



Embrace the Spirit • Vivez l'esprit

2016 Annual Collision Report

Contents

The Annual Collision Report is a summary of statistics associated with traffic collisions that occurred in the City of Winnipeg. This information is provided by Manitoba Public Insurance (MPI). It is important to note that the original MPI data has been altered from its original source to limit the data to records with identified locations only and exclude parking lots and back lanes. This report is comprised of five sections:

Section 1 - Trends:

This section contains statistics and information explore a recent history of collision statistics provided by MPI within the City of Winnipeg. Also included in this section are statistics relating to population and MPI registered vehicles.

Section 2 - Collisions:

This section classifies collisions by configuration types, traffic control types, time of collision, environmental conditions, roadway locations, and road surface conditions.

Section 3 - Collision Victims:

This section identifies the victims in all reportable collisions by age and severity (non-fatal or fatal) and types of injury. It also identifies if the victim was a pedestrian, cyclist, passenger or driver.

Section 4 - Drivers and Vehicles:

This section identifies both drivers and vehicles involved in reported collisions, vehicle maneuver being executed at the time of the collision and the vehicle type.

Section 5 - Cyclists and Pedestrians:

This section identifies motorized vehicle and cyclist maneuver, as well as vehicle maneuver and pedestrian action at the time of the collision.

Disclaimer:

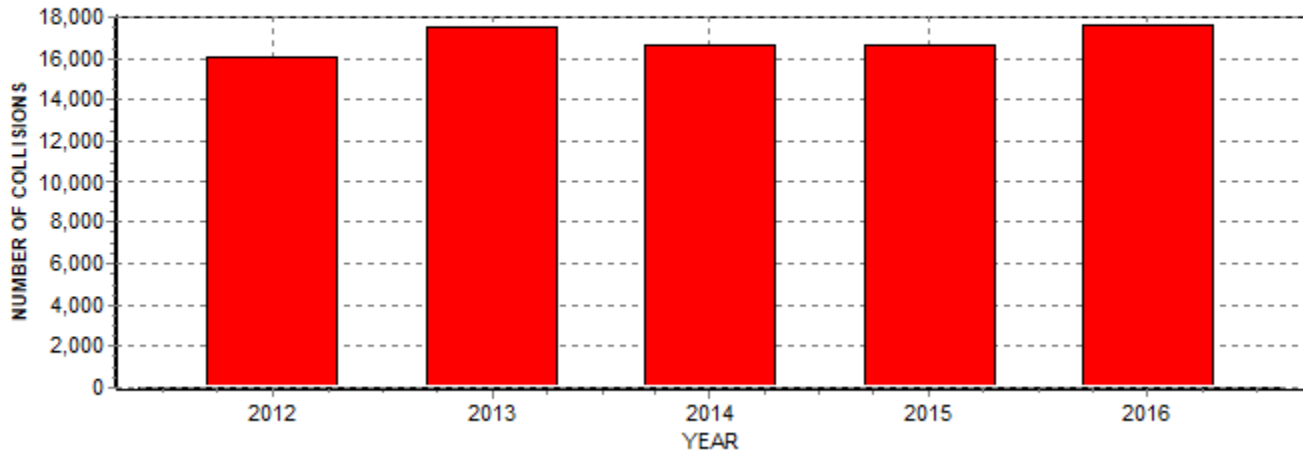
The City of Winnipeg provides this information in good faith but gives no warranty, nor accepts liability, from any incorrect, incomplete or misleading information, or its use for any purpose.

Figure 1.1 Tabular summary of reported collisions

2012 - 2016

Year	Reported Collisions
2012	16024
2013	17530
2014	16688
2015	16630
2016	17586

Figure 1.2 Total number of reported collisions





Public Works Department Reported Collisions Per 1000 Registered Vehicles

Figure 1.3 Tabular summary of reported collisions per 1000 registered vehicles 2012 - 2016

Year	Reported Collisions	Registered Vehicles	Reg. Veh. Collision Ratio
2012	16024	523191	30.63
2013	17530	533462	32.86
2014	16688	543686	30.69
2015	16630	550246	30.22
2016	17586	561207	31.34

NOTE: Registered Vehicle Collision Ratio: (Reported Collisions/Registered Vehicles) * 1000

Figure 1.4 Reported collisions per 1000 registered vehicles

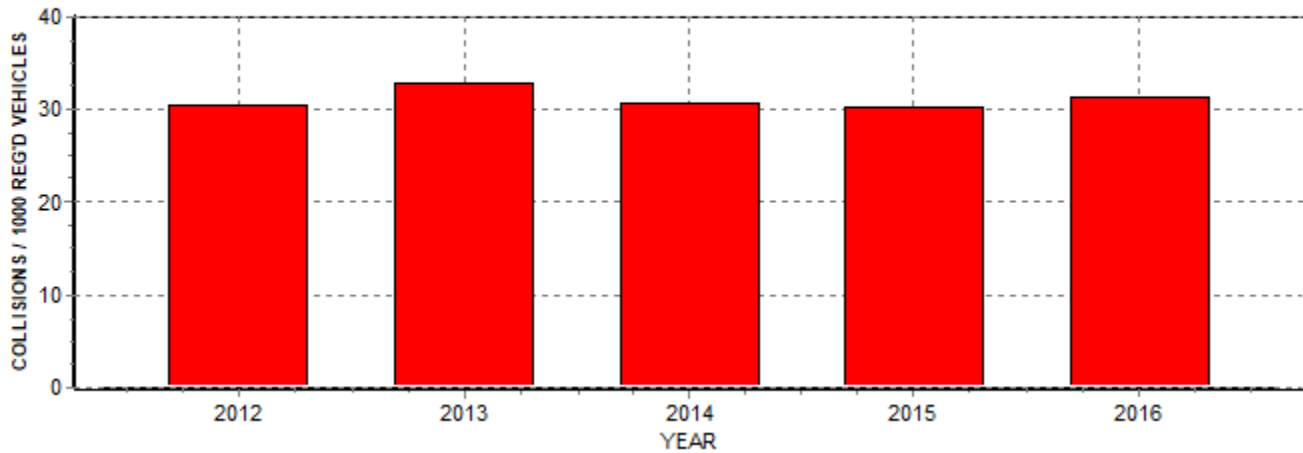




Figure 1.5 Tabular summary of reported collisions per 1000 population 2012 - 2016

