



# NYC TRAFFIC ACCIDENTS DASHBOARD



Accidents count

74.88K

Persons Injured

27K

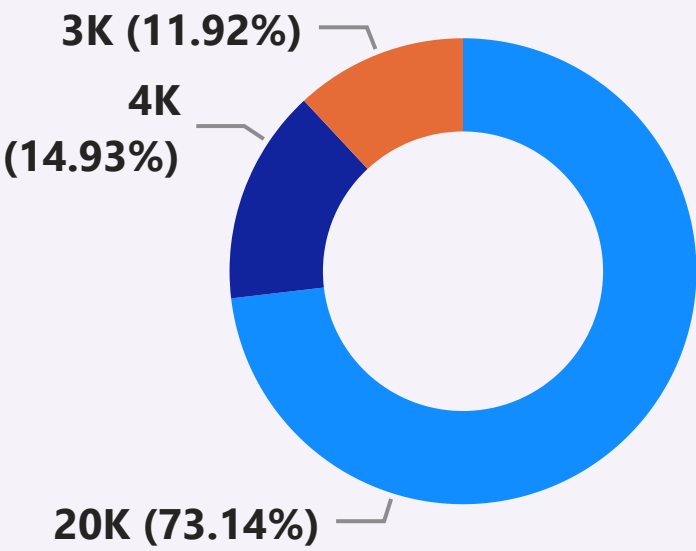
Persons Killed

144

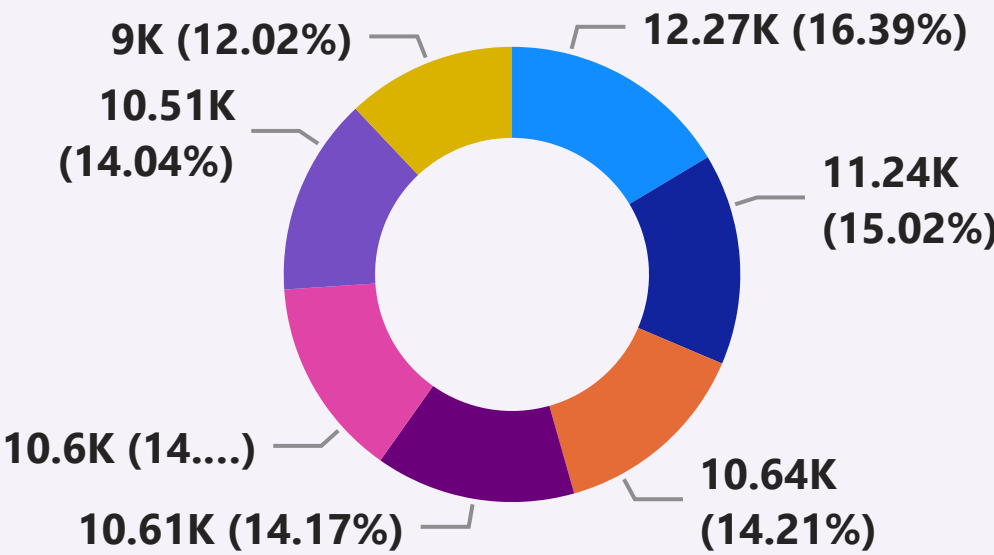
Month

- ☐ January
- ☐ February
- ☐ March
- ☐ April
- ☐ May
- ☐ June
- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ November

