



2019 Road Safety Report

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Transportation Planning Services Division
Planning & Building Services

Office of the Commissioner of
Economic Development & Innovation



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1. Introduction

Background

This annual report provides statistical data on all reported collisions on roads under the jurisdiction of the City of Windsor. The intent of this report is to provide factual information to agencies and individuals involved in road safety in the City in order to provide a sound basis for road-safety related decisions, as well as to provide a source of data to allow the evaluation of the performance of ongoing safety-related programs, policies, and strategies.

Changes in Report Format

The Vision Zero Policy was adopted by Council in February, 2020. The report format has been modified from previous versions to reflect Vision Zero principles and the work carried out to date under the Vision Zero Policy. In particular, a greater emphasis has been placed on fatal and major injury collisions.

The Municipal Benchmarking Network Canada (formerly the Ontario Municipal Benchmarking Initiative) no longer tracks winter weather collisions. For this reason, the section *Winter Weather Collisions*, included in previous versions of this report, is no longer included.

Injury Terminology

As this report is based on information obtained from MVA (motor vehicle accident) reports, descriptions of injury severity in this report use the same system as is used for MVA reports province-wide:

- **Fatal:** victim died of their injuries within 30 days of the collision
- **Major:** victim was admitted to hospital for treatment of their injuries (and was not classified as fatal)
- **Minor:** victim was treated in a hospital emergency department for their injuries (and was not classified as fatal or major injury)
- **Minimal:** victim received any other injuries not included in the above categories, including first aid on scene, treatment by family doctor or walk-in clinic, complaints of pain, etc.

Limitations and Disclaimer

This report is based on collision data provided by the Windsor Police Service from MVA (motor vehicle accident) reports. For this reason, the analysis and conclusions in this report are based on reported

collisions only, including both self-reported collisions and collisions investigated by police at the scene. **Unreported collisions are not reflected in the analysis.**

Only collisions that involve at least one motor vehicle (as defined by the Highway Traffic Act) are reflected in the data that forms the basis of this report. Because of this limitation, the following collision types are not reflected in this report:

- Single vehicle collisions involving a bicycle, e-bike or scooter,
- Collisions between bicycles, e-bikes, or scooters that do not involve a motor vehicle, and
- Collisions between pedestrians and bicycles, e-bikes or scooters.

This report examines only collisions on roads under the jurisdiction of the City of Windsor. Collisions on roads under provincial jurisdiction (e.g. King’s Highways) or privately-owned roads (e.g. the Ambassador Bridge) have not been examined for this report.

As this report reflects only collision data provided by the Windsor Police Service, it does not include collisions that were investigated by or reported to other police services (e.g. collisions on boundary roads where LaSalle Police or the Ontario Provincial Police responded).

Certain vehicles, including bicycles, e-bikes and e-scooters, are not considered motor vehicles under the Highway Traffic Act. As such, collisions involving these vehicles are not included in the source data for this report unless the collision also involved at least one motor vehicle.

“Traffic collisions frequently involve complex interactions between human behaviour, vehicle characteristics, and environmental conditions. The factor or factors responsible for causing a collision are not always the most obvious nor are they always readily apparent. Caution should be exercised in drawing conclusions from the statistics presented in this report and conclusions should be drawn only with appropriate qualifications and supportive information.” (Regional Municipality of Waterloo, 2012)

Population Projections

A number of statistics in this report are given on a per capita (or per 1,000 or 100,000 population) basis. To translate numbers of collisions, injuries, fatalities, etc. to per capita values, an estimate of the City of Windsor population is required.

Population estimates were provided by the City of Windsor Planning Department. The population values used for the remainder of this report are given in Table 1.

Table 1: City of Windsor Population Estimates

Year	Population	Source
2006	216,473	Census
2007	215,357	Estimate
2008	214,240	Estimate
2009	213,124	Estimate
2010	212,007	Estimate
2011	210,891	Census
2012	214,024	Estimate
2013	214,895	Estimate
2014	215,819	Estimate
2015	216,768	Estimate
2016	217,195	Census
2017	218,645	Estimate
2018	223,491	Estimate
2019	224,533	Estimate

Road Network Changes

In December 2010, a number of road sections (primarily along Huron Church Road and the E. C. Row Expressway) were transferred from the City of Windsor to the Province of Ontario.

As noted in *Background*, above, this report considers only collisions on roads under the jurisdiction of the City of Windsor. With the transfer of these road sections to the Province, these road sections are reflected in statistics for years through 2010, but not in statistics given in this report for 2011 and beyond.

The effect of this change on overall statistics given is considered minor; there were 42 collisions on these transferred sections in 2013, which represent 1.1% of the total number of collisions in that year.

2. Trends

Annual Totals

City-wide collision totals by year, broken down by collision classification, are summarized in Table 2 and Figure 1. From 2018 to 2019, the annual number of collisions increased by 0.1%.

Table 2: Number of Collisions by Year - City-wide

Year	Collisions			Total
	Fatality	Non-Fatal Injury	Property Damage Only	
2006	7	1,014	3,349	4,370
2007	4	868	3,653	4,525
2008	7	850	3,382	4,239
2009	3	810	2,783	3,596
2010	2	965	2,941	3,908
2011	3	824	2,821	3,648
2012	7	892	2,747	3,646
2013	4	934	2,893	3,831
2014	2	913	3,006	3,921
2015	6	1,179	3,107	4,292
2016	3	1,274	2,961	4,238
2017	5	1,422	3,060	4,487
2018	7	1,415	3,109	4,531
2019	6	1,362	3,168	4,536

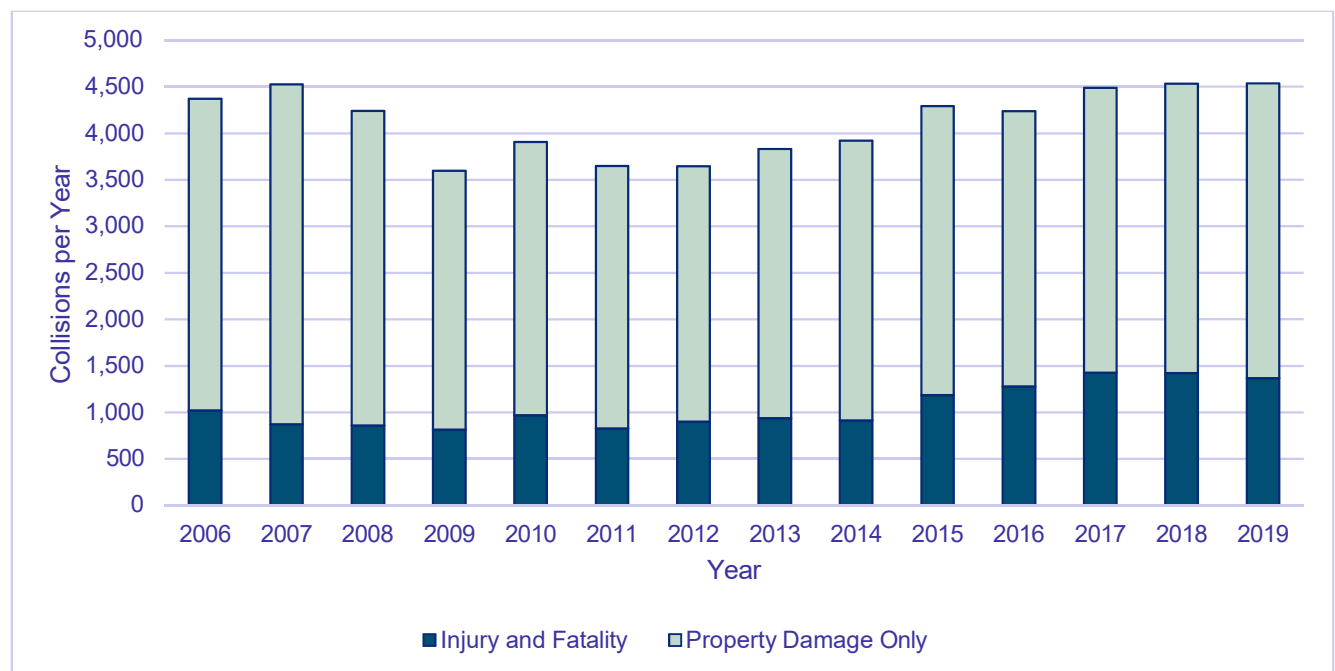


Figure 1: Number of Collisions per Year

City-wide totals for fatalities and major injuries are summarized in Table 3 and Figure 2. From 2018 to 2019, the number of fatalities and major injuries increased by 12%. However, it should be noted that in 2018, the total number of fatalities and major injuries dropped sharply compared to 2017 and previous years; the 2019 total (38 fatalities and major injuries) is close to the 2015-2019 five-year average (37.2 fatalities and major injuries per year).