Year	Reported Collisions	Population	Population/Collision Ratio
2012	16024	689504	23.24
2013	17530	698645	25.09
2014	16688	709171	23.53
2015	16630	718357	23.15
2016	17586	735552	23.91

NOTE: Population Collision Ratio: (Reported Collisions/Population) * 1000

Figure 1.6 Reported collisions per 1000 population

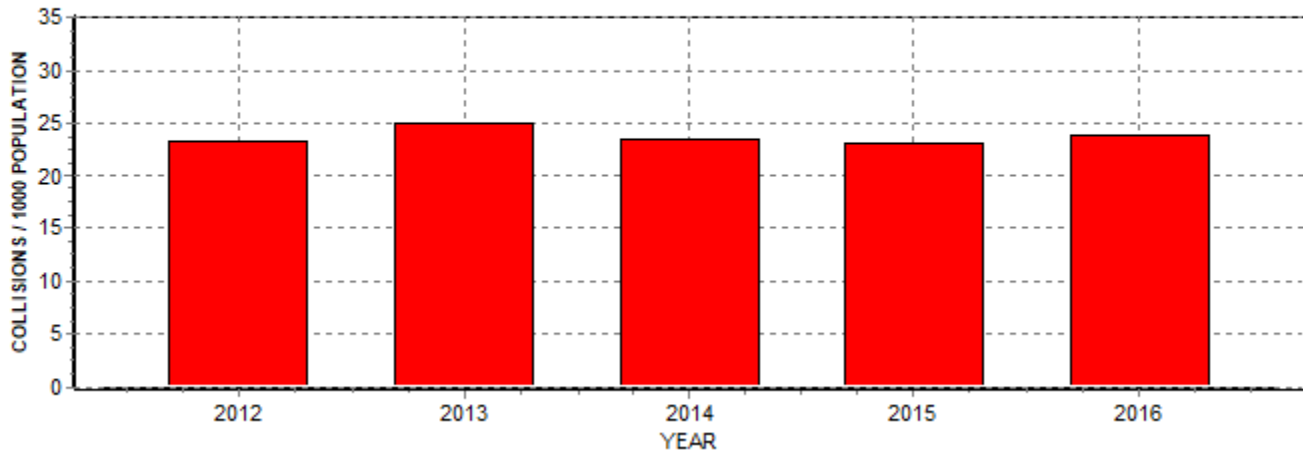


Figure 1.7 Tabular summary of reported collisions by severity **2012 - 2016**

Year	Fatal	Injury	Property Damage	Reported Collisions
2012	19	4581	11424	16024
2013	9	4683	12838	17530
2014	10	5072	11606	16688
2015	11	5080	11539	16630
2016	18	5354	12214	17586

Figure 1.8 Total number of fatal collisions

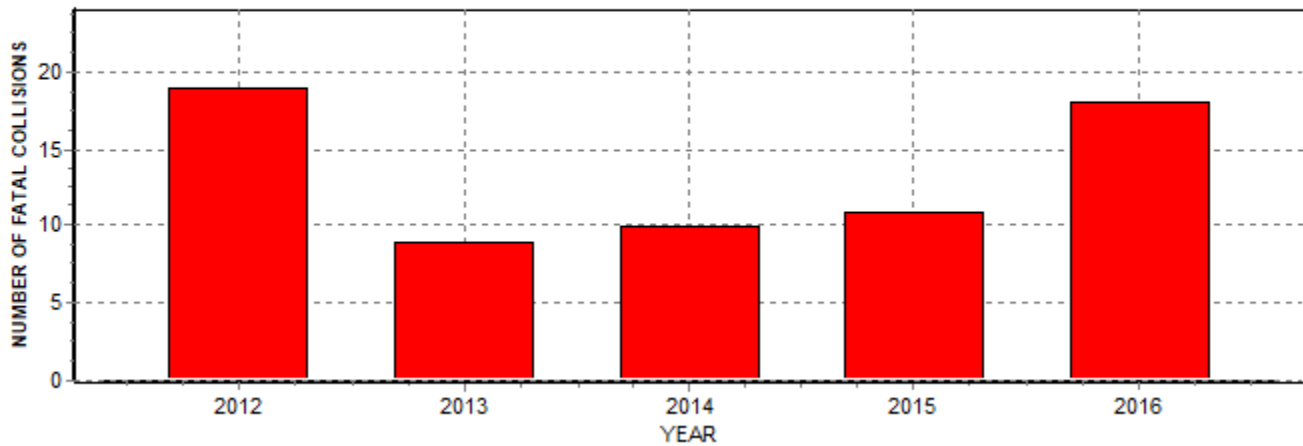
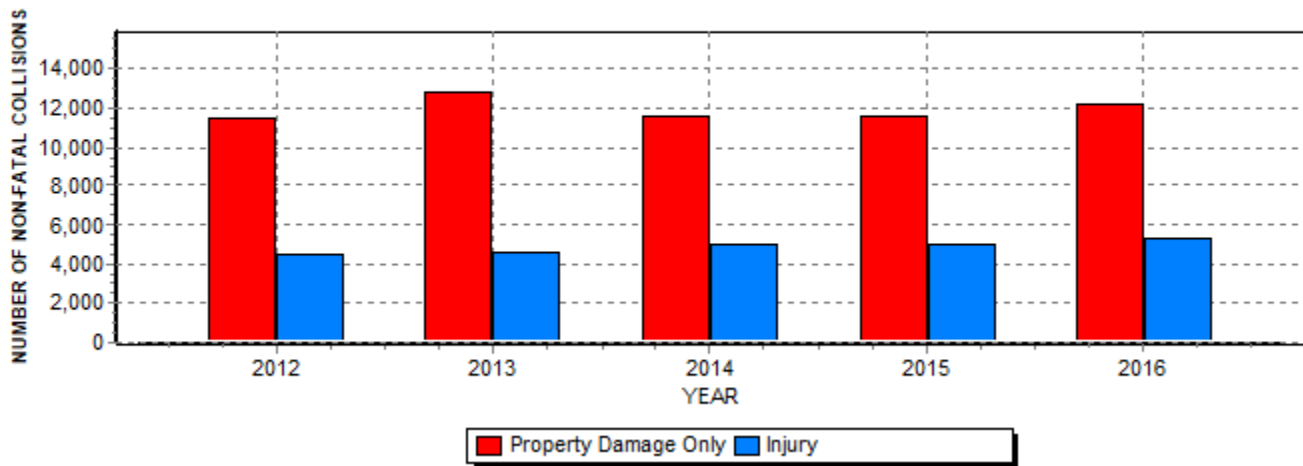