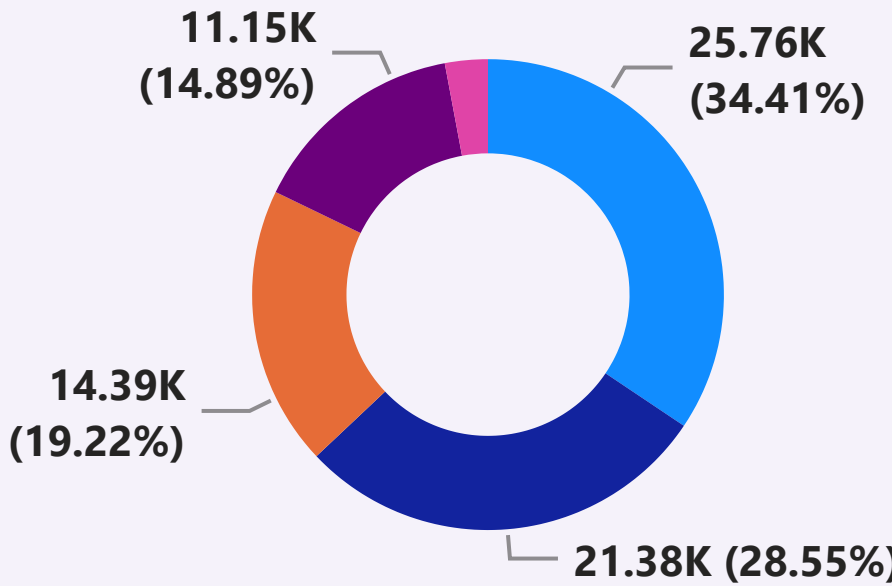
Distribution of Injured Persons



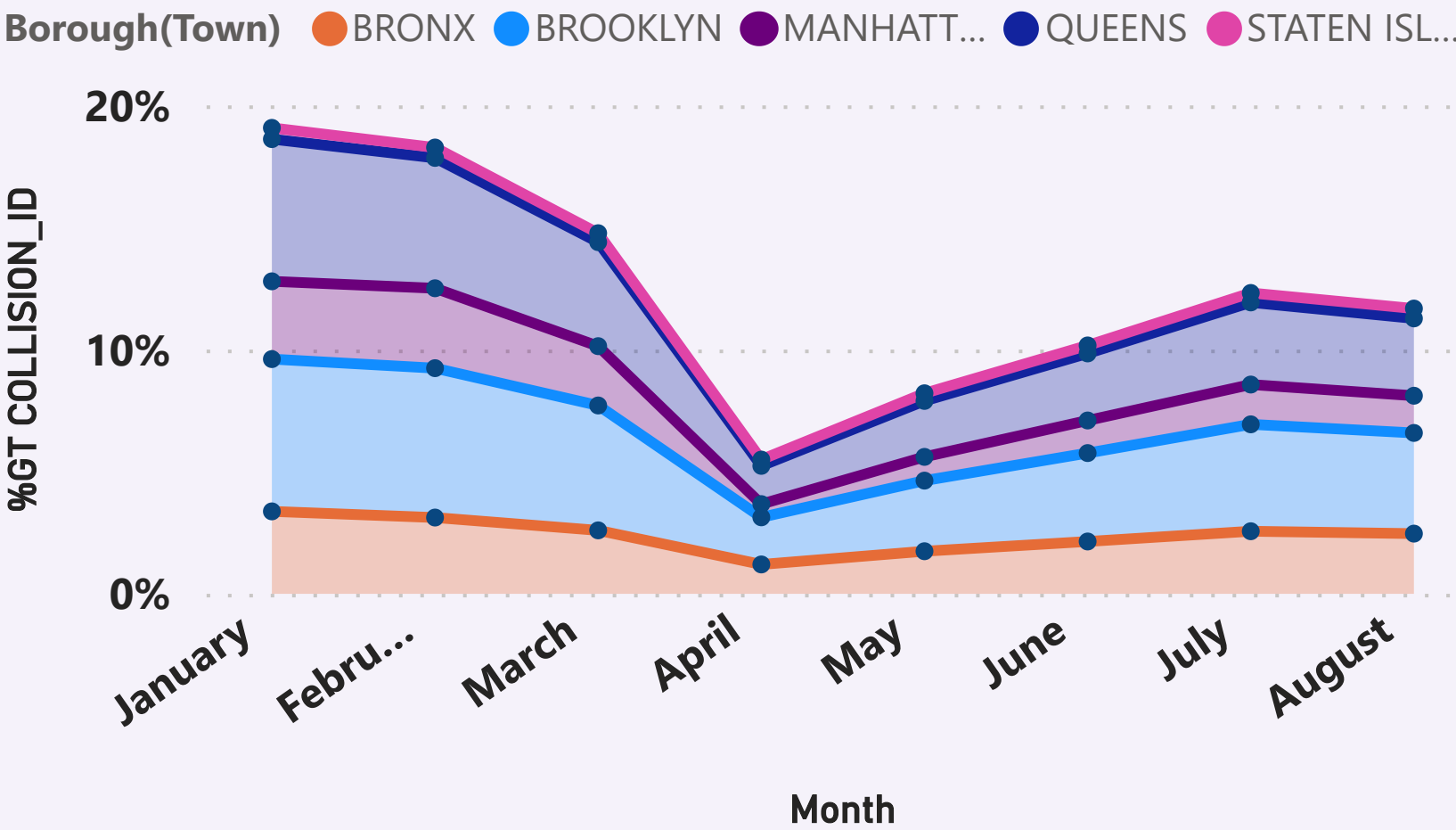
Daywise Accidents



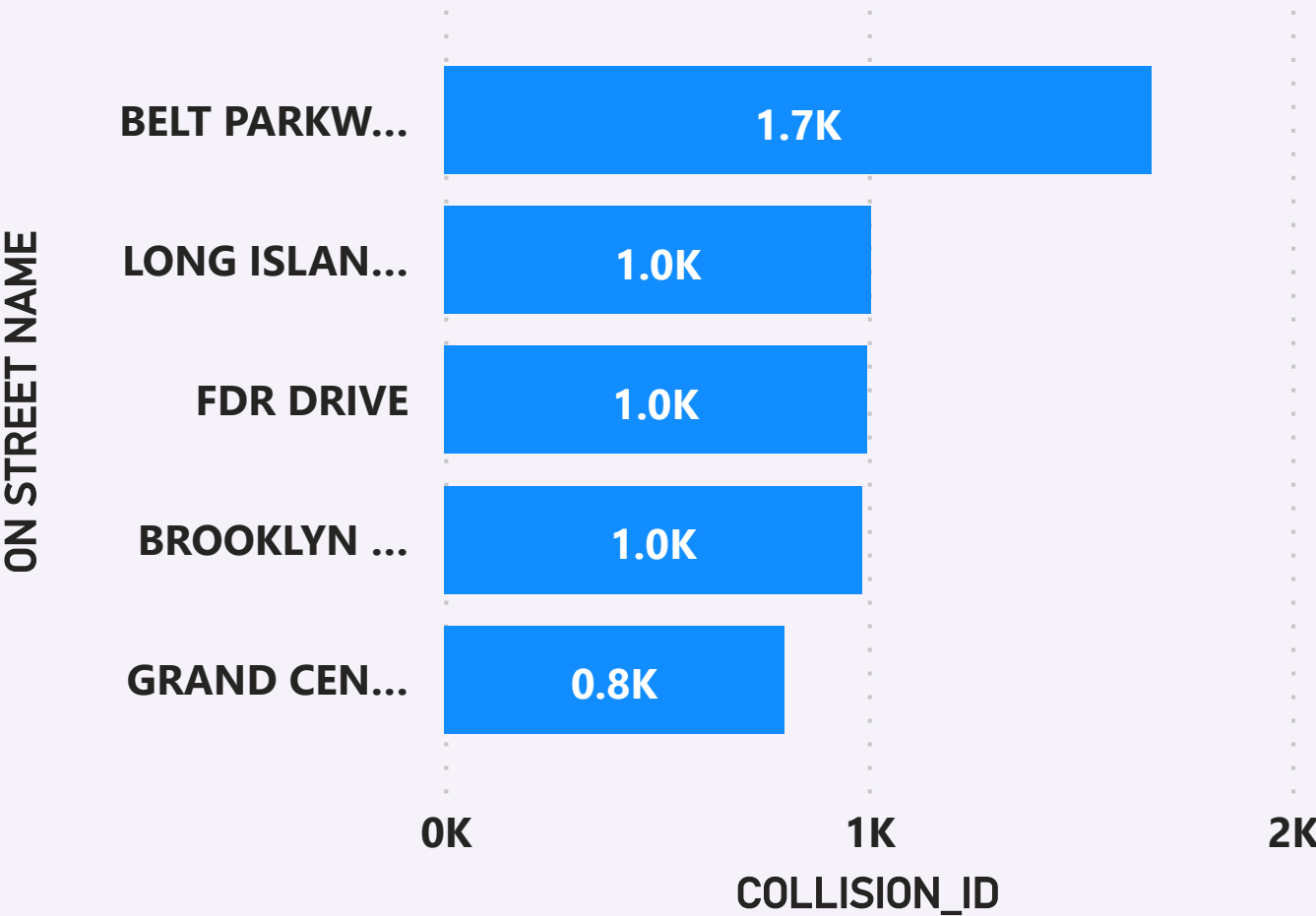
Collision count vs Town



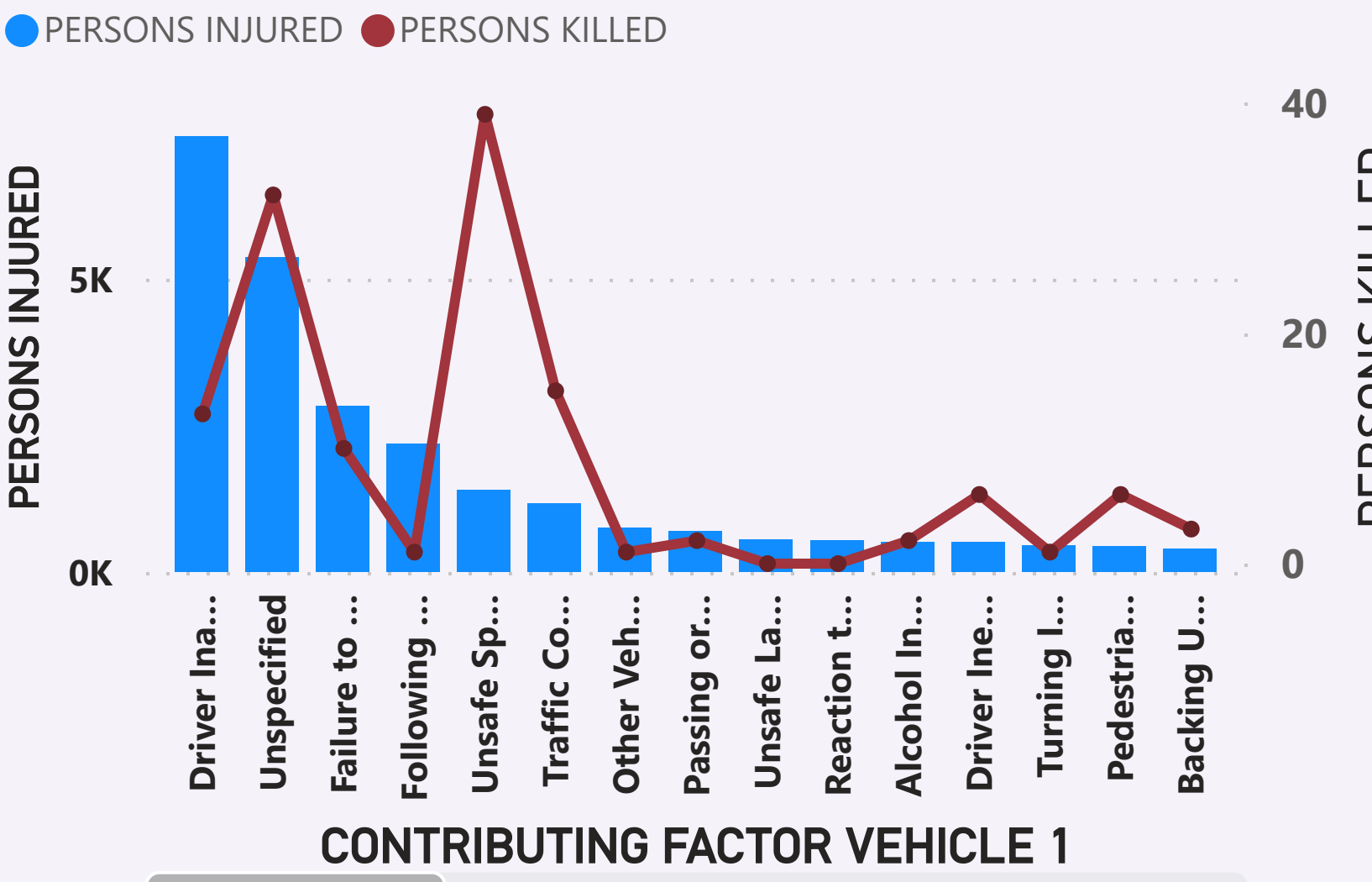
%GT Collision count by Month



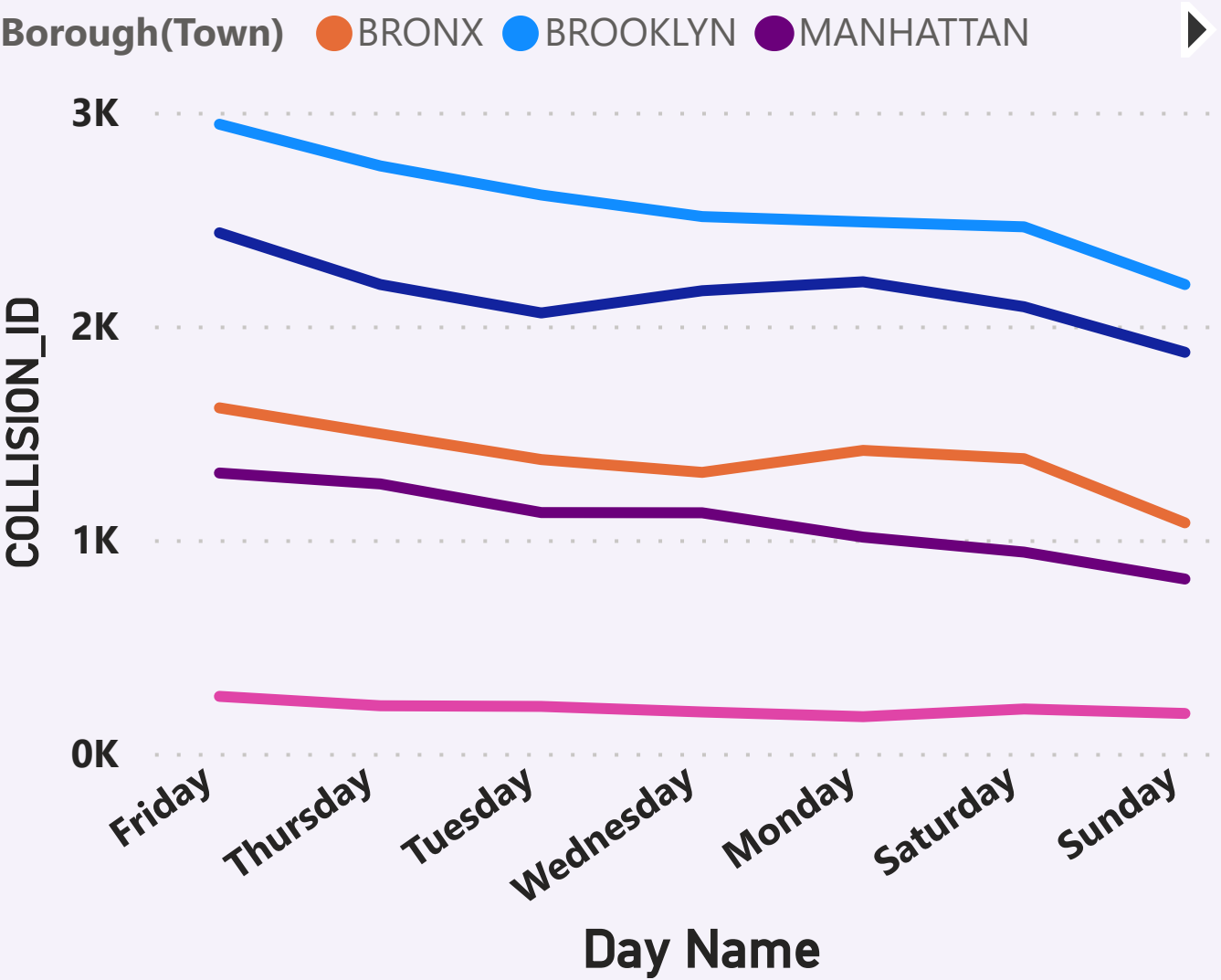
Streetwise Accidents Frequency