Table 3: Fatalities and Major Injuries by Year

Year	Fatalities	Major Injuries	Total
2006	6	23	29
2007	6	27	33
2008	6	17	23
2009	3	19	22
2010	2	16	18
2011	3	13	16
2012	7	27	34
2013	4	34	38
2014	2	32	34
2015	6	33	39
2016	3	36	39
2017	5	32	37
2018	7	27	34
2019	6	31	37

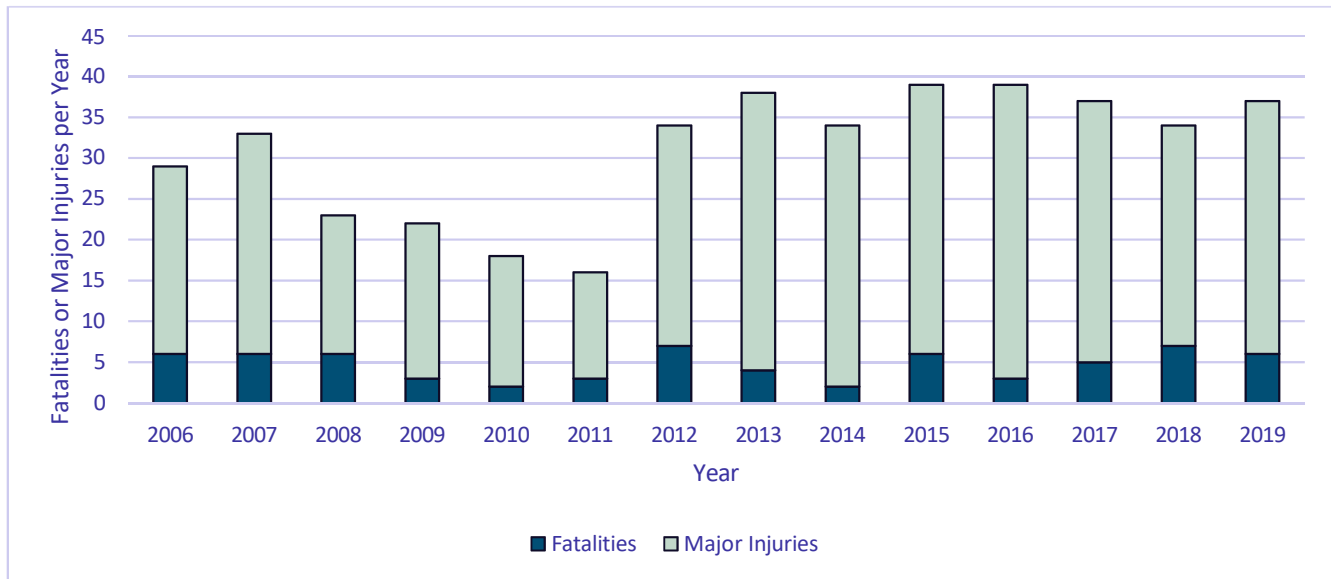


Figure 2: Fatalities and Major Injuries per Year

Injuries and Fatalities per Capita

Rates for collision injuries and fatalities relative to the City of Windsor population are given in Table 4 and Figure 3. Based on 5-year (2015-2019) averages, Windsor’s non-fatal injury rate (7.91 per 1,000

population) is higher than the provincial average (3.70 per 1,000 population) and Windsor’s fatality rate (2.45 per 100,000 population) is lower than the provincial average (4.08 per 100,000 population).

Table 4: Injury and Fatality Rates Relative to Population

Year	Population	Non-Fatal Injuries	Persons Injured per 1,000 population	Fatalities	Fatalities per 100,000 population
2006	216,473	1,382	6.38	6	2.77
2007	215,357	1,128	5.24	6	2.79
2008	214,240	1,123	5.24	6	2.80
2009	213,124	1,066	5.00	3	1.41
2010	212,007	1,209	5.70	2	0.94
2011	210,891	1,022	4.85	3	1.42
2012	214,024	1,149	5.37	7	3.27
2013	214,895	1,202	5.59	4	1.86
2014	215,819	1,210	5.61	2	0.93
2015	216,768	1,590	7.34	6	2.77
2016	217,195	1,695	7.80	3	1.38
2017	218,645	1,890	8.64	5	2.29
2018	223,491	1,678	7.51	7	3.13
2019	224,533	1,854	8.26	6	2.67
5-year average - 2015 to 2019			7.91		2.45

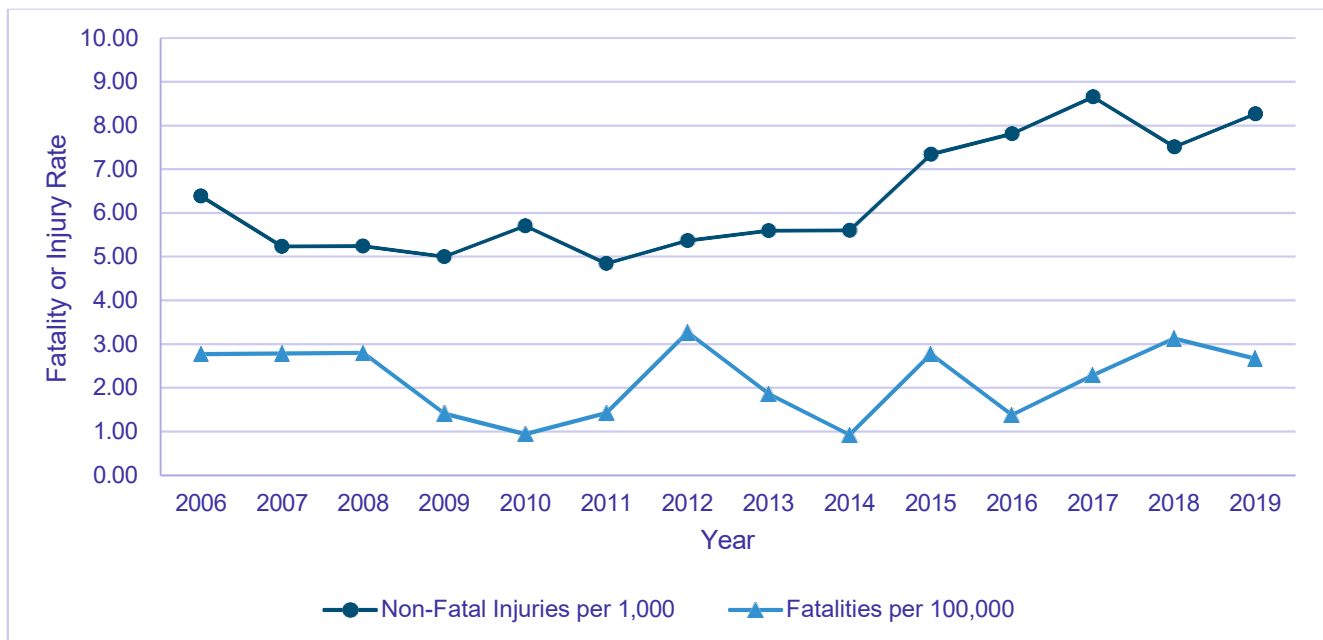


Figure 3: Injury and Fatality Rates Relative to Population

Annual, Weekly and Daily Variation

Annual Variation by Month

The variation in collisions and fatal and major injuries over the year is summarized in Table 5 and Figure 4. Summer months (June through September) experienced higher than average numbers of fatalities and major injuries, while the highest number of collisions occurred in January and October.

Table 5: Variation by Month – 2019

Month	Fatal and Major Injuries			Collisions (All Severities)		
	Injuries	% of Year	% of Average Month	Collisions	% of Year	% of Average Month
January	3	8.1%	97%	459	10.1%	121%
February	2	5.4%	65%	332	7.3%	88%
March	2	5.4%	65%	395	8.7%	104%
April	3	8.1%	97%	305	6.7%	81%
May	2	5.4%	65%	371	8.2%	98%
June	9	24.3%	292%	385	8.5%	102%
July	5	13.5%	162%	338	7.5%	89%
August	4	10.8%	130%	387	8.5%	102%
September	4	10.8%	130%	391	8.6%	103%
October	2	5.4%	65%	431	9.5%	114%
November	1	2.7%	32%	401	8.8%	106%
December	0	0.0%	0%	341	7.5%	90%
Total	37			4,536		

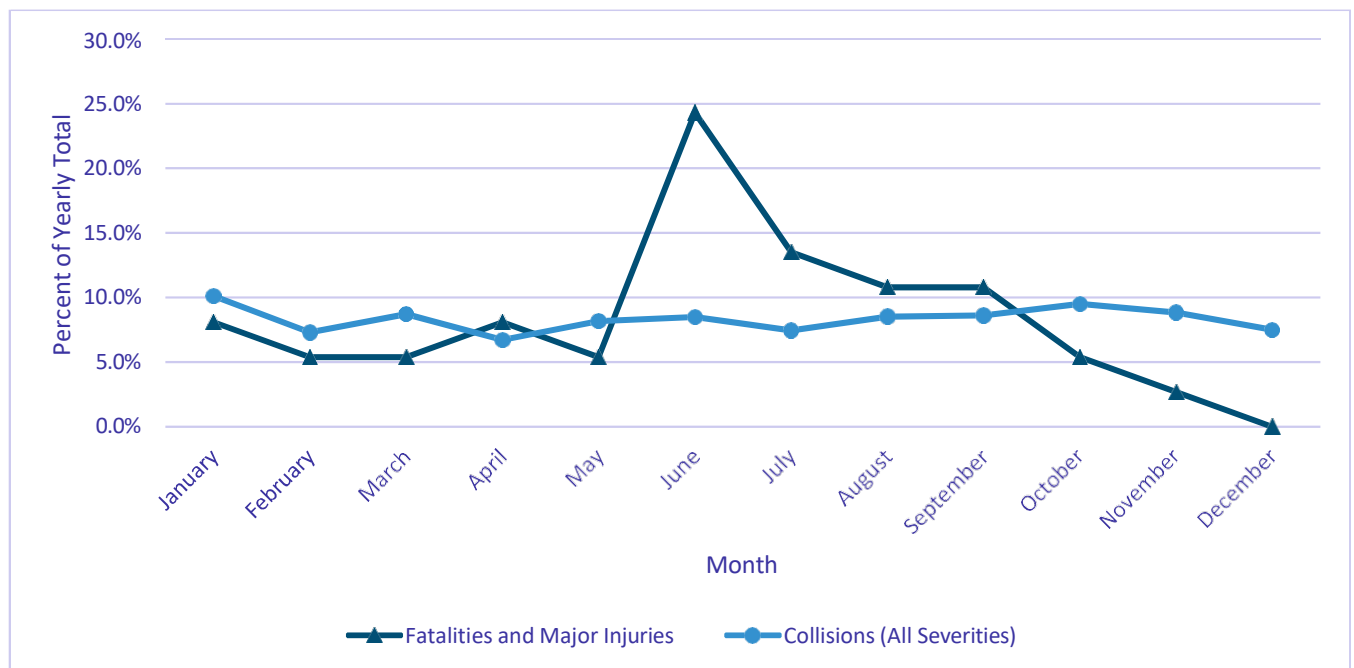


Figure 4: Variation by Month – 2019

Weekly Variation by Day

The variation in collisions and fatal and major injuries over the average week is summarized in Table 6 and Figure 5. Overall, fatalities and major injuries were highest on Sunday, while total collisions were above average Monday through Friday.