Figure 1.9 Total number of injury and property damage only collisions





Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.1 Total number of reported collisions by severity and configuration type

Configuration Type	Fatal	Injury	Property Dmg. Only	Reported Collisions
Fixed Object	2	81	727	810
Head On	0	39	112	151
Intersection 90 Degree	4	1283	1938	3225
Left Turn (Left w/ Thru)	0	137	217	354
Left Turn (Opp Dir)	2	146	235	383
Left Turn (Same Dir)	0	20	107	127
Off Road Left	2	11	91	104
Off Road Right	1	30	126	157
Over-Taking	0	21	69	90
Parking	0	43	332	375
Pedestrian	4	44	58	106
Rear End	0	2682	4302	6984
Right Turn (Opp Dir)	0	12	22	34
Right Turn (Same Dir)	0	22	110	132
Sideswipe (Opposing)	0	25	126	151
Sideswipe (Same Dir)	1	266	1804	2071
Unknown	2	492	1838	2332
TOTAL	18	5354	12214	17586



Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.2 Total number of reported collisions by severity and traffic control type

Traffic Control Type	Fatal	Injury	Property Dmg. Only	Reported Collisions
4-Way Stop	0	62	124	186
Flashing Signal Light	0	9	10	19
Left Turn on Red	0	1	4	5
Merge	0	54	114	168
Officer/Flagman/School Guard	0	2	2	4
Pedestrian Corridor	0	16	45	61
Pedestrian Crosswalk	0	90	118	208
R.R. Auto Controls	0	1	1	2
R.R. Crossing	0	17	36	53
R.R. Gates	0	3	1	4
Right Turn on Red	0	1	3	4
School Crossing	0	2	1	3
School Zone	0	2	13	15
Stop	1	293	559	853
Traffic Signal/Control Device	10	1694	2927	4631
Turn Controls	0	9	24	33
Warning Sign	0	3	6	9
Yield	0	257	483	740
Unknown	7	2838	7743	10588
TOTAL	18	5354	12214	17586



Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.3 Total number of reported collisions by hour of day and day of week

Hour	Days of the Week							Reported Collisions	Percentage
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
00:00 - 00:59	13	10	11	24	24	35	28	145	0.8
01:00 - 01:59	10	9	11	12	15	38	32	127	0.7
02:00 - 02:59	10	8	11	17	16	40	38	140	0.8
03:00 - 03:59	2	9	3	13	14	20	24	85	0.5
04:00 - 04:59	6	10	3	7	5	8	9	48	0.3
05:00 - 05:59	16	19	13	16	11	15	7	97	0.6
06:00 - 06:59	66	74	66	45	55	20	20	346	2.0
07:00 - 07:59	183	178	161	162	138	26	18	866	4.9
08:00 - 08:59	236	225	236	212	157	39	21	1126	6.4
09:00 - 09:59	117	147	140	125	115	78	46	768	4.4
10:00 - 10:59	102	141	124	113	115	134	73	802	4.6
11:00 - 11:59	129	132	148	135	142	156	67	909	5.2
12:00 - 12:59	142	167	166	179	211	185	122	1172	6.7
13:00 - 13:59	140	157	181	141	204	172	117	1112	6.3
14:00 - 14:59	174	153	133	161	226	162	136	1145	6.5
15:00 - 15:59	246	246	246	264	304	190	113	1609	9.1
16:00 - 16:59	289	305	314	321	319	162	135	1845	10.5
17:00 - 17:59	255	273	274	270	319	129	123	1643	9.3
18:00 - 18:59	135	158	166	175	204	130	88	1056	6.0
19:00 - 19:59	107	92	122	94	151	100	70	736	4.2
20:00 - 20:59	74	69	92	68	84	72	58	517	2.9
21:00 - 21:59	62	73	100	60	77	59	59	490	2.8
22:00 - 22:59	49	63	64	51	82	75	57	441	2.5
23:00 - 23:59	40	33	36	34	62	55	38	298	1.7
Unknown	9	8	10	15	10	7	4	63	0.4
TOTAL	2612	2759	2831	2714	3060	2107	1503	17586	100 %
Percentage	14.9	15.7	16.1	15.4	17.4	12.0	8.5		

NOTE: 'Unknown' hour means no time recorded

Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.4 Total number of reported collisions by hour of day