Contributing Factor for Accident



Weekday vs Collision Count

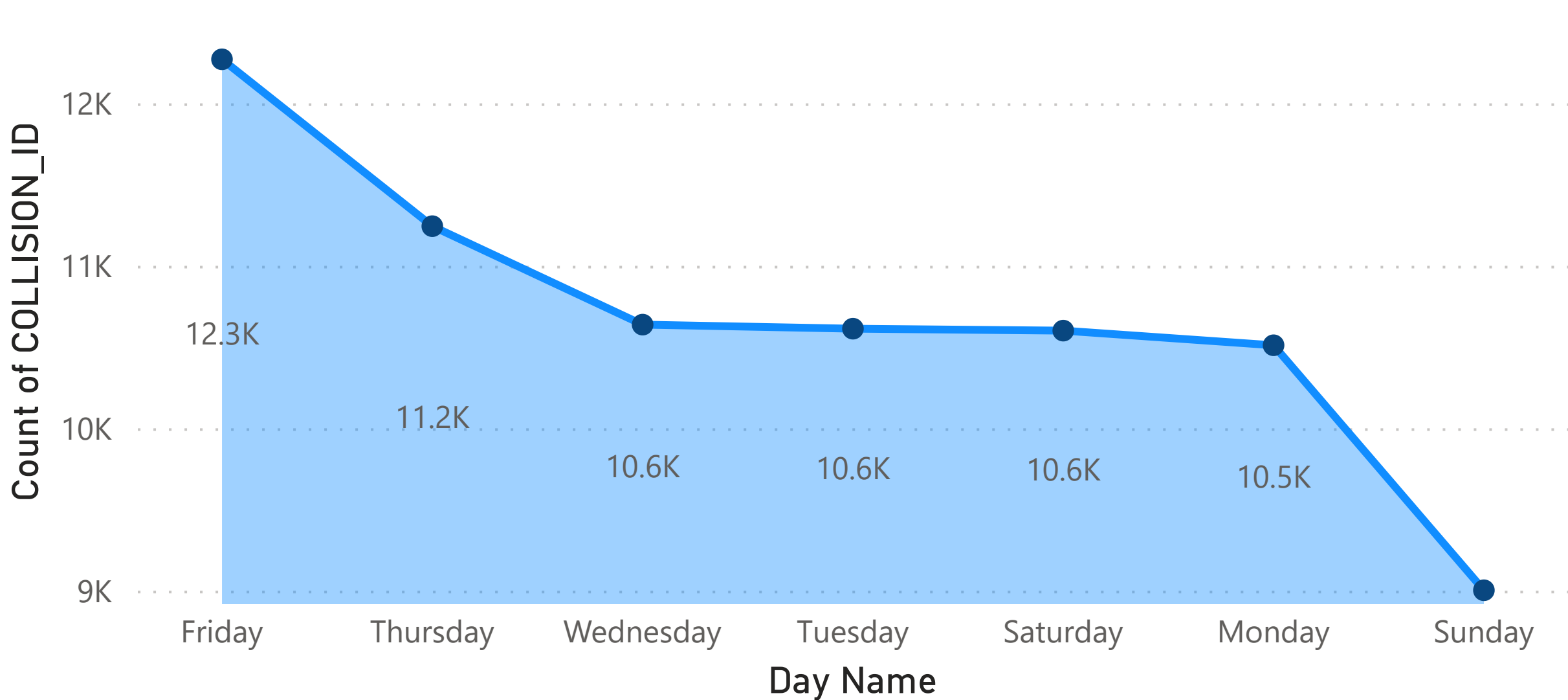


# Seasonal Pattern Analysis

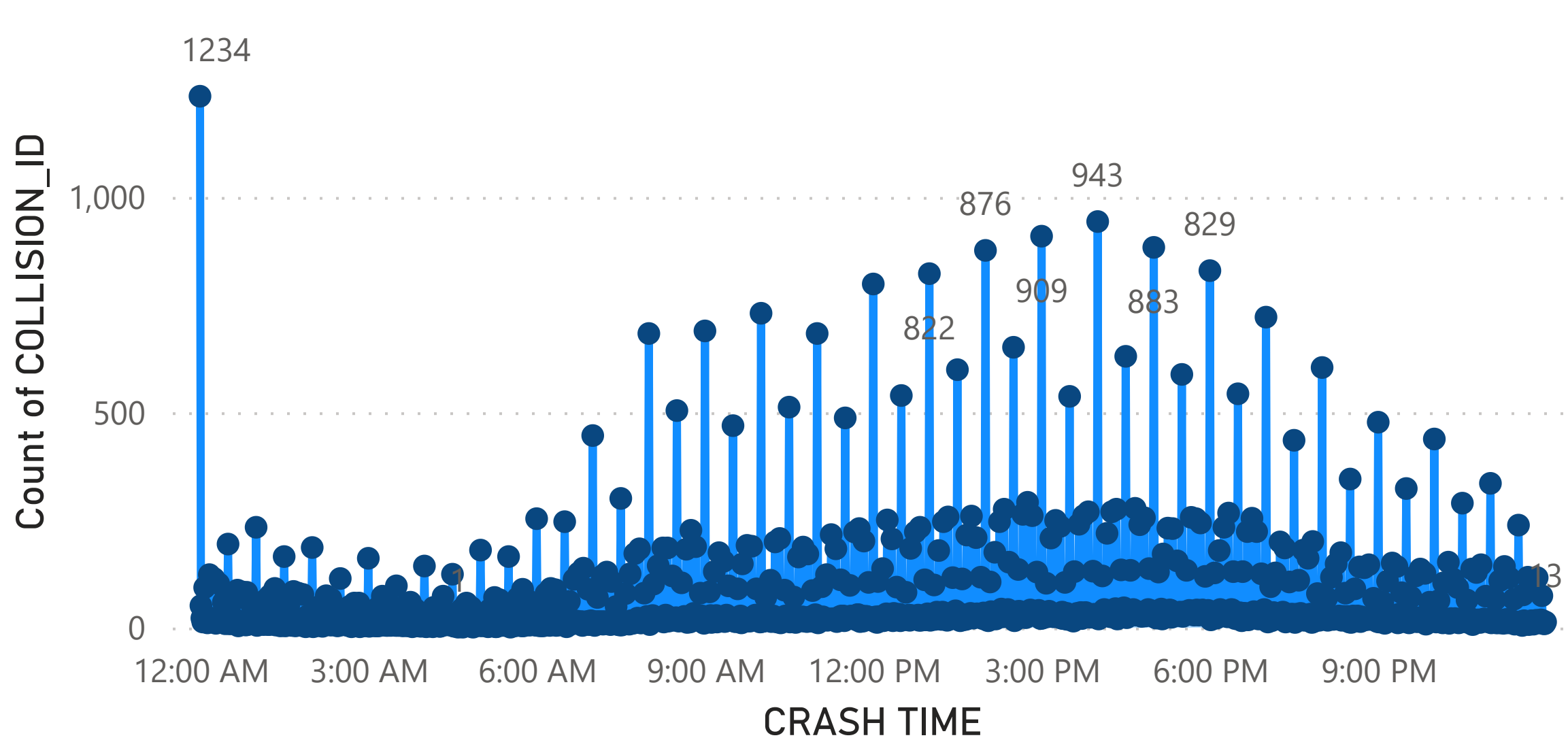
## 1. Accident Frequency Distribution

Month	Friday	Monday	Saturday	Sunday	Thursday	Tuesday	Wednesday	Total
January	2577	1768	1941	1428	2445	1857	2271	14287
February	2265	1960	2176	1537	2076	1874	1796	13684
March	1722	1872	1303	1447	1505	1729	1479	11057
April	634	534	553	440	685	569	701	4116
May	1125	745	970	903	764	815	827	6149
June	1162	1245	1057	918	969	1271	994	7616
July	1550	1144	1152	1200	1603	1182	1394	9225
August	1236	1243	1449	1130	1197	1316	1176	8747
Total	12271	10511	10601	9003	11244	10613	10638	74881