Table 6: Variation by Day of Week – 2019

Day of Week	Fatal and Major Injuries			Collisions (All Severities)		
	Injuries	% of Week	% of Average Day	Collisions	% of Week	% of Average Day
Sunday	6	16.2%	114%	437	9.6%	67%
Monday	5	13.5%	95%	658	14.5%	102%
Tuesday	6	16.2%	114%	730	16.1%	113%
Wednesday	6	16.2%	114%	692	15.3%	107%
Thursday	5	13.5%	95%	768	16.9%	119%
Friday	5	13.5%	95%	708	15.6%	109%
Saturday	4	10.8%	76%	543	12.0%	84%
Total	37			4,536		

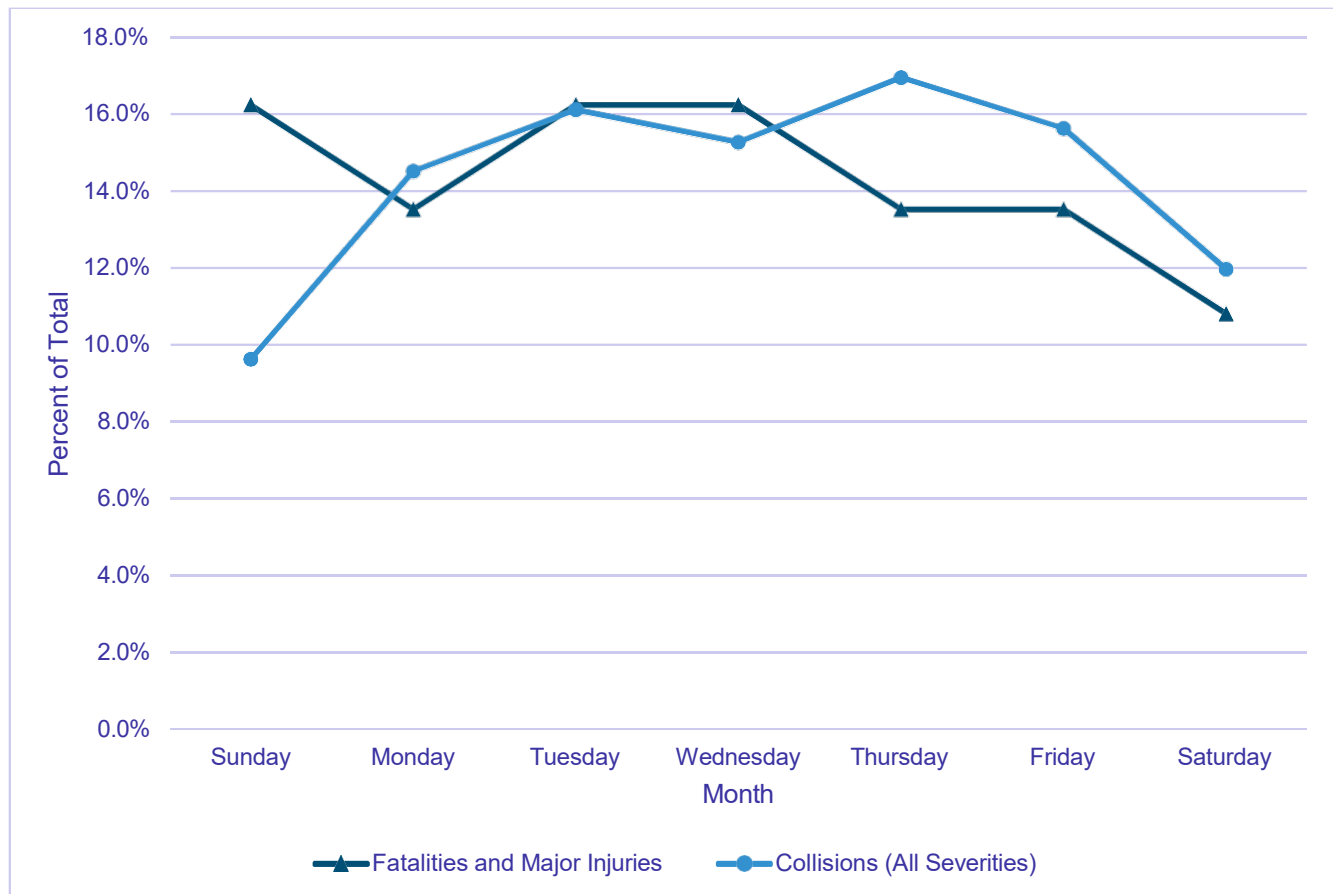


Figure 5: Variation by Day of Week – 2019

Daily Variation by Hour

The variation in collisions and fatal and major injuries over the average week is summarized in Table 7 and Figure 6. Overall, for total collisions, the number of collisions generally followed traffic volume patterns, with peaks in collisions during the AM peak period, midday peak period, and PM peak period, with the PM peak period experiencing the highest hourly collision frequency.

Trends were less apparent for fatalities and major injuries. For the most part, fatalities and major injuries followed a similar pattern to total collisions (and to traffic volume patterns), though fatalities and major injuries did not decrease to the same degree during evening hours (19:00 – 21:00) and early morning (01:00 – 05:00).

Table 7: Variation by Hour of Day – 2019

Hour Beginning	Fatal and Major Injuries			Collisions (All Severities)		
	Injuries	% of Day	% of Average Hour	Collisions	% of Day	% of Average Hour
0:00	0	0.0%	0%	117	2.6%	62%
1:00	0	0.0%	0%	52	1.1%	28%
2:00	2	5.4%	130%	53	1.2%	28%
3:00	1	2.7%	65%	24	0.5%	13%
4:00	1	2.7%	65%	17	0.4%	9%
5:00	0	0.0%	0%	22	0.5%	12%
6:00	0	0.0%	0%	82	1.8%	43%
7:00	1	2.7%	65%	145	3.2%	77%
8:00	3	8.1%	195%	221	4.9%	117%
9:00	0	0.0%	0%	211	4.7%	112%
10:00	1	2.7%	65%	186	4.1%	98%
11:00	2	5.4%	130%	242	5.3%	128%
12:00	2	5.4%	130%	332	7.3%	176%
13:00	1	2.7%	65%	282	6.2%	149%
14:00	6	16.2%	389%	329	7.3%	174%
15:00	4	10.8%	259%	444	9.8%	235%
16:00	1	2.7%	65%	411	9.1%	217%
17:00	2	5.4%	130%	382	8.4%	202%
18:00	1	2.7%	65%	246	5.4%	130%
19:00	3	8.1%	195%	201	4.4%	106%
20:00	3	8.1%	195%	131	2.9%	69%
21:00	1	2.7%	65%	131	2.9%	69%
22:00	1	2.7%	65%	140	3.1%	74%
23:00	1	2.7%	65%	135	3.0%	71%
Total	37			4,536		