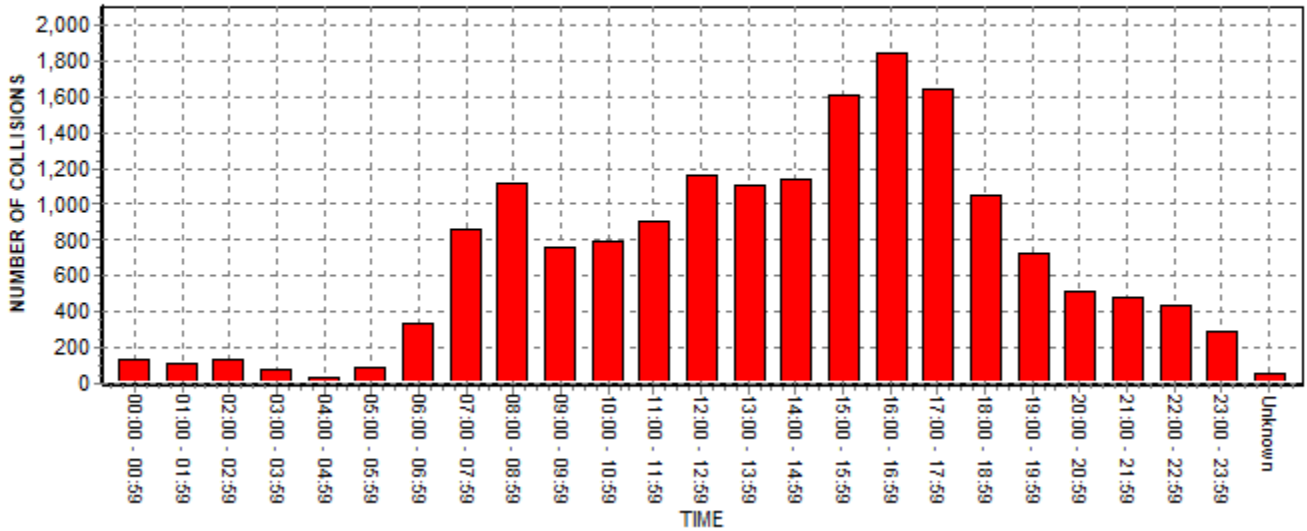
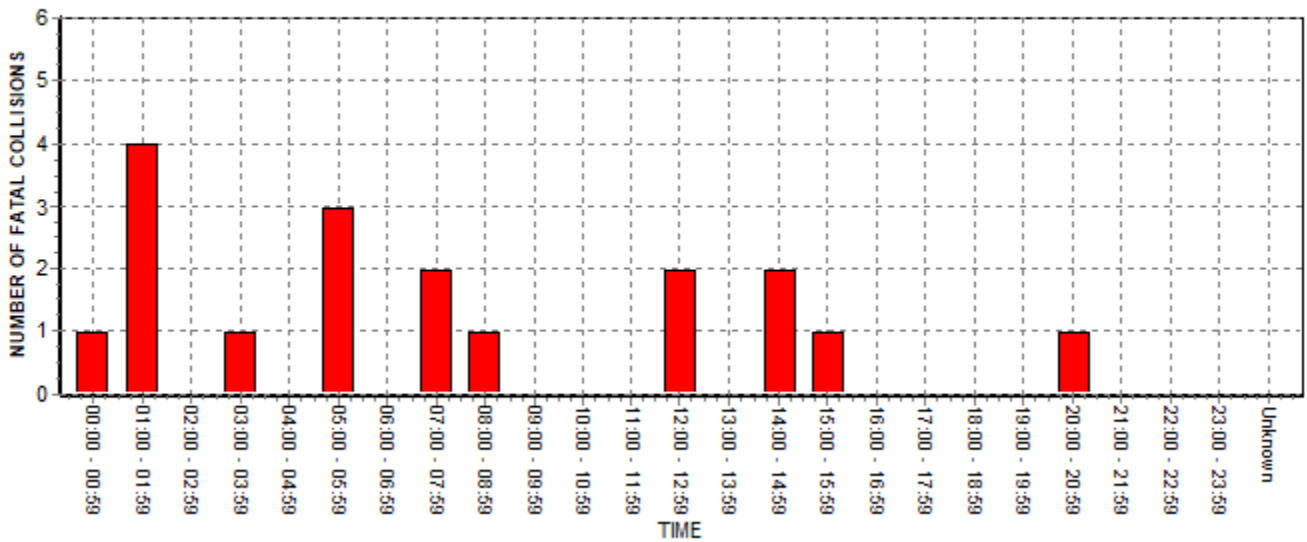


Figure 2.4.1 Total number of reported collisions by hour of day (Fatal)



Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.4.2 Total number of reported collisions by hour of day (Injury)

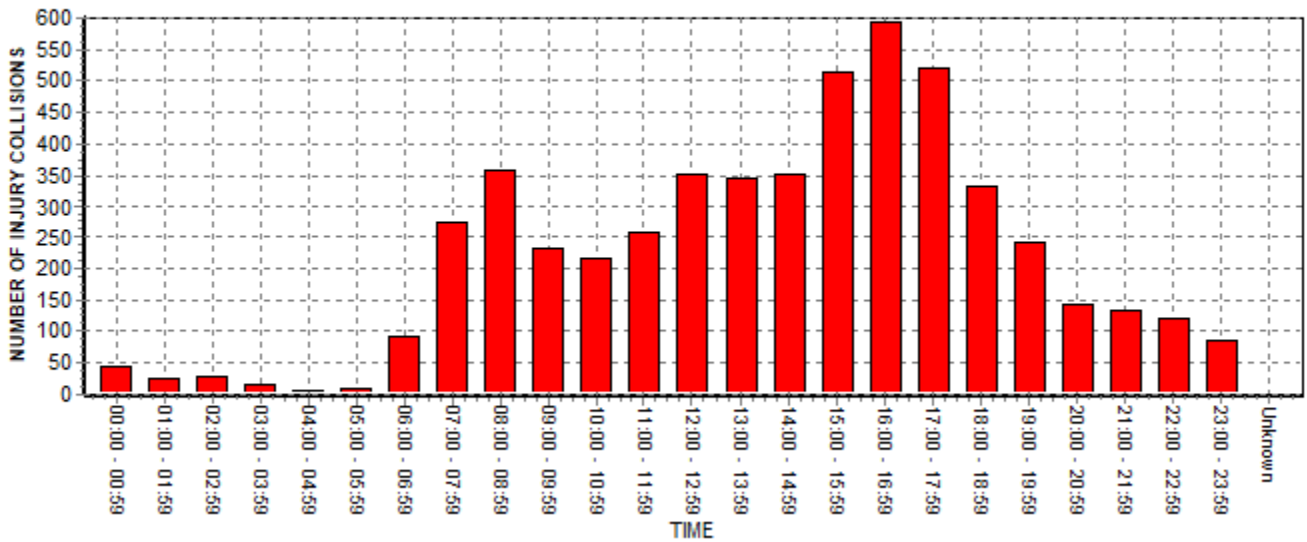
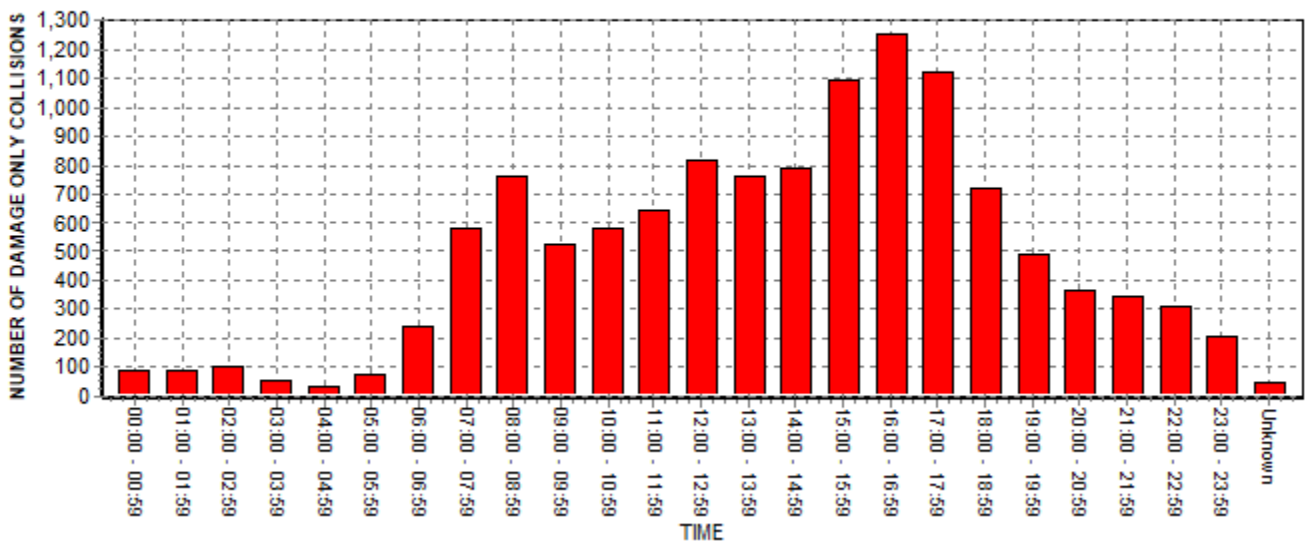