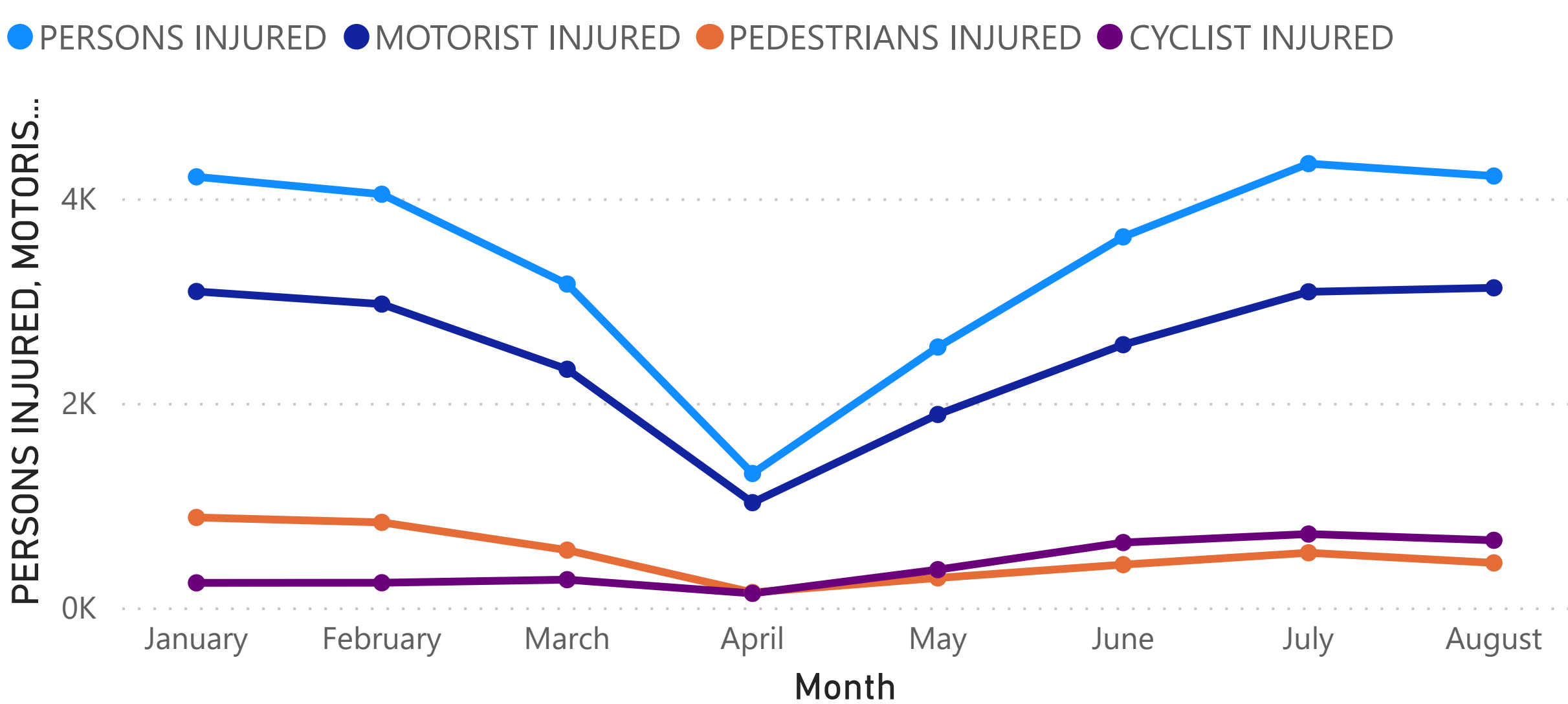
## 2. Accidents Frequency by Day



## 3. Accidents frequency hour of day



## 4. People Injured

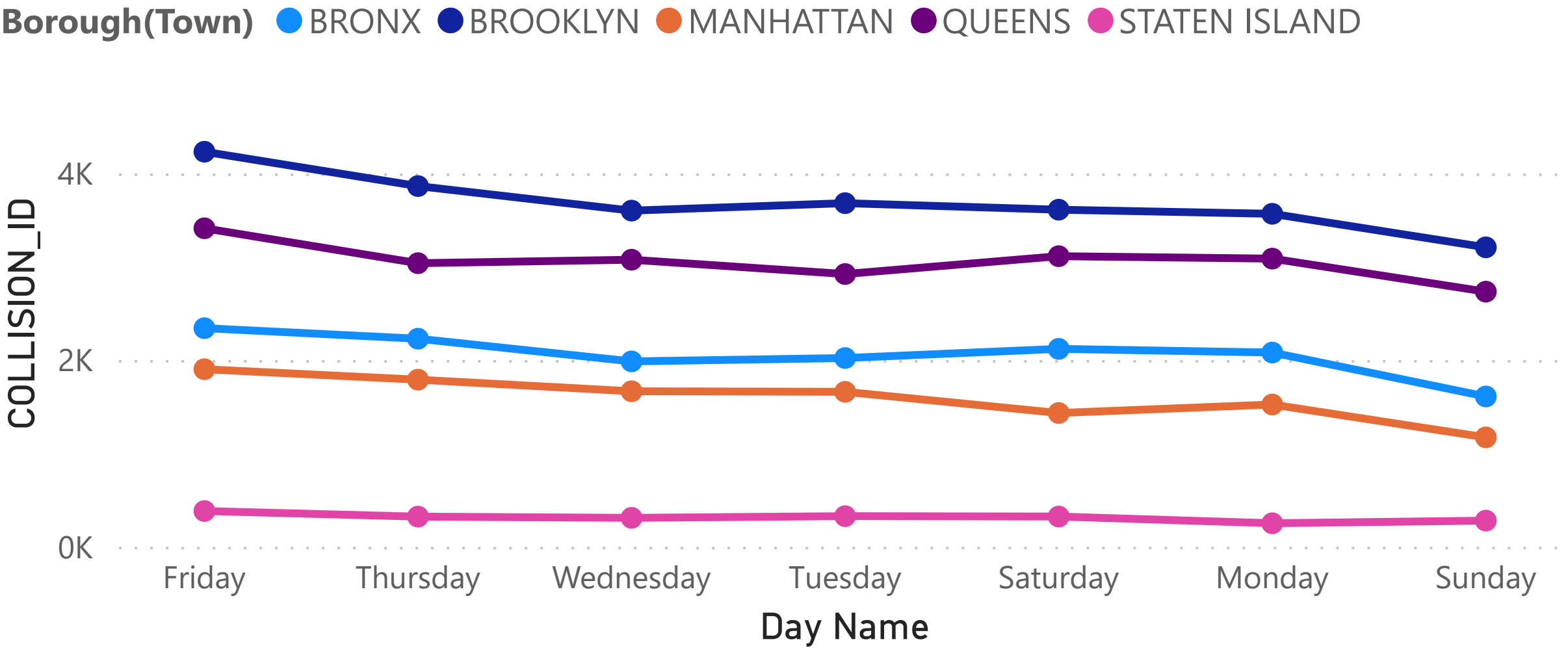


# Townwise Accident Frequency Analysis

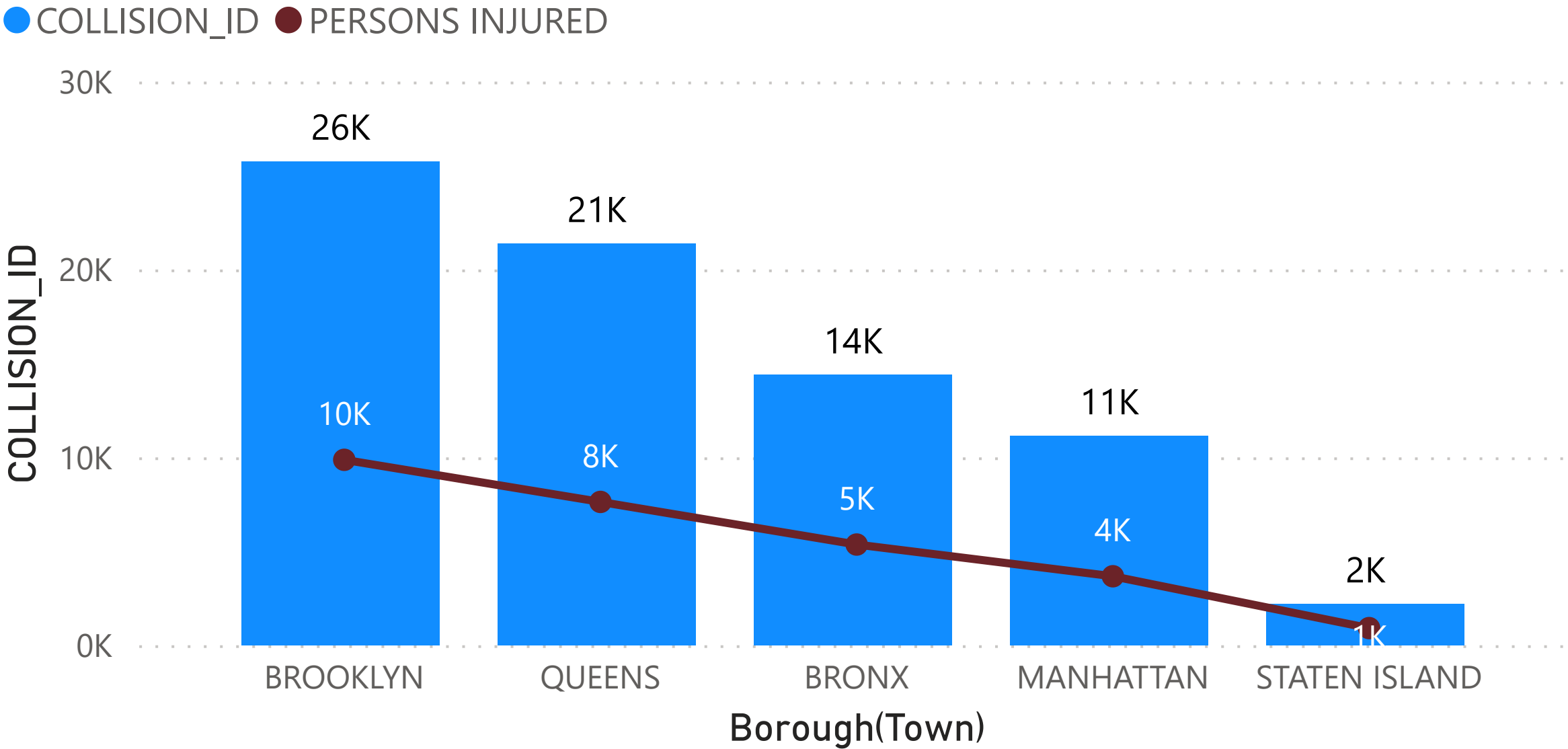
1. Monthwise Accident Frequency

Month	BRONX	BROOKLYN	MANHATTAN	QUEENS	STATEN ISLAND	Total
January	2528	4669	2385	4360	345	14287
February	2339	4580	2450	3997	318	13684
March	1946	3829	1819	3189	274	11057
April	901	1445	405	1173	192	4116
May	1306	2165	728	1716	234	6149
June	1605	2711	999	2056	245	7616
July	1919	3278	1220	2518	290	9225
August	1846	3087	1141	2371	302	8747
Total	14390	25764	11147	21380	2200	74881