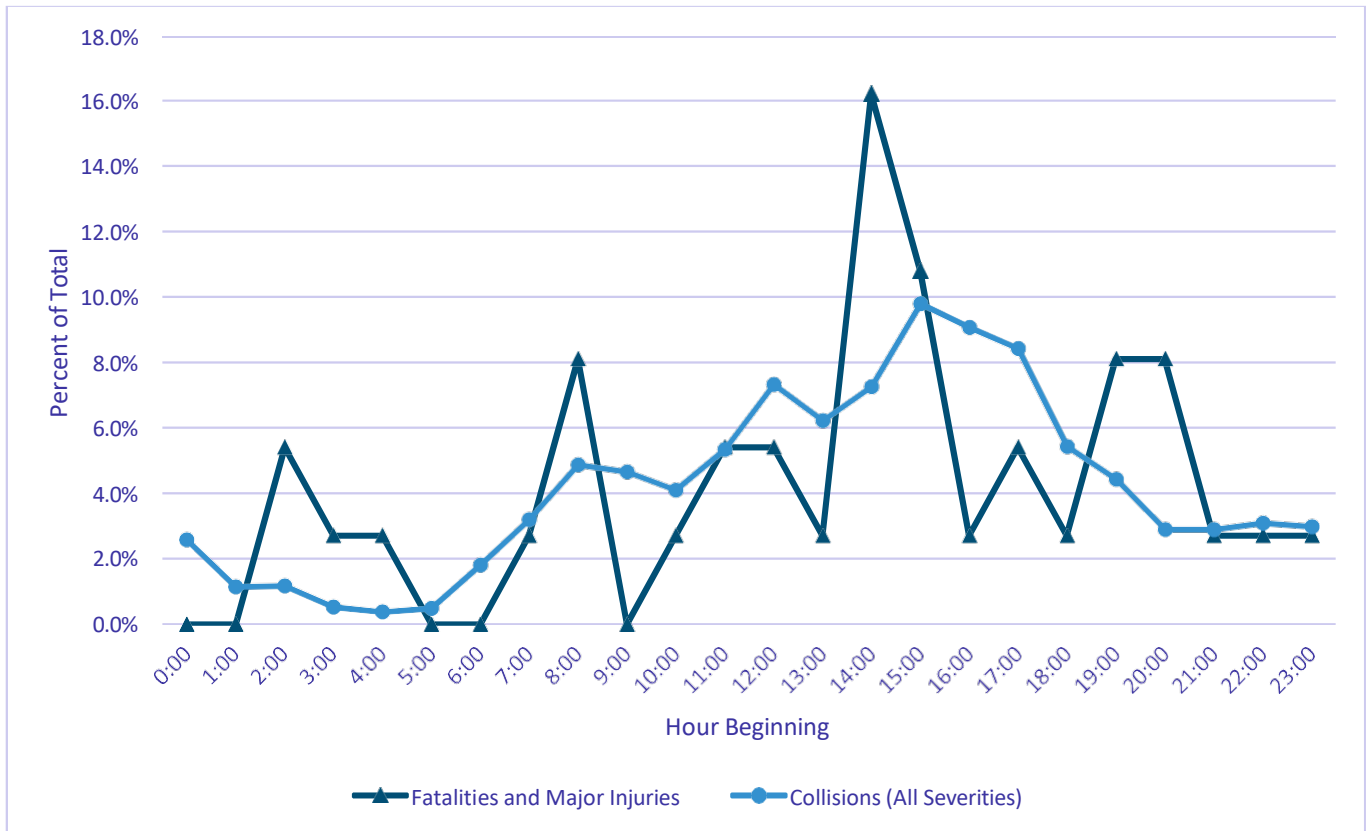


Figure 6: Variation by Hour of Day – 2019

Windsor in Context

The Ontario Ministry of Transportation publishes the Ontario Road Safety Annual Report each year, which provides province-wide road safety statistics. As of the date of this report, the full 2018 Ontario Road Safety Report has been published; a limited amount of preliminary data has been published for 2019 and 2020.

Comparisons between Windsor and Ontario are provided in Table 8. Provincial statistics are based on information provided in the *Preliminary 2019 Ontario Road Safety Annual Report Selected Statistics* except when the information is not available in the 2019 preliminary statistics; in these cases, information provided in the *2018 Ontario Road Safety Annual Report* has been used.

Table 8: Comparison - Windsor vs. Ontario

Category	Measure	Windsor (2019)	Ontario (2019 except as noted)
Overall	Persons killed per 100,000 people	2.45	3.95
	Persons injured per 1,000 people	7.91	3.19
Vulnerable Road Users	Pedestrian fatalities and major injuries (% of all fatalities and major injuries)	20%	25%
	Cyclist fatalities and major injuries (% of all fatalities and major injuries) [Note 1]	9%	6%
	Motorcyclist fatalities and major injuries (% of all fatalities and major injuries) [Note 2]	16%	11%
Driver Condition	Inattentive (% of all drivers in collisions)	10.4%	10.3% [Note 3]
	Alcohol-related [Note 4] (% of all drivers in collisions)	0.75%	1.13% [Note 3]

Notes:

1. "Cyclist" includes bicycle passengers. This category includes conventional bicycles and e-bikes.
2. "Motorcyclist" includes motorcycle passengers. This category includes motorcycles and mopeds.
3. Ontario value is for 2018 (2019 information not yet available).
4. Alcohol-related driver conditions include "had been drinking," "ability impaired – alcohol" and "ability impaired – alcohol over 0.08."

3. Characteristics of Collisions

Impact Type

Initial impact type for 2019 collisions is summarized in Table 9 and Figure 7. The largest category for fatalities and major injuries was “single motor vehicle – other” (43%). Of this group, half were pedestrian collisions (8 of 16 injuries). The largest category for collisions overall was rear end (32%).

Table 9: 2019 Initial Impact Type

Impact Type	Fatalities and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Unknown	0	0%	1	0%
Approaching ("Head-on")	0	0%	47	1%
Angle ("T-bone")	4	11%	602	13%
Rear End	5	14%	1,449	32%
Sideswipe	2	5%	539	12%
Turning Movement	8	22%	923	20%
SMV Unattended Vehicle	2	5%	390	9%
SMV Other	16	43%	412	9%
Other	0	0%	173	4%
Total	37		4,536	



Figure 7: 2019 Initial Impact Type

4. People in Collisions

Fatalities and Major Injuries

Fatal and major injuries are summarized in Table 10 and Figure 8 by involved person category. For the 5 most recent years of data, motor vehicle occupants made up 54% of fatalities and major injuries. Vulnerable road users (pedestrians, cyclists and motorcyclists) made up 46% of fatalities and major injuries. The number of fatalities and major injuries in 2019 (37) was slightly lower than the 5-year average (37.2).

Table 10: Fatalities and Major Injuries by Involved Person Category

Year	Fatalities and Major Injuries						Total
	Pedestrian	Cyclist [Note 1]	Motorcyclist [Note 2]	Motor Vehicle Driver	Motor Vehicle Passenger	Hanger-on [Note 3]	
2006	7	4	3	11	4	0	29
2007	9	3	2	11	8	0	33
2008	7	0	2	9	5	0	23
2009	10	3	1	4	4	0	22
2010	5	2	2	7	2	0	18
2011	3	0	4	6	3	0	16
2012	7	4	7	13	3	0	34
2013	10	4	7	11	6	0	38
2014	7	5	1	16	4	1	34
2015	10	5	9	12	3	0	39
2016	9	4	7	13	5	1	39
2017	7	2	6	18	4	0	37
2018	10	2	5	10	7	0	34
2019	2	4	3	16	12	0	37
5-year average (2015- 2019)	7.6 20%	3.4 9%	6 16%	13.8 37%	6.2 17%	0.2 1%	37.2

Notes:

1. "Cyclist" includes bicycle passengers. This category includes conventional bicycles and e-bikes.
2. "Motorcyclist" includes motorcycle passengers. This category includes motorcycles and mopeds.
3. "Hanger-on": a person hanging off of or being pulled by a motor vehicle.

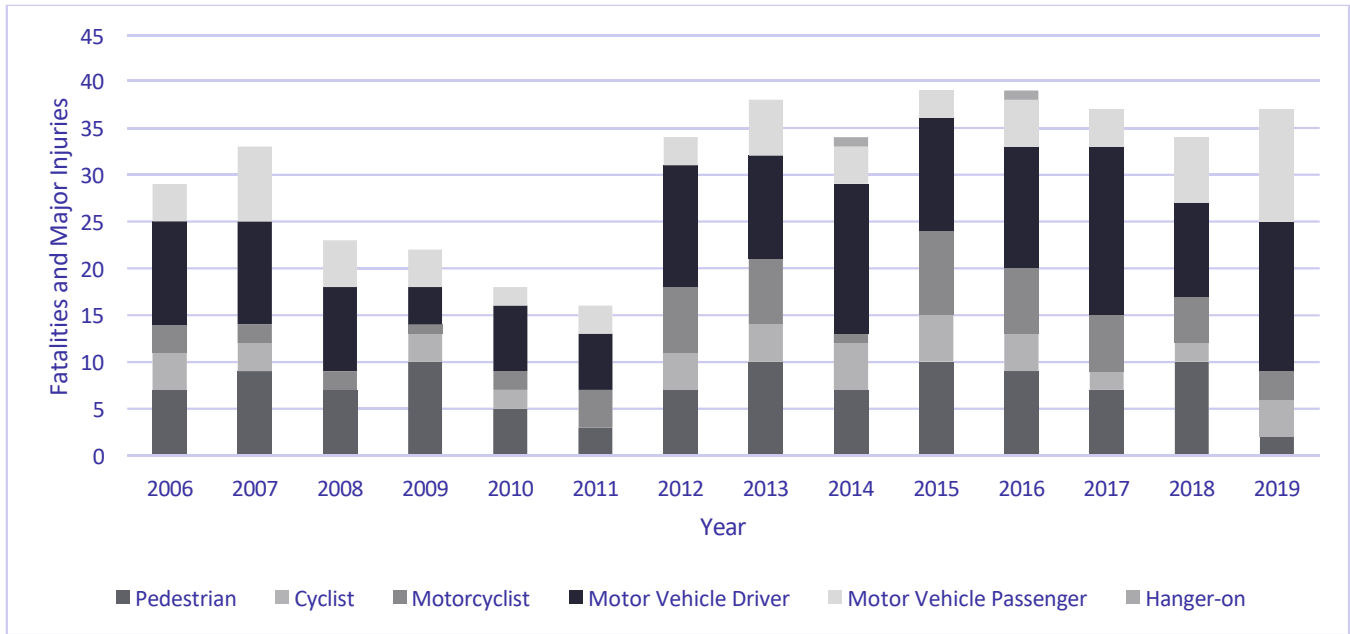


Figure 8: Fatalities and Major Injuries by Involved Person Category

Drivers

Driver Actions

Driver actions in collisions are summarized in Table 11 and Figure 9. The most common driver action – where known – was “failed to yield right-of-way” for collisions overall and “lost control” for fatal and major injury collisions.