Figure 2.4.3 Total number of reported collisions by hour of day (P.D. only)

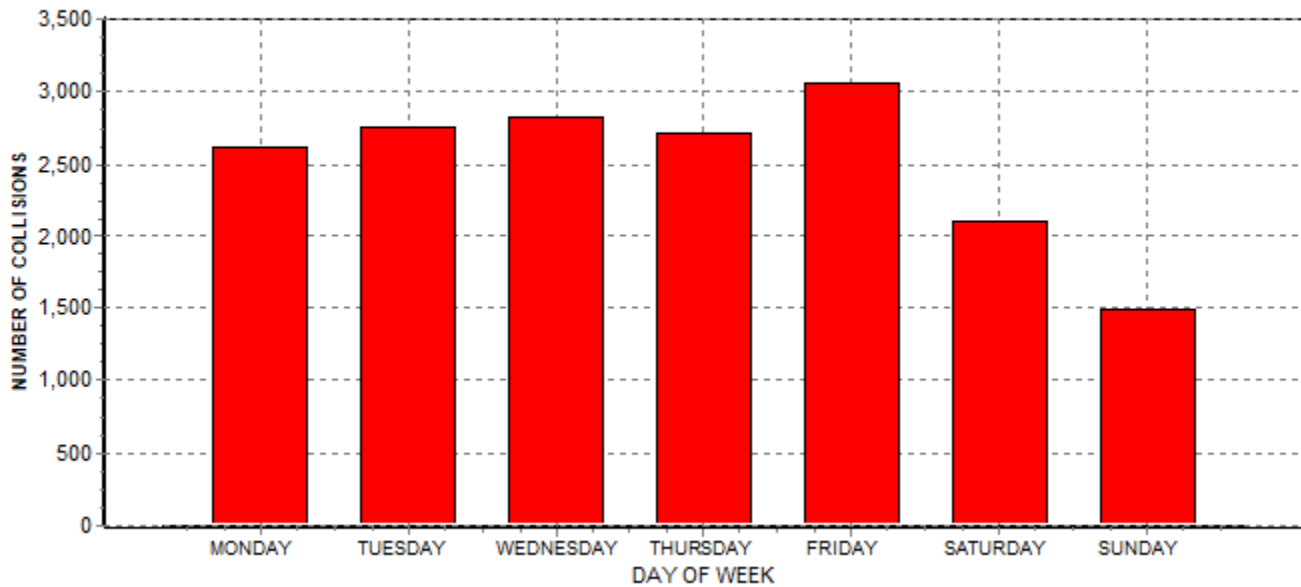


Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.5 Total number of reported collisions by severity and day of week

Day Of Week	Fatal	Injury	Property Dmg. Only	Reported Collisions
MONDAY	2	785	1825	2612
TUESDAY	4	861	1894	2759
WEDNESDAY	4	842	1985	2831
THURSDAY	0	889	1825	2714
FRIDAY	1	919	2140	3060
SATURDAY	3	601	1503	2107
SUNDAY	4	457	1042	1503
TOTAL	18	5354	12214	17586

Figure 2.6 Total number of reported collisions by day of week

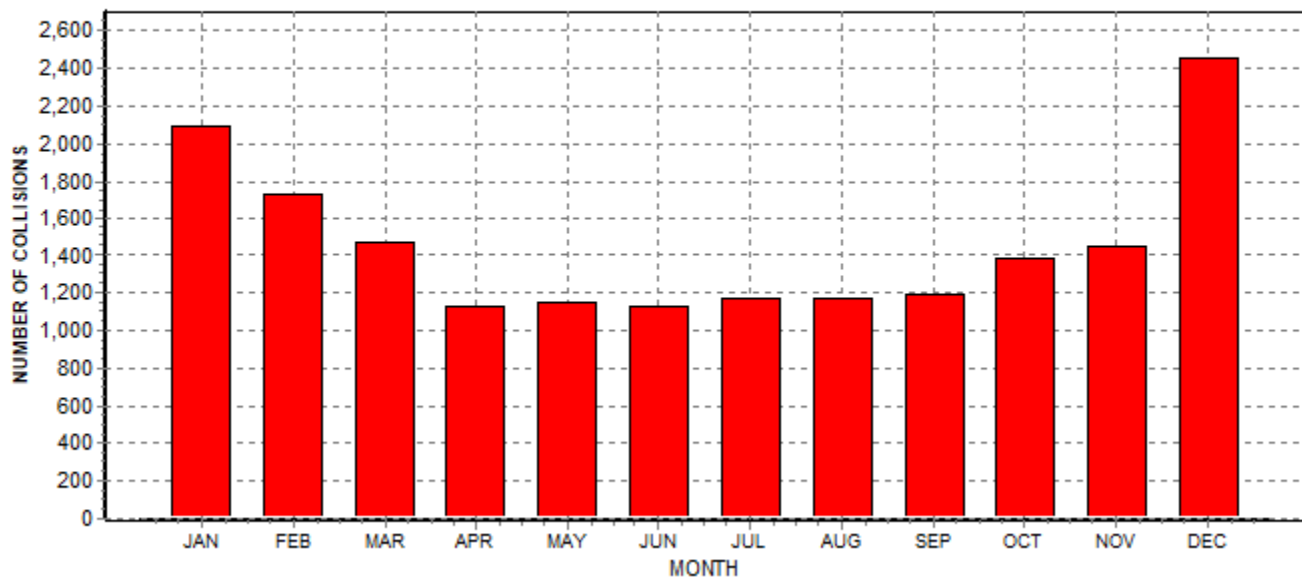


Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.7 Total number of reported collisions by severity and month of year