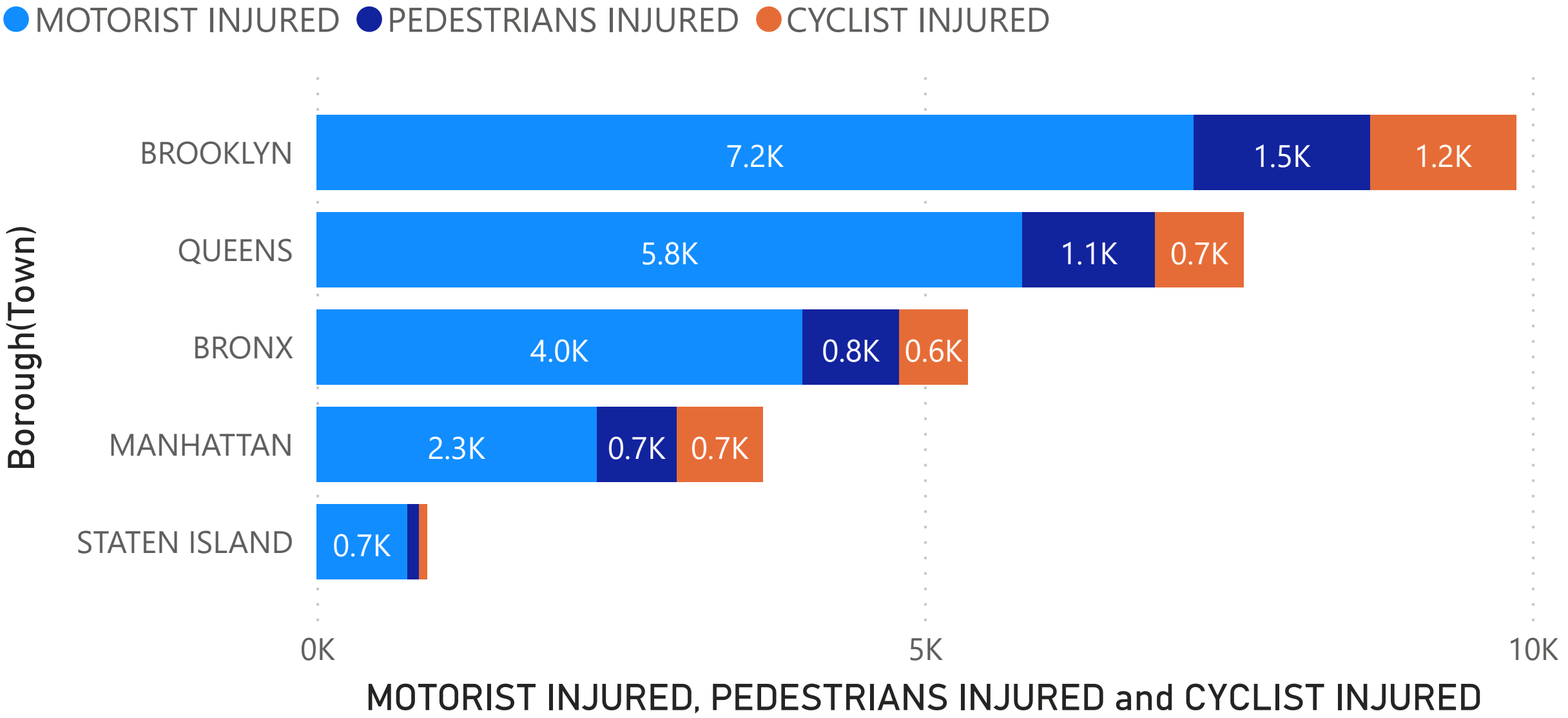
2. Daywise Accident Frequency



3. Accidents frequency by town



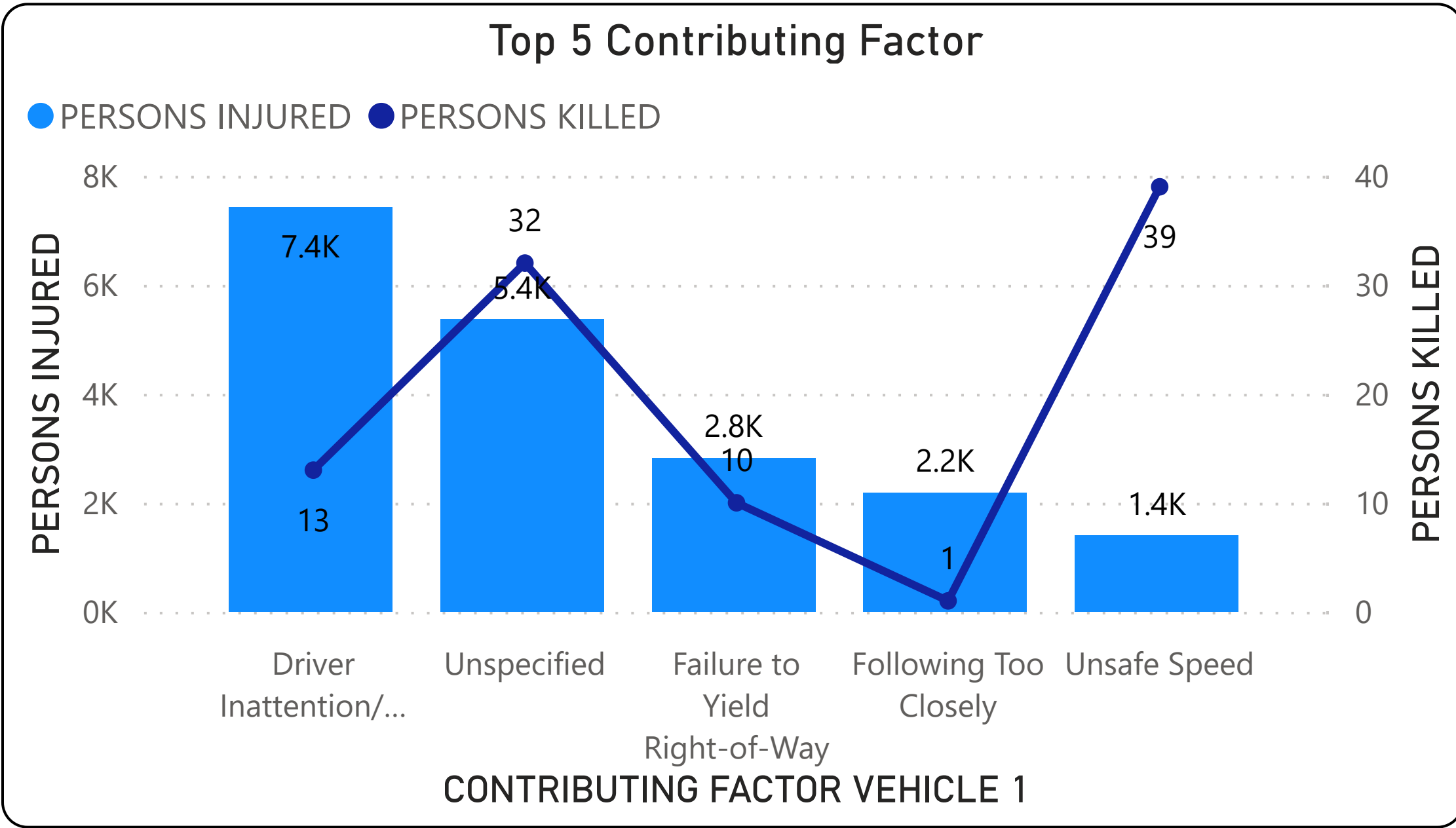
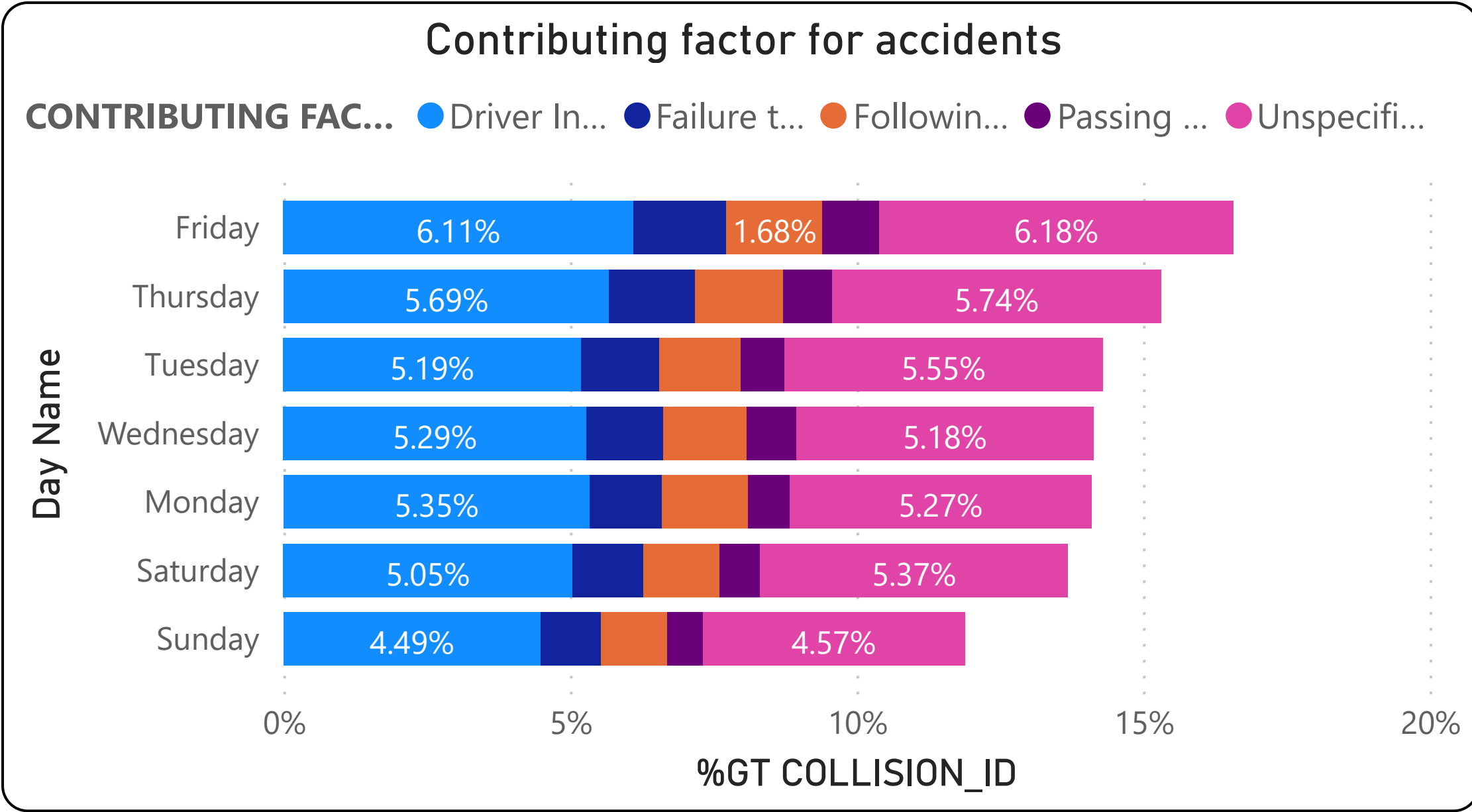
4. Persons Injured