Table 11: Driver Actions in Collisions – 2019

Apparent Driver Action	Fatal and Major Injury Collisions		Collisions of all Severity	
	Drivers	% of Total	Drivers	% of Total
Unknown	0	0%	1,423	15%
Driving properly	27	46%	4,490	46%
Following too close	4	7%	790	8%
Exceeding speed limit	3	5%	17	0%
Speed too fast for condition	2	3%	91	1%
Speed too slow	0	0%	0	0%
Improper turn	4	7%	167	2%
Disobeyed traffic control	2	3%	289	3%
Failed to yield right-of-way	5	8%	863	9%
Improper passing	0	0%	83	1%
Lost control	7	12%	452	5%
Wrong way on one-way road	0	0%	7	0%
Improper lane change	1	2%	227	2%
Other	4	7%	909	9%
Total	59		9,808	

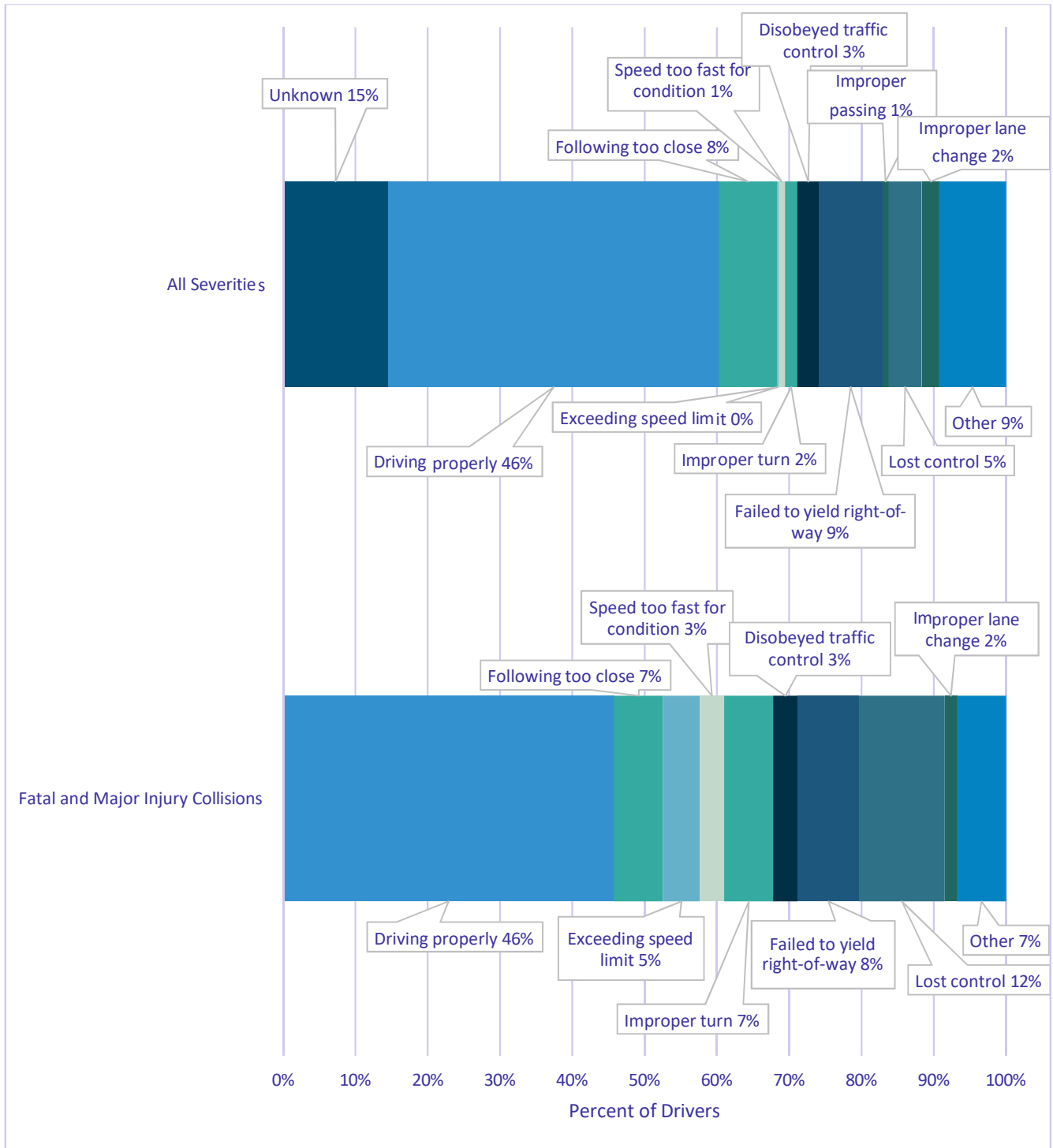


Figure 9: Driver Actions in Collisions – 2019

Driver Conditions

Table 12: Driver Conditions in Collisions – 2019

Driver Condition	Fatal and Major Injury Collisions		All Severities	
	Drivers	% of Total	Drivers	% of Total
Unknown or no info	9	15%	1,961	20%
Normal	43	73%	6,709	68%
Had been drinking	1	2%	24	0%
Ability impaired, alcohol (over 0.08)	1	2%	28	0%
Ability impaired, alcohol	0	0%	22	0%
Ability impaired, drugs	1	2%	6	0%
Fatigue	0	0%	9	0%
Medical or physical disability	2	3%	19	0%
Inattentive	2	3%	1,017	10%
Other	0	0%	13	0%
Total	59		9,808	

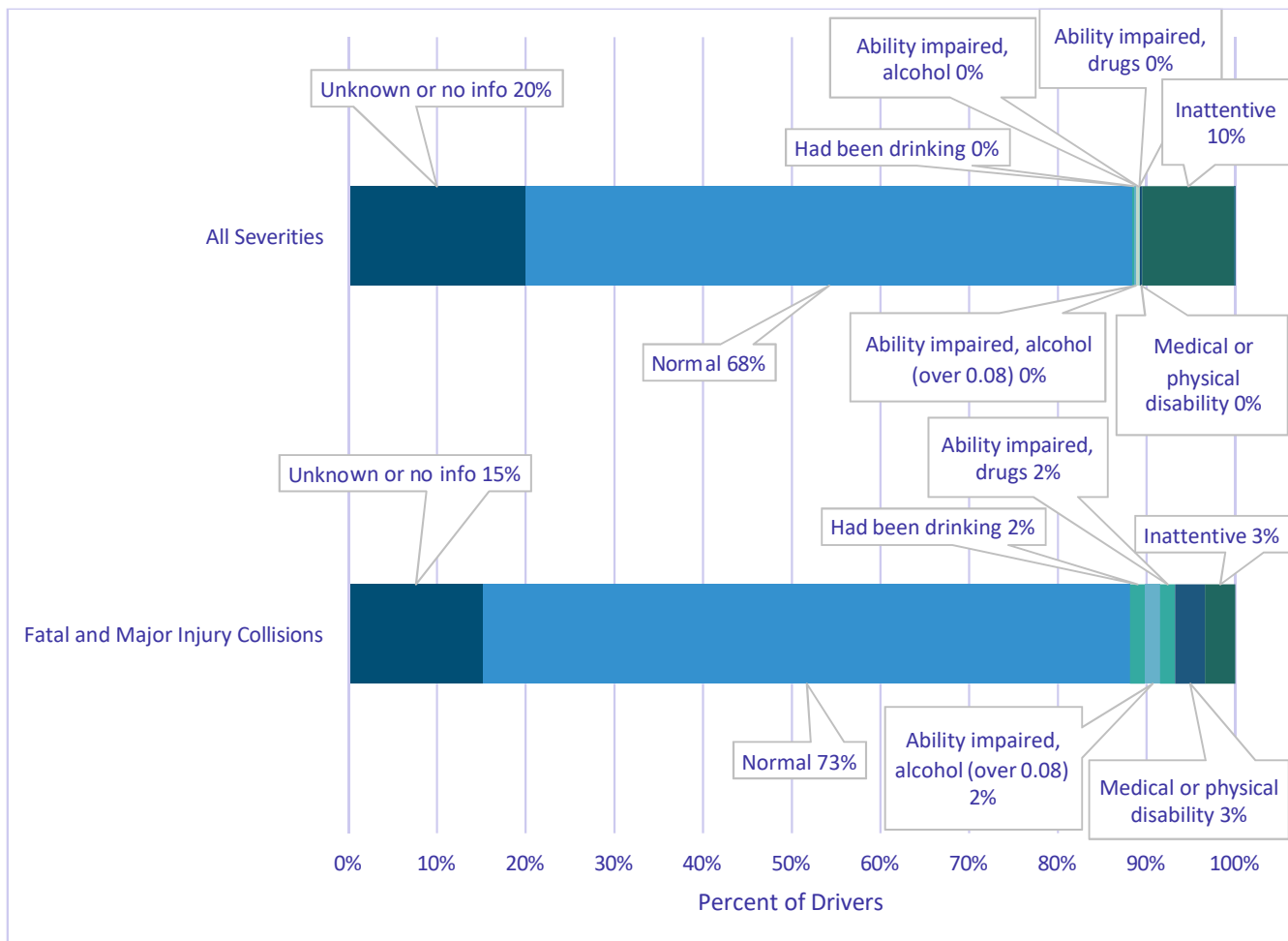


Figure 10: Driver Conditions in Collisions – 2019

Cyclists

Cyclist collisions are summarized by classification and year in Table 13 and Figure 11. In 2019, there were 107 collisions involving cyclists; this represents an increase of 51% from 2018 and 30% from the 2015-2019 average.