Month	Fatal	Injury	Property Dmg. Only	Reported Collisions
JANUARY	1	639	1450	2090
FEBRUARY	1	548	1185	1734
MARCH	0	431	1042	1473
APRIL	3	342	792	1137
MAY	2	379	773	1154
JUNE	0	331	804	1135
JULY	2	368	813	1183
AUGUST	2	377	805	1184
SEPTEMBER	2	386	808	1196
OCTOBER	2	459	933	1394
NOVEMBER	1	441	1009	1451
DECEMBER	2	653	1800	2455
TOTAL	18	5354	12214	17586

Figure 2.8 Total number of reported collisions by month of year

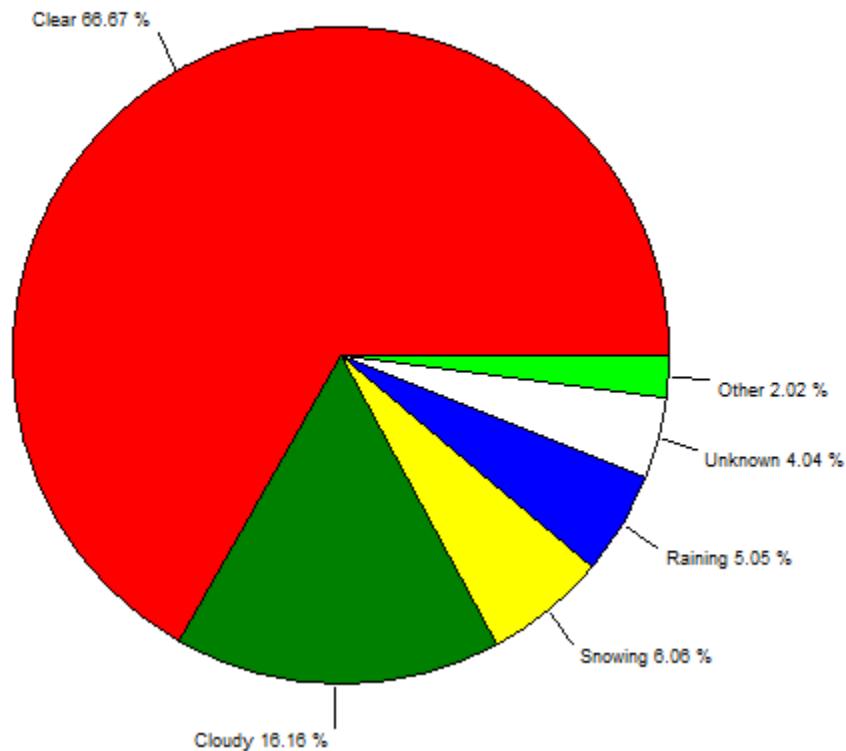


Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.9 Total number of reported collisions by severity and environment condition

Weather Condition	Fatal	Injury	Property Dmg. Only	Reported Collisions
Clear	14	3616	7983	11613
Cloudy	3	849	1972	2824
Drifting Snow	0	26	82	108
Fog or Mist	0	52	135	187
Freezing Rain / Sleet / Hail	0	10	37	47
Raining	1	284	632	917
Smoke or Dust	0	1	6	7
Snowing	0	299	828	1127
Strong Winds	0	9	42	51
Unknown	0	208	497	705
TOTAL	18	5354	12214	17586

Figure 2.10 Percentage of total number of reported collisions by environment condition



NOTE: Items less than 5% are combined into 'Other' category



Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.11 Total number of reported collisions by severity and road location

Road Location	Fatal	%	Injury	%	Damage	%	Collisions	%
Intersection	17	0.10	5123	29.13	11576	65.83	16716	95.05
Non-Intersection	1	0.01	231	1.31	638	3.63	870	4.95
TOTAL	18	0.10	5354	30.44	12214	69.45	17586	100.00



Analysis Period: 1 January 2016 - 31 December 2016

Figure 2.12 Total number of reported collisions by road surface condition

Road Surface Condition	Reported Collisions
Dry	9809
Fresh Oil	9
Ice	2880
Loose Sand/Gravel/Dirt	36
Mud	7
Slush	509
Snow	1621
Wet	2183
Unknown	532
TOTAL	17586



Analysis Period: 1 January 2016 - 31 December 2016

Figure 3.1 Total number of collision victims by age group and victim travel mode (fatal)

Victim Age	Motor Vehicle		Pedestrians	Cyclists	Motorcycle / Mopeds		Collision Victims	%
	Driver	Passenger			Driver	Passenger		
1 to 4	0	0	0	0	0	0	0	0.00
5 to 9	0	0	0	0	0	0	0	0.00
10 to 14	0	0	0	0	0	0	0	0.00
15 to 19	0	0	0	0	0	0	0	0.00
20 to 24	0	0	0	0	0	0	0	0.00
25 to 29	1	1	1	0	0	0	3	15.00
30 to 34	0	1	0	0	0	0	1	5.00
35 to 39	2	2	0	1	0	0	5	25.00
40 to 44	0	0	0	0	1	0	1	5.00
45 to 49	0	0	0	1	0	0	1	5.00
50 to 54	0	0	0	0	0	0	0	0.00
55 to 59	2	0	2	0	0	0	4	20.00
60 to 64	0	0	0	0	0	0	0	0.00
65 to 69	0	0	1	0	0	0	1	5.00
70 to 74	2	0	0	0	0	0	2	10.00
75+	0	1	0	1	0	0	2	10.00
Unknown	0	0	0	0	0	0	0	0.00
TOTAL	7	5	4	3	1	0	20	100.0 %



Analysis Period: 1 January 2016 - 31 December 2016

Figure 3.2 Total number of collision victims by age group and victim travel mode (injury)