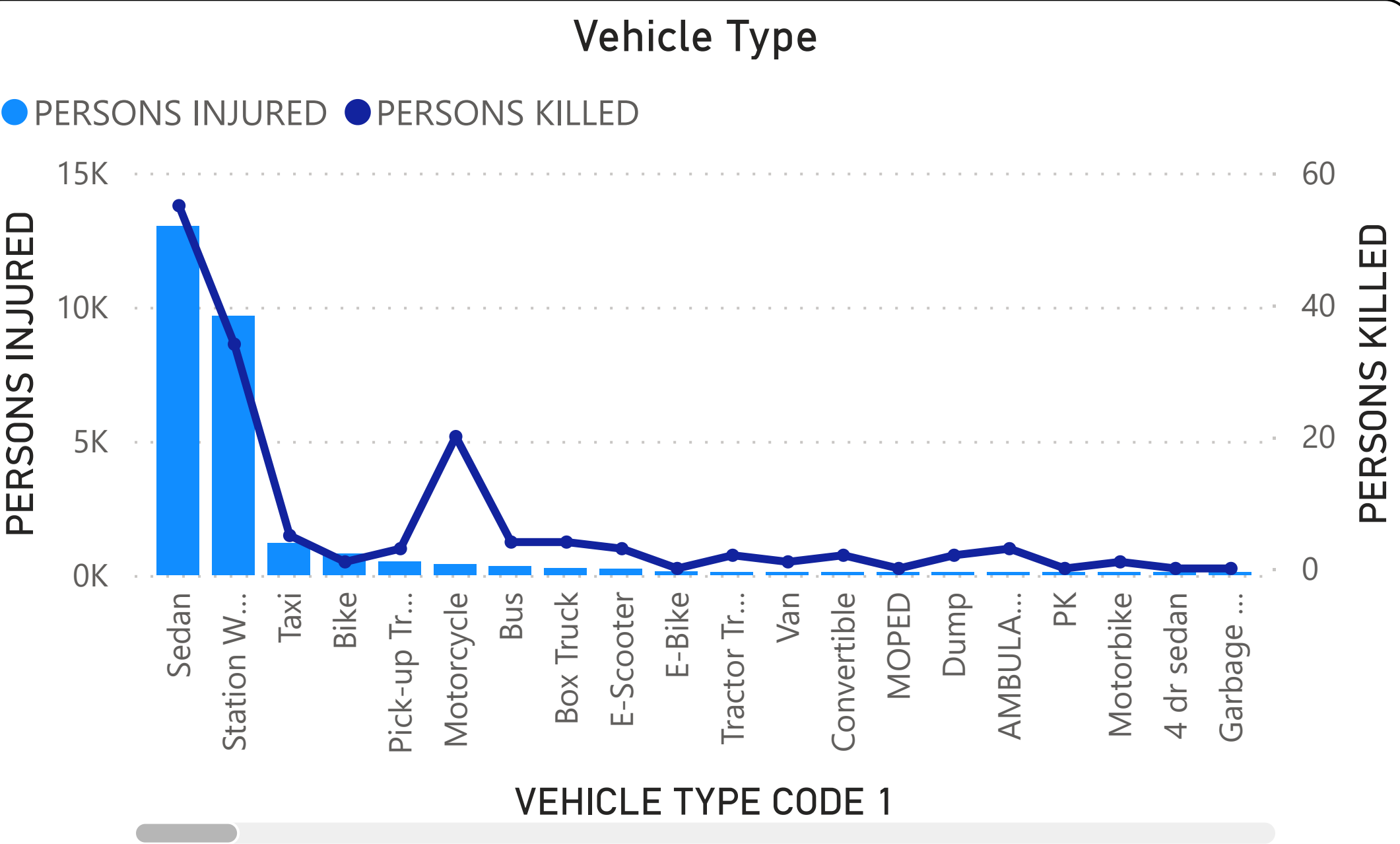
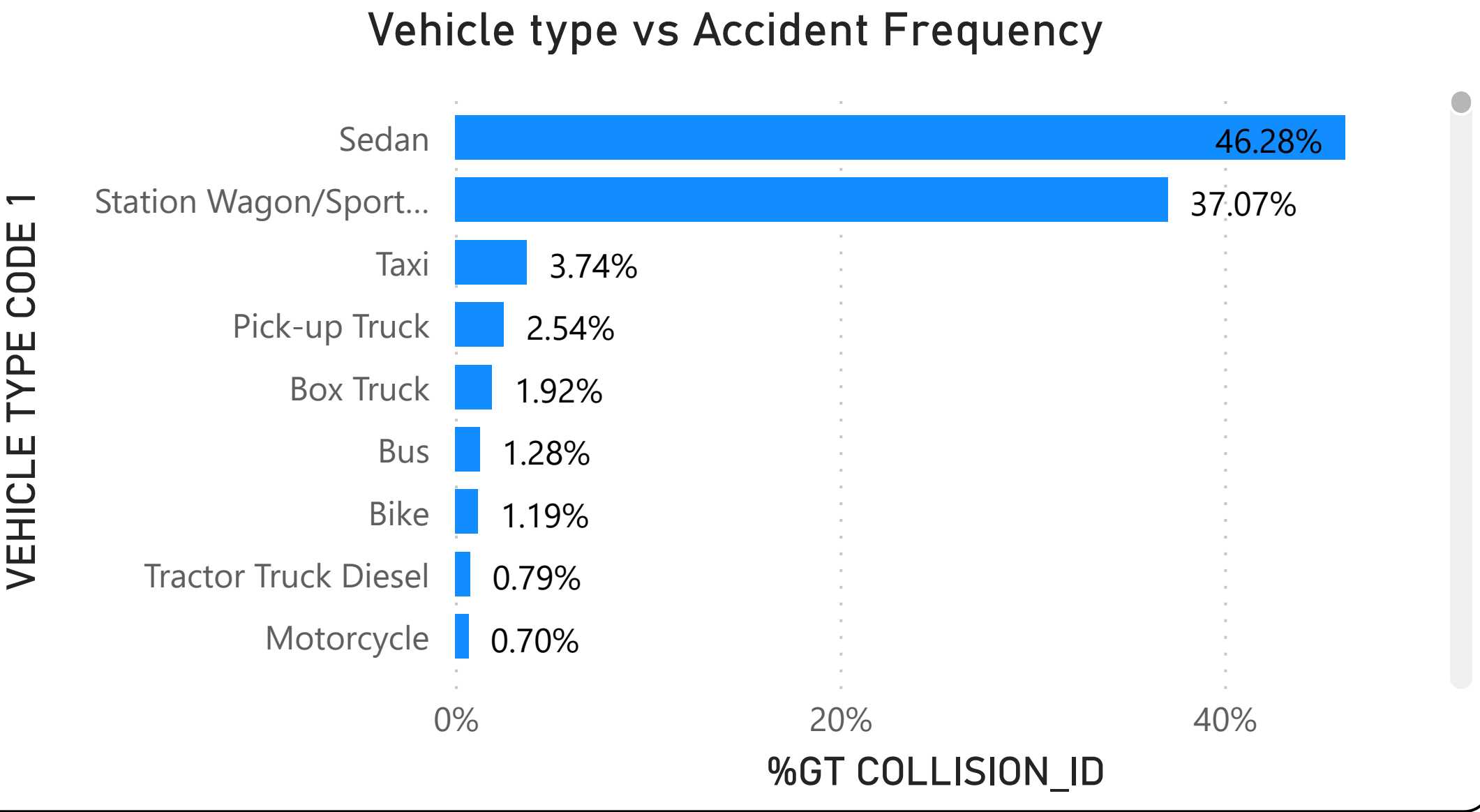
# Contributing factors for accidents

CONTRIBUTING FACTOR VEHICLE 1	January	February	March	April	May	June	July
Unspecified	3593	3317	2729	1096	1623	2078	2596
Driver Inattention/Distracted	3649	3677	3027	992	1477	1862	2324
Following Too Closely	1141	1116	879	176	363	464	567
Failure to Yield Right-of-Way	1064	1022	702	220	336	445	540
Passing or Lane Usage Improper	572	558	408	133	210	293	354
Backing Unsafely	615	578	475	158	209	246	273
Passing Too Closely	561	526	406	122	201	241	314
Other Vehicular	427	407	265	121	202	252	296
Unsafe Speed	244	238	233	231	253	276	291
Unsafe Lane Changing	397	404	297	66	130	152	193
Traffic Control Disregarded	214	191	176	131	182	209	238
Turning Improperly	275	266	235	67	107	127	176
Driver Inexperience	198	187	208	82	125	165	182
Reaction to Uninvolved Vehicle	225	210	168	71	117	145	145
Alcohol Involvement	152	192	125	62	124	110	101
Pavement Slippery	246	105	82	79	49	33	40
View Obstructed/Limited	114	99	99	35	48	70	102
Pedestrian/Bicyclist/Other Pedestrian Error/Confusion	64	66	65	24	67	94	93
Aggressive Driving/Road Rage	64	71	67	54	66	54	69
Oversized Vehicle	85	78	59	19	30	33	43
Brakes Defective	54	57	34	19	32	31	43
Fell Asleep	44	38	39	14	19	26	29
Obstruction/Debris	17	25	21	15	12	26	23
Passenger Distraction	37	37	25	6	16	12	15
Steering Failure	33	22	27	12	14	11	20
Outside Car Distraction	27	16	29	5	18	17	25
Lost Consciousness	18	24	14	8	16	10	19
Glare	28	26	26	7	3	12	11
Total	14287	13684	11057	4116	6149	7616	9225