Table 13: Cyclist Collisions by Classification

Year	Fatality	Non-Fatal Injury	Property Damage Only	Total
2006	0	98	10	108
2007	0	88	12	100
2008	0	91	16	107
2009	0	75	14	89
2010	0	94	11	105
2011	0	91	12	103
2012	1	77	18	96
2013	0	100	20	120
2014	0	71	12	83
2015	1	71	18	90
2016	0	67	11	78
2017	0	53	13	66
2018	1	56	14	71
2019	1	82	24	107
2015-2019 Average	0.6	65.8	16	82.4

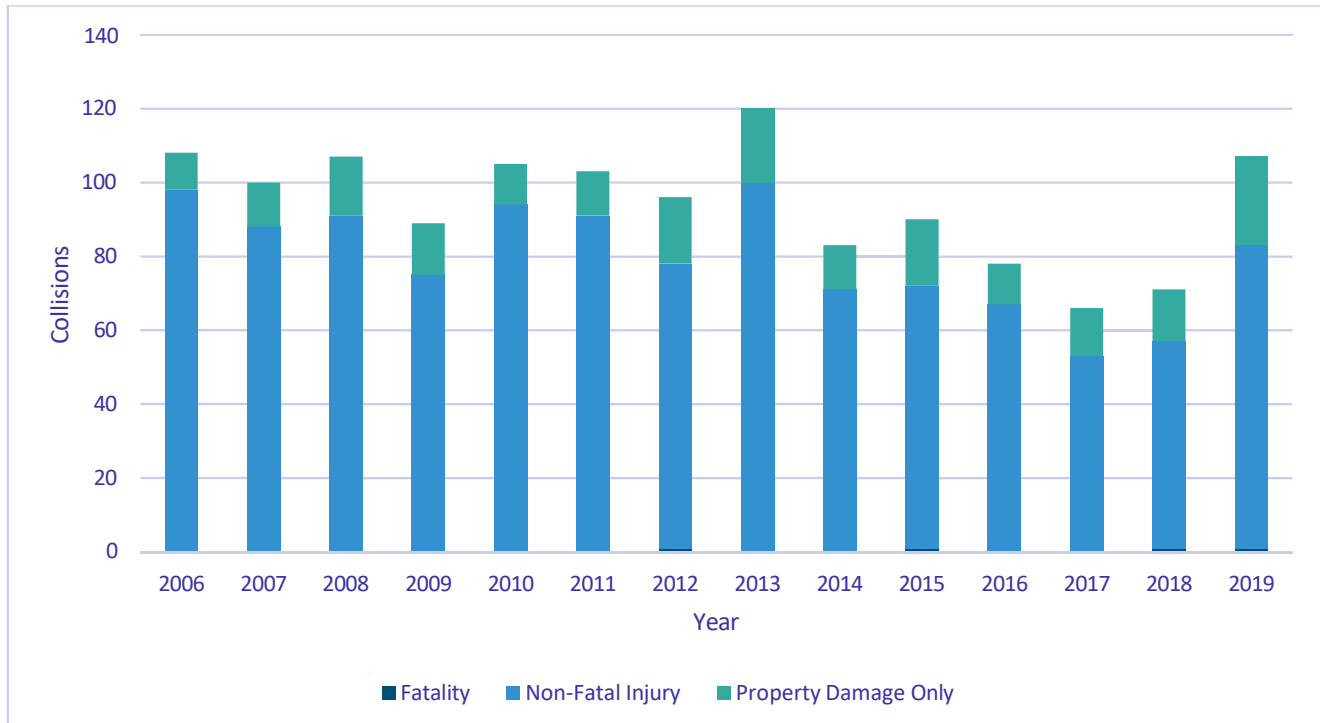


Figure 11: Cyclist Collisions by Classification

Cyclist Actions

Cyclist actions in cyclist collisions are given in Table 14 and Figure 12. Every fatal and major injury cyclist collision had a different cyclist action. The most common cyclist action in collisions overall was “other.”

Table 14: Cyclist Actions in Cyclist Collisions – 2019

Cyclist Action	Fatal and Major Injury Collisions		All Severities	
	Cyclists	%	Cyclists	%
Driving properly	1	25%	27	25%
Following too close	1	25%	5	5%
Exceeding speed limit	0	0%	1	1%
Speed too fast for condition	0	0%	3	3%
Improper turn	0	0%	9	8%
Disobeyed traffic control	0	0%	14	13%
Failed to yield right-of-way	1	25%	14	13%
Improper passing	1	25%	9	8%
Wrong way on one way road	0	0%	2	2%
Other	1	25%	23	21%
Total	4		107	

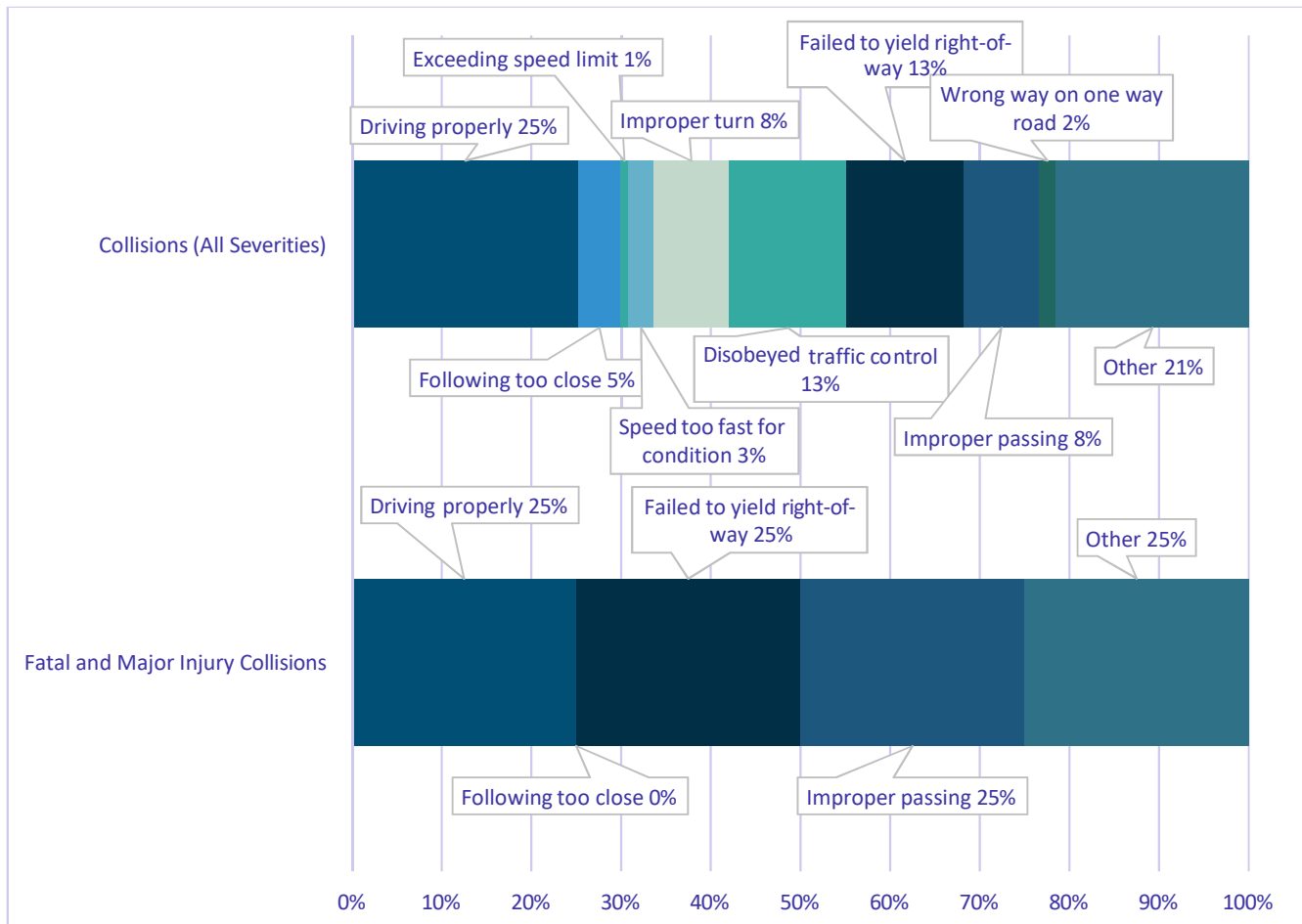


Figure 12: Cyclist Actions in Cyclist Collisions – 2019

Driver Actions in Cyclist Collisions

Driver actions in cyclist collisions are given in Table 15 and Figure 13. The most common driver action was “driving properly.”

Table 15: Driver Actions in Cyclist Collisions – 2019

Driver Action	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Drivers	%	Drivers	%
Unknown or no info	0	0%	1	1%
Driving properly	3	75%	41	38%
Following too close	0	0%	5	5%
Exceeding speed limit	0	0%	1	1%
Speed too fast for condition	0	0%	3	3%
Improper turn	0	0%	17	16%
Disobeyed traffic control	0	0%	8	7%
Failed to yield right-of-way	1	25%	13	12%
Improper passing	0	0%	2	2%
Lost control	0	0%	7	7%
Other	0	0%	9	8%
Total	4		107	