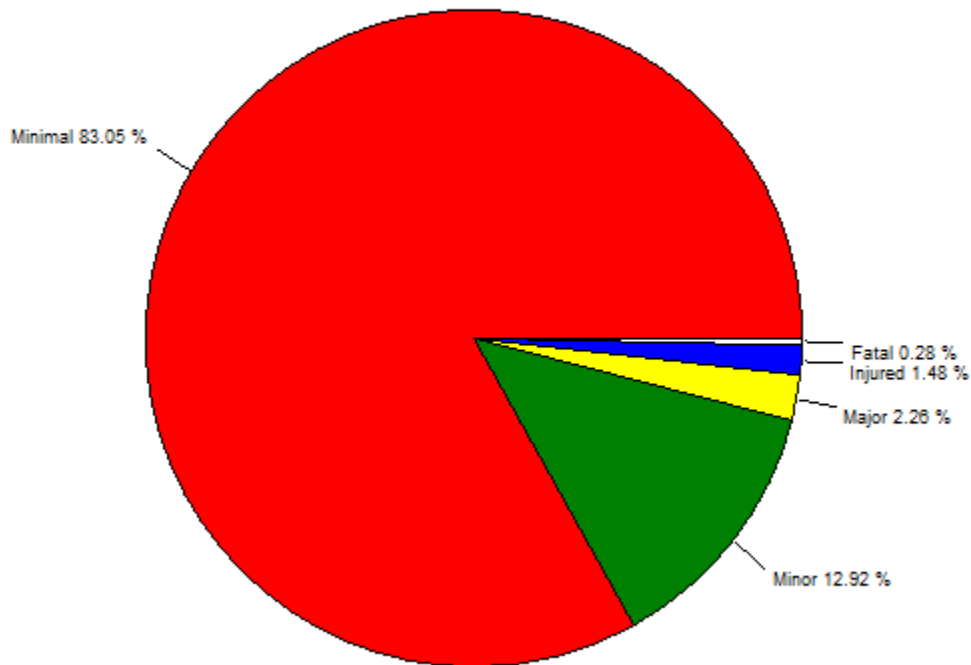
Victim Age	Motor Vehicle		Pedestrians	Cyclists	Motorcycle / Mopeds		Collision Victims	%
	Driver	Passenger			Driver	Passenger		
1 to 4	0	104	1	0	0	0	105	1.50
5 to 9	0	104	2	0	0	0	106	1.51
10 to 14	0	95	1	2	0	0	98	1.40
15 to 19	233	133	5	6	2	0	379	5.41
20 to 24	551	138	14	12	8	0	723	10.33
25 to 29	608	138	5	7	10	0	768	10.97
30 to 34	573	101	7	11	3	1	696	9.94
35 to 39	552	90	6	4	11	0	663	9.47
40 to 44	570	89	6	9	7	0	681	9.73
45 to 49	504	94	6	8	6	0	618	8.83
50 to 54	528	88	10	2	15	0	643	9.19
55 to 59	433	84	10	4	6	0	537	7.67
60 to 64	292	57	6	1	8	1	365	5.21
65 to 69	194	39	4	1	2	0	240	3.43
70 to 74	102	25	1	2	0	0	130	1.86
75+	110	59	2	1	0	0	172	2.46
Unknown	1	72	1	2	0	0	76	1.09
TOTAL	5251	1510	87	72	78	2	7000	100.0 %

Analysis Period: 1 January 2016 - 31 December 2016

Figure 3.3 Total number of collision victims by injury type and mode of travel

Injury Type	Motor Vehicle		Pedestrians	Cyclists	Collision Victims
	Driver	Passenger			
Fatal	8	5	4	3	20
Injured	62	18	12	12	104
Major	100	37	18	4	159
Minimal	4536	1236	29	29	5830
Minor	631	221	28	27	907
TOTAL	5337	1517	91	75	7020

Figure 3.4 Distribution of collision victims by injury type.

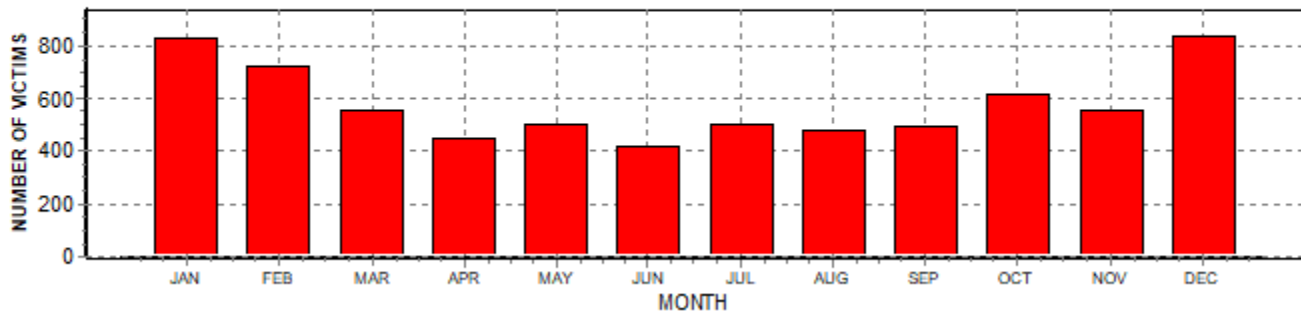


Analysis Period: 1 January 2016 - 31 December 2016

Figure 3.5 Total number of collision victims by month and injury type

Month	Fatal	Injury	Reported Victims
JANUARY	1	832	833
FEBRUARY	1	725	726
MARCH	0	558	558
APRIL	3	449	452
MAY	3	505	508
JUNE	0	421	421
JULY	2	505	507
AUGUST	2	480	482
SEPTEMBER	2	499	501
OCTOBER	3	622	625
NOVEMBER	1	562	563
DECEMBER	2	842	844
TOTAL	20	7000	7020

Figure 3.6 Total number of collision victims by month



Analysis Period: 1 January 2016 - 31 December 2016

Figure 4.1 Total number of vehicles by vehicle maneuver

Vehicle Maneuver	Number of vehicles	Percentage
Changing Lanes to Left	576	1.90
Changing Lanes to Right	639	2.11
Entering Parked Position / Stopped on Roadside	82	0.27
Going Straight Ahead	12666	41.80
Making U-Turn	105	0.35
Merging	348	1.15
Overtaking	22	0.07
Parked - Illegally	8	0.03
Parked - Legally	289	0.95
Reversing	357	1.18
Slowing / Stopping in Traffic	1739	5.74
Starting from Parked Position / Leaving Roadside	212	0.70
Starting in Traffic	878	2.90
Stopped in Traffic	6430	21.22
Swerving	203	0.67
Turning Left	2586	8.53
Turning Right	986	3.25
Unknown	2177	7.18
TOTAL	30303	100.0 %