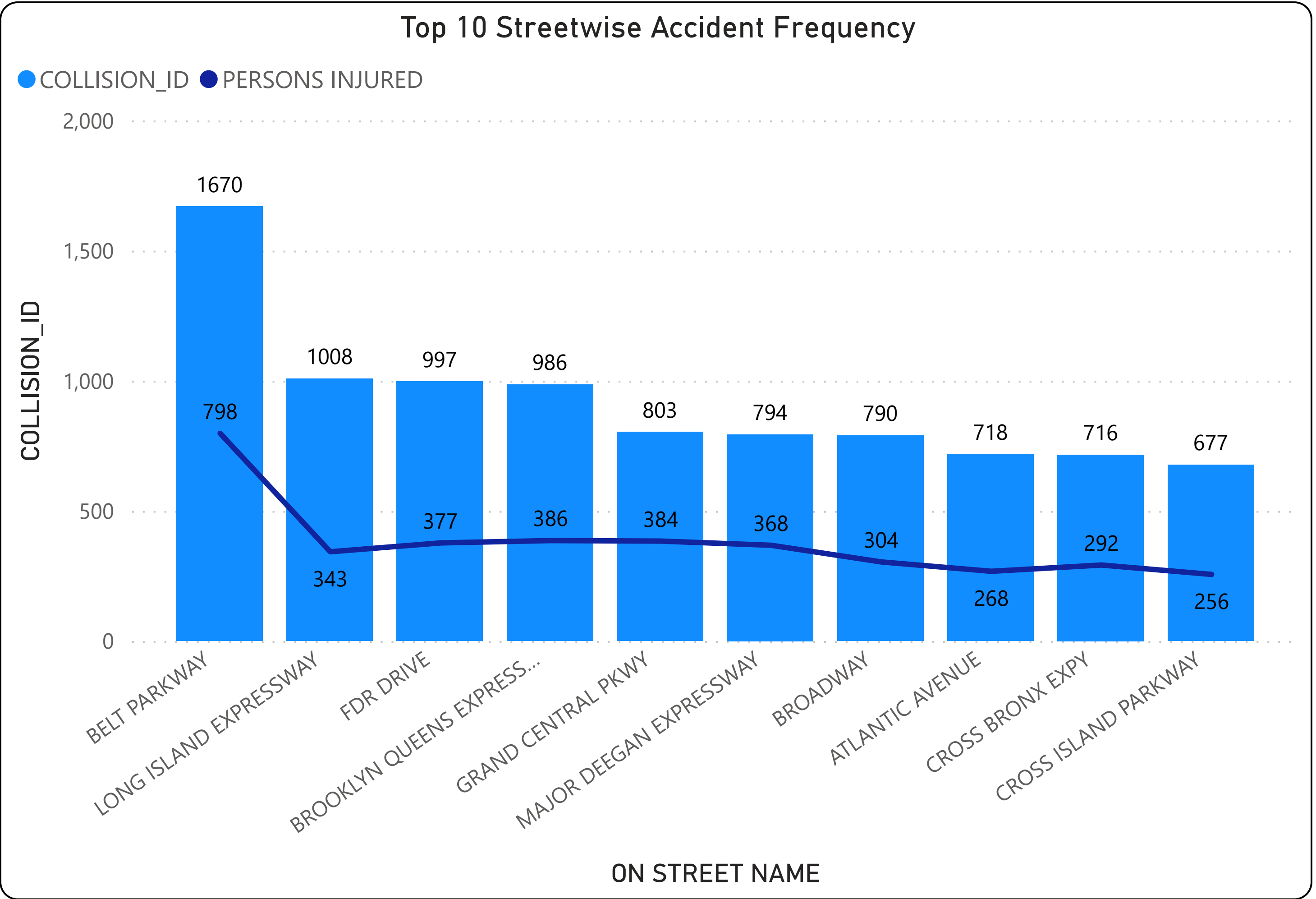
# Vehicle type responsible for accidents

VEHICLE TYPE CODE 1	January	February	March	April	May	June	July	August	Total
Sedan	6251	6028	4966	2077	2978	3640	4434	4280	34654
Station Wagon/Sport Utility Vehicle	5738	5279	4245	1441	2193	2655	3129	3075	27755
Taxi	643	739	477	92	149	196	260	242	2798
Pick-up Truck	412	386	334	102	117	155	204	189	1899
Box Truck	275	273	227	70	127	145	170	150	1437
Bus	265	243	158	27	53	53	79	77	955
Bike	64	61	84	46	116	166	186	171	894
Tractor Truck Diesel	103	122	77	32	57	63	70	67	591
Motorcycle	26	33	42	36	68	107	124	86	522
Van	73	82	64	23	37	58	64	45	446
AMBULANCE	60	67	53	32	47	44	68	50	421
E-Scooter	14	16	8	8	33	56	83	39	257
Convertible	34	44	26	14	15	25	33	29	220
Dump	43	38	36	14	13	24	22	29	219
E-Bike	13	13	14	6	18	20	45	30	159
4 dr sedan	37	46	33	6	6	10	8	6	152
PK	22	13	8	9	11	25	33	28	149
Flat Bed	27	19	34	5	7	12	20	15	139
Garbage or Refuse	24	19	16	8	7	20	18	18	130
MOPED	4	7	7	5	13	23	33	6	98
Carry All	18	14	16	2	4	9	12	8	83
Tractor Truck Gasoline	18	7	16	4	8	6	5	6	70
Tow Truck / Wrecker	11	11	16	2	3	5	11	9	68
Chassis Cab	10	16	6	2	4	10	7	7	62
Tanker	7	11	11	6	4	10	4	3	56
Motorscooter	6	4	3	4	5	10	6	6	44
Motorbike	2	3	2	3	9	15	6	3	43
LIMO	10	14	6	1		1	3	1	36
Total	14287	13684	11057	4116	6149	7616	9225	8747	74881



# Streetwise Accidents Analysis

ON STREET NAME	COLLISION_ID	%CT COLLISION_ID
BELT PARKWAY	1670	2.23%
LONG ISLAND EXPRESSWAY	1008	1.35%
FDR DRIVE	997	1.33%
BROOKLYN QUEENS EXPRESSWAY	986	1.32%
GRAND CENTRAL PKWY	803	1.07%
MAJOR DEEGAN EXPRESSWAY	794	1.06%
BROADWAY	790	1.06%
ATLANTIC AVENUE	718	0.96%
CROSS BRONX EXPY	716	0.96%
CROSS ISLAND PARKWAY	677	0.90%
VAN WYCK EXPWY	619	0.83%
3 AVENUE	572	0.76%
BRUCKNER BOULEVARD	552	0.74%
LINDEN BOULEVARD	485	0.65%
BRUCKNER EXPRESSWAY	472	0.63%
NORTHERN BOULEVARD	435	0.58%
JACKIE ROBINSON PKWY	385	0.51%
2 AVENUE	376	0.50%
BRONX RIVER PARKWAY	370	0.49%
FLATBUSH AVENUE	356	0.48%
HENRY HUDSON PARKWAY	342	0.46%
JEROME AVENUE	316	0.42%
QUEENS BOULEVARD	311	0.42%
ROCKAWAY BOULEVARD	307	0.41%
PARK AVENUE	298	0.40%
5 AVENUE	293	0.39%
BUSHWICK AVENUE	291	0.39%
BEDFORD AVENUE	277	0.37%
Total	74881	100.00%





## Insights:

- Max no of accidents happen in **January** then there is **sudden decrease** up to April and then **again increase** in accidents from May.
- Main Reason is that **Dec-March is the cold season** with January being the coldest month of the year, these heavy **snowfalls and snow storms** occur which are more prone to cause accidents because **roads are slippery due to black ice**.
- Also temperatures are near freezing during the winter nights, while the days see **low temperatures, less sunshine**, and cloudy conditions.
- The **snowless period** of the year lasts from **April to November**, April-May is the spring season while the **June-August hot summer season** with July being the hottest month of the year in the year.
- **Friday** is the **worst** weekday in terms of accidents while **Sunday is much safer** if we look at timing **midnight** most no accidents happen in a year and 1 Pm -6 pm is more accident-prone timing of the day.
- **Brooklyn** reported max accidents in 2020 followed by Queens while **State Island** reported the least accidents.
- **Friday** is worst for all towns contributing max no of accidents resulted in people get injured and in severe accidents got killed.
- Among total persons injured **most of them are motorists** followed by pedestrians and cyclists.
- In most accidents, the main reason is **drivers' distraction and inattention** while driving, fatal accidents in which people get killed cause due to **unsafe speed limits** of vehicles.
- Almost in **47%** of total accidents people drive a **sedan** and from data, we can see that max people were injured while driving a sedan followed by a **wagon/sports vehicle**, while People using **Bus, Bike, Motorcycle** are much safer as less no of accidents happen.
- At 1,670, **Belt Parkway** had the highest number of accidents reported and was 146.68% higher than **Cross Island Parkway**, which had the lowest number of accidents at 67