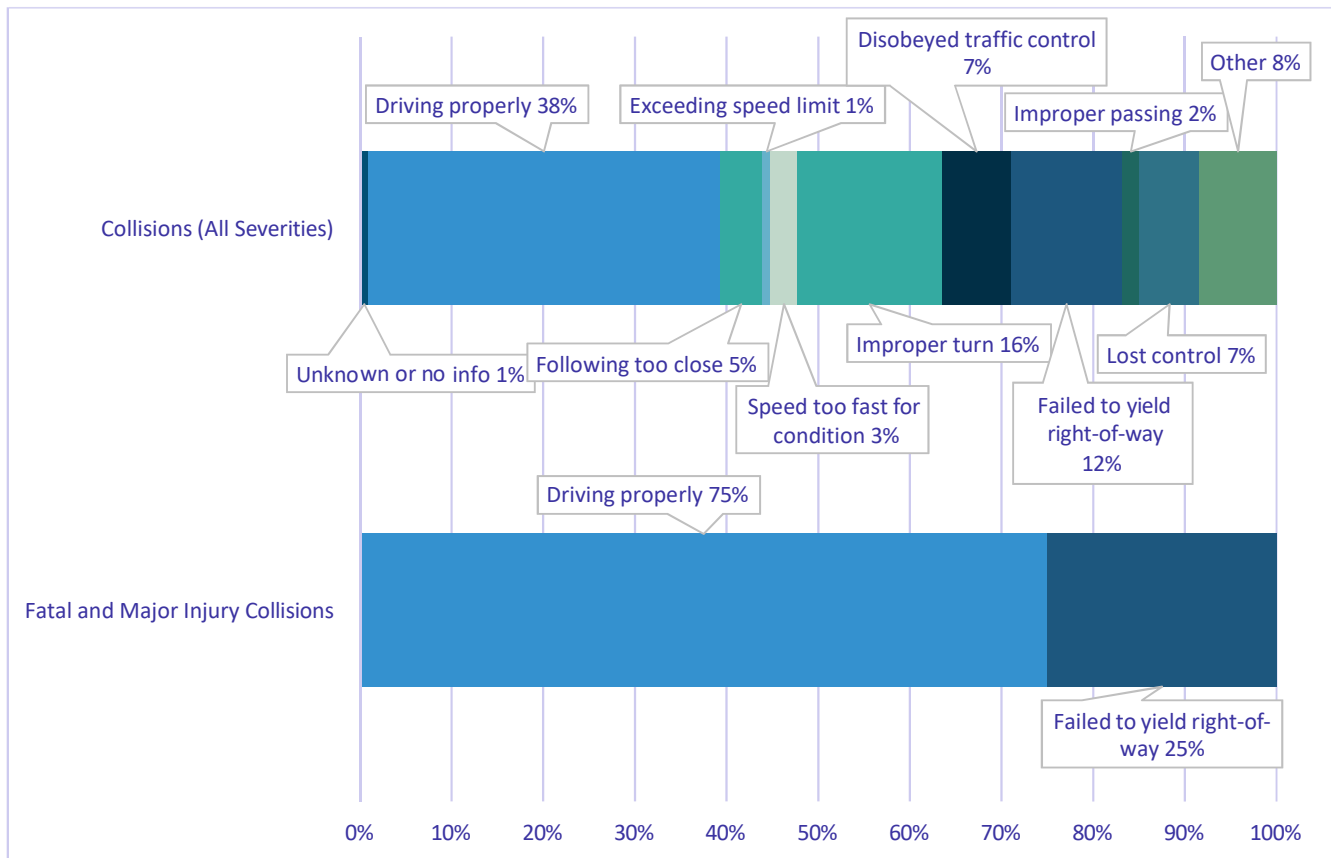


Figure 13: Driver Actions in Cyclist Collisions – 2019

Cyclist Conditions

Cyclist conditions are provided in Table 16 and Figure 14. The most common cyclist condition, both for fatal and major collisions as well as collisions overall, was “normal.”

Table 16: Cyclist Condition – 2019

Cyclist Condition	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Cyclists	%	Cyclists	%
Unknown or no info	0	0%	1	1%
Normal	3	75%	81	76%
Ability impaired, alcohol (over 0.08)	0	0%	2	2%
Medical or physical disability	0	0%	3	3%
Inattentive	1	25%	20	19%
Total	4		107	

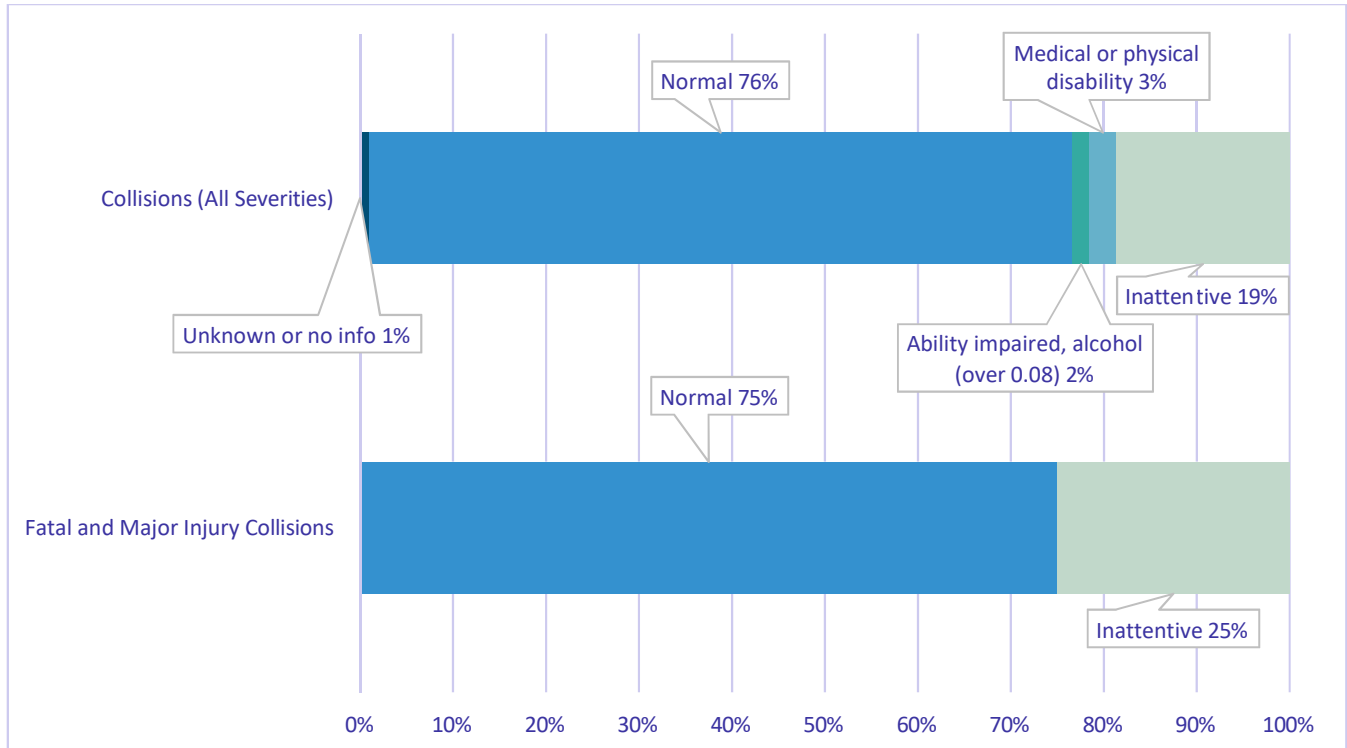


Figure 14: Cyclist Condition – 2019

Locations of Cyclist Collisions

Locations that experienced at least one fatal or major injury cyclist collision over the 2015-2019 period are summarized in Table 17 and Table 18.

Locations that experienced at least three cyclist collisions – of any severity – over the 2015-2019 period are summarized in Table 19 and Table 20.

Table 17: Intersection Cyclist Collision Locations (Fatal and Major Injury) – 2015 to 2019

Rank	Compkey	Description	Control	Fatalities and Major Injuries – Cyclist Collisions 2015-2019
1	286715	Wear St @ Dougall Ave	Unsignalized	2
2	288671	Jefferson Blvd @ North Service Rd E & Quality Way	Signalized	1
2	287084	Erie St W @ Dougall Ave	Unsignalized	1
2	287320	Hanna St W @ Church St	Unsignalized	1
2	287553	St Julien Ave @ Walker Rd	Unsignalized	1
2	286826	Riverside Dr W @ Ouellette Ave & Riverside Dr E	Signalized	1
2	286985	Wyandotte St E @ Marentette Ave	Unsignalized	1
2	286698	Tecumseh Rd E @ Parent Ave	Signalized	1
2	285170	College Ave @ Elm Ave	Unsignalized	1
2	284937	Huron Church Rd @ Tecumseh Rd W	Signalized	1

Table 18: Midblock Cyclist Collision Locations (Fatal and Major Injury) – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Fatalities and Major Injuries – Cyclist Collisions 2015-2019
1	171317	Rhodes Dr	Electricity Dr	Pillette Rd	Class 1 Collector	1
1	169639	Tecumseh Rd E	Parent Ave	Langlois Ave	Class 2 Arterial	1
1	161404	E C Row E/B On Ramp	Howard Ave	E C Row Expy E/B	Expressway	1
1	165225	Janette Ave	Park St W	Wyandotte St W	Class 1 Collector	1
1	164301	Wyandotte St E	Marentette Ave	Parent Ave	Class 2 Arterial	1
1	127744	Sandwich St	Detroit St	Mill St	Class 2 Arterial	1
1	128112	Walker Rd	Ontario St	Ottawa St	Class 2 Arterial	1
1	128206	Wyandotte St W	Ouellette Ave	Pelissier St	Class 2 Arterial	1

Table 19: Intersection Cyclist Collision Locations (All Severities) – 2015 to 2019

Rank	Compkey	Location	Control	Cyclist Collisions (All Severities) 2015-2019
1	288803	Wyandotte St E @ Lauzon Rd	Signalized	4

2	290448	Tecumseh Rd E @ East Park Dr	Signalized	3
2	289240	Lauzon Pky @ Tecumseh Rd E	Signalized	3
2	287621	Wyandotte St E @ Drouillard Rd	Signalized	3
2	286698	Tecumseh Rd E @ Parent Ave	Signalized	3
2	286972	Wyandotte St W @ Pelissier St	Signalized	3
2	285136	Wyandotte St W @ Crawford Ave	Signalized	3
2	284934	Huron Church Rd @ College Ave	Signalized	3
9	<i>Tie (31 locations)</i>			2
40	<i>Tie (183 locations)</i>			1

Table 20: Midblock Cyclist Collision Locations (All Severities) – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Cyclist Collisions (All Severities) 2015-2019
1	292626	Tecumseh Rd E	Serbian Centre Access Road	East Park Dr	Class 2 Arterial	4
2	171317	Rhodes Dr	Electricity Dr	Pillette Rd	Class 1 Collector	3
2	167107	Tecumseh Rd W	South Pacific Ave	Municipal Lane	Class 2 Arterial	3
2	164300	Wyandotte St E	Louis Ave	Marentette Ave	Class 2 Arterial	3
5	<i>Tie (9 locations)</i>					2
14	<i>Tie (110 locations)</i>					1

Helmet Use

Cyclist safety equipment use is summarized in Table 21 and Figure 15. For fatal and major injury collisions, 75% of cyclists were not wearing helmets.