Analysis Period: 1 January 2016 - 31 December 2016

Figure 4.2 Total number of vehicles by vehicle type

Vehicle Type	Number of vehicles	Percentage
Ambulance	4	0.01
Automobile	23376	77.14
Bicycle	163	0.54
Bus (Other)	19	0.06
Fire	27	0.09
Inter-City Bus	7	0.02
Mini-Van/Multi-Purpose Van	2148	7.09
Moped	10	0.03
Motocycle/Scooter	100	0.33
Motorhome	11	0.04
Paratransit Bus	5	0.02
Pick-Up Under 4500 kg	3498	11.54
Power Unit for Semi-Trailer	118	0.39
School Bus	19	0.06
Transit Bus (Urban)	69	0.23
Truck (Other)	39	0.13
Truck Over 4500 kg (Unit Chassis)	380	1.25
Van Under 4500 kg	308	1.02
Unknown	2	0.01
TOTAL	30303	100.0 %



Analysis Period: 1 January 2016 - 31 December 2016

Figure 5.1 Number of Motorized Vehicles Colliding with Cyclists by Maneuver and Age of Vehicle Drivers

Driver Maneuver	I	F	TL	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	unk	
				to	to	to	to	to	to	to	to	to	to	to	to	to	to	to		to
				4	9	14	19	24	29	34	39	44	49	54	59	64	69	74	75+	
Changing Lanes to Left	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Changing Lanes to Right	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
Going Straight Ahead	2	0	51	0	0	0	10	4	7	6	3	7	1	3	2	2	3	3	0	0
Making U-Turn	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Reversing	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Slowing / Stopping in Traffic	0	0	3	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0
Starting from Parked Position / Leaving	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Starting in Traffic	0	0	4	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0
Stopped in Traffic	0	0	5	0	0	0	0	1	1	0	0	0	0	1	1	0	0	1	0	0
Turning Left	1	0	11	0	0	0	0	2	2	2	2	0	2	0	0	0	1	0	0	0
Turning Right	0	0	21	0	0	0	1	1	2	1	4	2	2	4	2	0	1	0	1	0
Unknown	0	0	44	0	0	0	7	2	0	0	0	2	0	0	0	0	0	1	1	31
TOTAL	3	0	146	0	0	0	21	14	14	10	9	13	5	9	6	2	5	5	2	31

I = Injured
F = Fatal
TL = Total

unk=Unknown



Analysis Period: 1 January 2016 - 31 December 2016

Figure 5.2 Number of Cyclists by Maneuver and Age

Driver Maneuver	I	F	TL	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	unk	
				to	to	to	to	to	to	to	to	to	to	to	to	to	to	to		to
				4	9	14	19	24	29	34	39	44	49	54	59	64	69	74	75+	
Changing Lanes to Left	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Going Straight Ahead	53	2	60	0	0	2	5	8	6	7	2	9	5	1	3	1	1	2	1	7
Parked - Legally	1	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Starting from Parked Position / Leaving	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Starting in Traffic	2	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
Stopped in Traffic	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Turning Left	2	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Turning Right	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Unknown	10	1	93	0	0	0	0	1	1	3	2	0	3	0	1	0	0	0	0	82
TOTAL	72	3	163	0	0	2	6	12	7	11	5	9	9	2	4	1	1	2	2	90

I = Injured
F = Fatal
TL = Total

unk=Unknown



Analysis Period: 1 January 2016 - 31 December 2016

Figure 5.3 Number of Motorized Vehicles Colliding with Pedestrians by Maneuver and Age of Vehicle Drivers

Driver Maneuver	I	F	TL	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	unk	
				to	to	to	to	to	to	to	to	to	to	to	to	to	to	to		to
				4	9	14	19	24	29	34	39	44	49	54	59	64	69	74	75+	
Going Straight Ahead	2	0	27	0	0	0	8	1	2	1	5	0	1	1	1	2	1	0	4	0
Reversing	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Slowing / Stopping in Traffic	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Starting in Traffic	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Stopped in Traffic	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Swerving	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Turning Left	0	0	16	0	0	0	5	2	0	0	0	0	1	2	4	0	0	1	1	0
Turning Right	0	0	7	0	0	0	0	0	2	1	1	0	0	0	0	1	1	1	0	0
Unknown	1	0	38	0	0	0	2	2	0	0	0	0	1	0	1	1	0	2	0	29
TOTAL	3	0	93	0	0	0	17	6	4	2	6	0	3	3	6	4	4	4	5	29

I = Injured
F = Fatal
TL = Total

unk=Unknown



Analysis Period: 1 January 2016 - 31 December 2016

Figure 5.4 Number of Pedestrians by Pedestrian Action and Age

Pedestrian Action	I	F	TL	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	unk	
				to	to	to	to	to	to	to	to	to	to	to	to	to	to	to		to
				4	9	14	19	24	29	34	39	44	49	54	59	64	69	74	75+	
At Intersection, Crossing With Right-Of-Way	38	0	39	0	0	0	1	7	3	2	4	3	3	7	2	3	1	0	1	2
At Intersection, Crossing Without Right-Of-Way	3	0	3	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
At Intersection, Crossing, No Traffic Control	2	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Between Intersections, Crossing Roadway	9	0	9	0	0	0	2	0	0	2	0	0	1	1	2	0	0	0	1	0
On Sidewalk / Median / Safety Zone	2	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Walking on Roadway (Travelled Portion)	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Coming from Behind Vehicle / Object on Roadside	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Running Into Roadway	2	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	30	3	34	0	1	1	2	4	3	2	2	2	2	2	5	3	4	0	0	1
TOTAL	87	4	93	1	2	1	5	14	6	7	6	6	6	10	12	6	5	1	2	3

I = Injured
F = Fatal
TL = Total

unk=Unknown

Analysis Period: 1 January 2016 - 31 December 2016

Figure 5.5 Number of Pedestrians Involved in Collisions by Injury Type and Age

Pedestrian Age	Fatal	Injured	Total
1 to 4	0	1	1
5 to 9	0	2	2
10 to 14	0	1	1
15 to 19	0	5	5
20 to 24	0	14	14
25 to 29	1	5	6
30 to 34	0	7	7
35 to 39	0	6	6
40 to 44	0	6	6
45 to 49	0	6	6
50 to 54	0	10	10
55 to 59	2	10	12
60 to 64	0	6	6
65 to 69	1	4	5
70 to 74	0	1	1
75+	0	2	2
Unknown	0	1	3
TOTAL	4	87	93