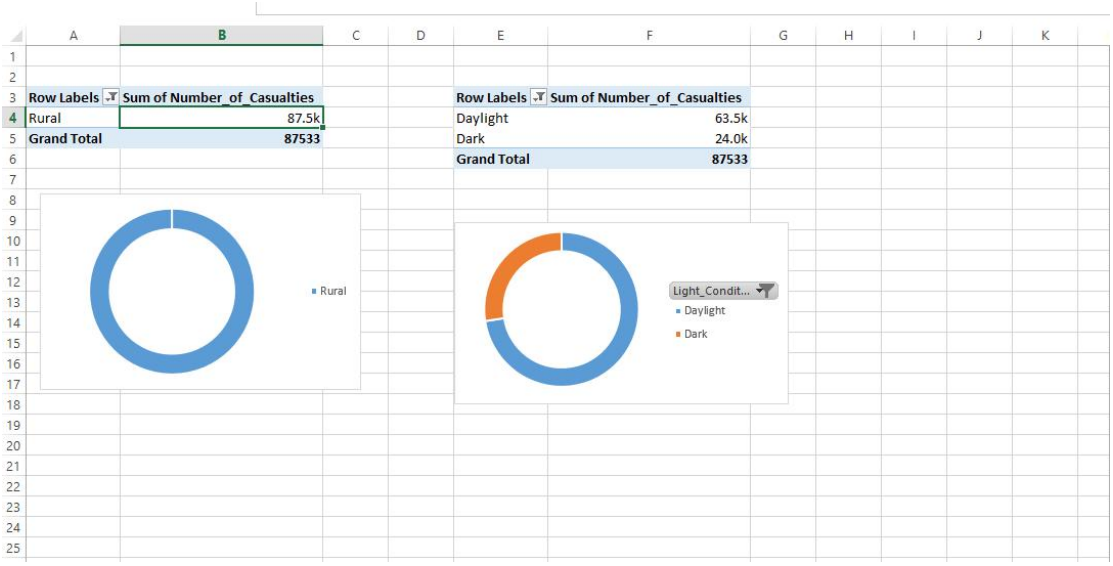


Row Labels	Sum of Number_of_Casualties
Dry	52545
(blank)	75
Wet	29194
snow/ice	5719
Grand Total	**87533**

Road surface	No of casualties
Dry	52545
(blank)	75
Wet	29194
snow/ice	5719



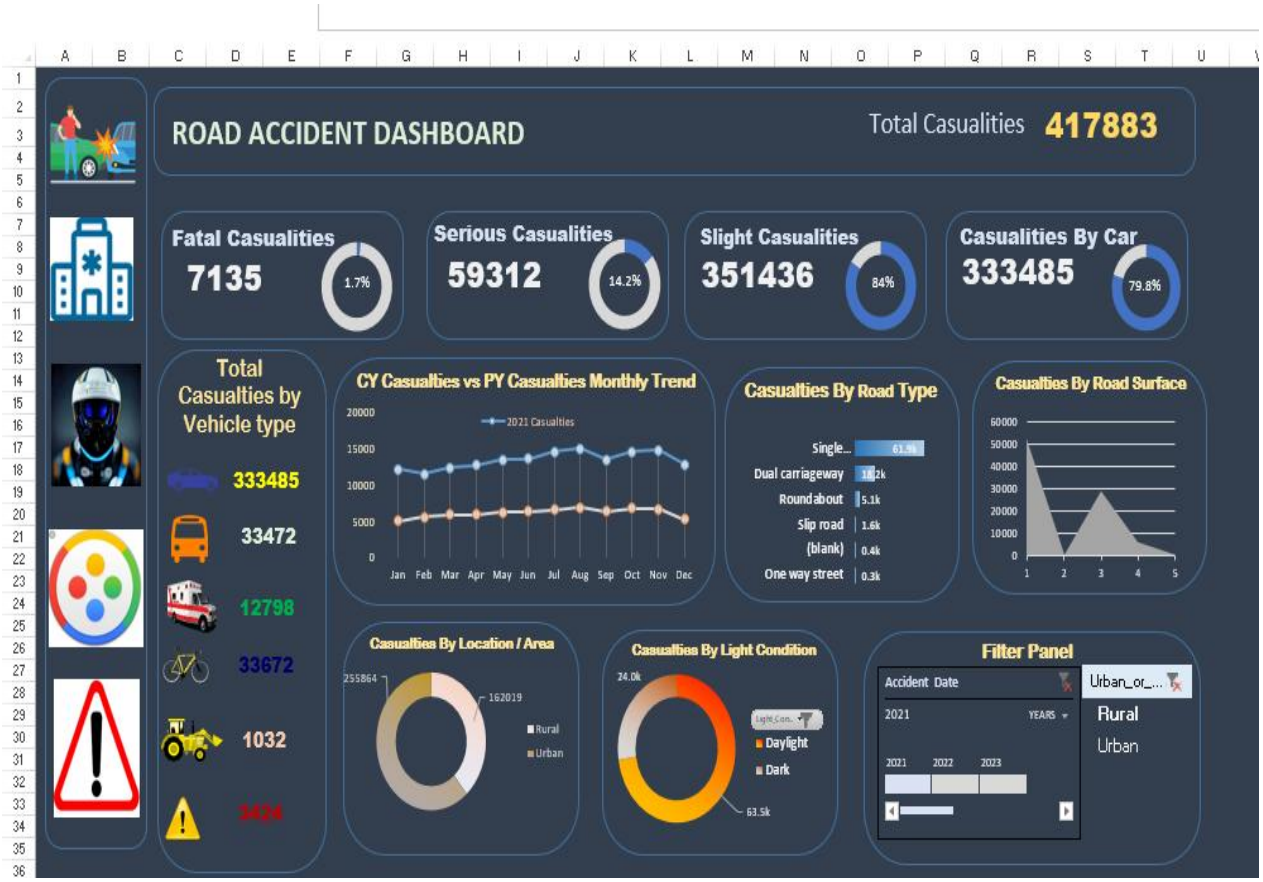
DAY/ NIGHT :



Row Labels	Sum of Number_of_Casualties
Rural	87.5k
Grand Total	87533

Row Labels	Sum of Number_of_Casualties
Daylight	63.5k
Dark	24.0k
Grand Total	87533

FULL ROAD ACCIDENT DASHBOARD in Excel



Summary of key findings.

- After analysing the data we can see the total number of road accident for the year 2021 & 2022.

- We have the total number of fatal casualties, serious casualties and slight casualties.

- We can see the total number of casualties by vehicles types.

- We can see the comparison between current year(CY) casualties and previous year (PY) casualties by monthly trend. Casualties by road type, by road surface, by light condition and using filter to choose in between the years.

DATA REFENCES:

United kingdom road accident

https://en.m.wikipedia.org/wiki/Reported_Road_Casualties_Great_Britain.