For cyclist collisions overall, information on cyclist helmet use was unavailable in the majority of cases. In 68% of cyclist collisions, cyclist safety equipment use was coded as “use unknown” (i.e. the investigating officer was unable to determine whether a helmet or other safety equipment was used) or no information was provided (i.e. on the MVA report for the collision, the “safety equipment used” field for the cyclist was blank).

Table 21: Cyclist Safety Equipment Use – 2019

Safety Equipment Used	Fatal and Major Injury Collisions		All Collisions	
	Cyclists	%	Cyclists	%
Use unknown	0	0%	25	23%
Helmet	1	25%	6	6%
Equipment not used but available	1	25%	10	9%
No equipment available	2	50%	18	17%
No information	0	50%	48	45%
Total	4		107	

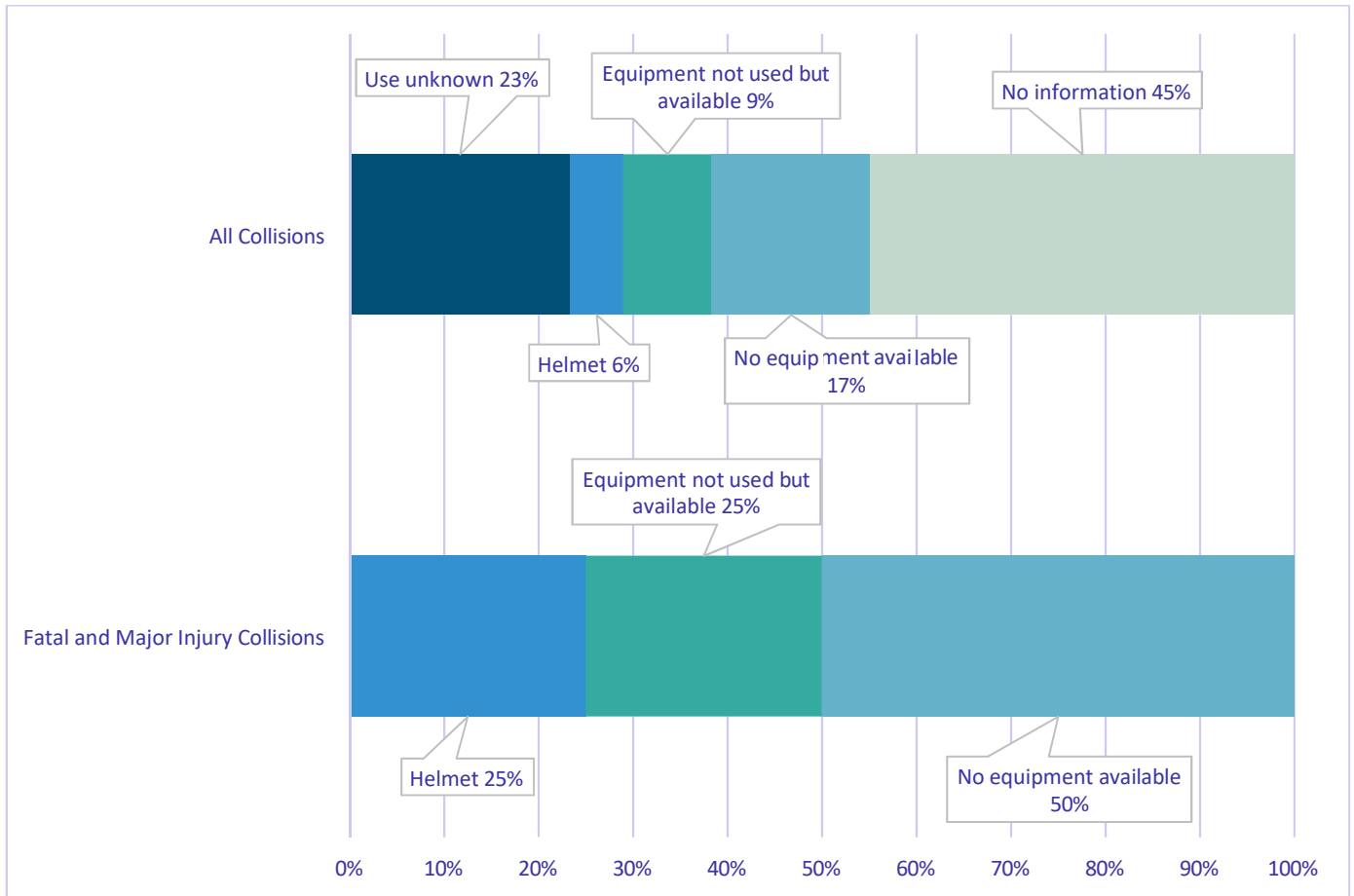


Figure 15: Cyclist Safety Equipment Use – 2019

Pedestrians

Pedestrian collisions are summarized by classification and year in Table 13 and Figure 11. In 2019, there were 87 collisions involving pedestrians; this represents an increase of 5% from 2018 and 6% from the 2015-2019 average.

Table 22: Pedestrian Collisions by Classification

Year	Fatality	Non-Fatal Injury	Property Damage Only	Total
2006	2	78	7	87
2007	1	78	6	85
2008	1	84	3	88
2009	2	65	9	76
2010	0	84	7	91
2011	1	74	6	81
2012	1	82	5	88
2013	2	77	2	81
2014	1	83	6	90
2015	0	90	4	94
2016	2	69	1	72
2017	1	82	6	89
2018	2	82	4	88
2019	0	86	6	92
2015-2019 Average	1	81.8	4.2	87

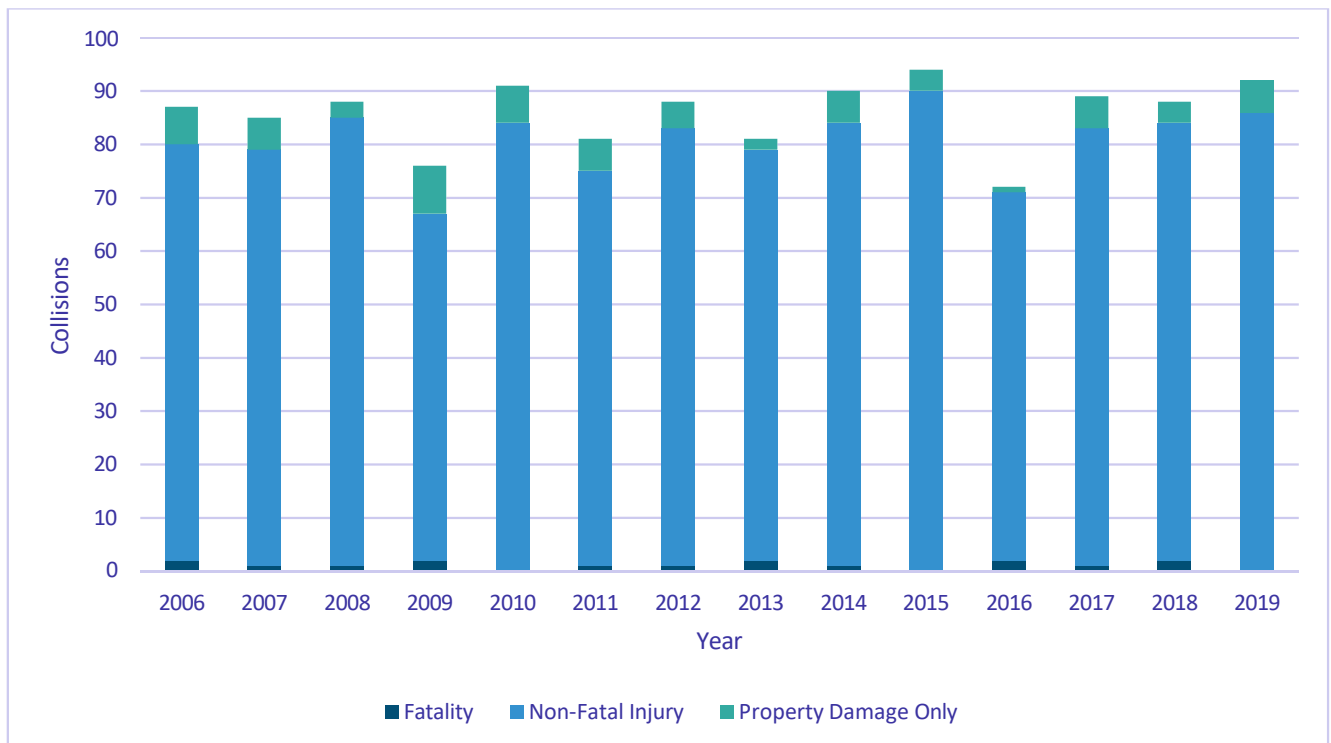


Figure 16: Pedestrian Collisions by Classification

Pedestrian Actions

Pedestrian actions in collisions are summarized in Table 23 and Figure 17. For fatal and major injury collisions, the most common pedestrian action was crossing without right-of-way. For collisions overall, the most common pedestrian action was crossing with right-of-way.

Table 23: Pedestrian Actions – 2019

Pedestrian Action	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Pedestrians	%	Pedestrians	%
Unknown or no info	0	0%	3	3%
Crossing with right-of-way	2	25%	48	52%
Crossing without right-of-way	4	50%	17	18%
Crossing - no traffic control	2	25%	4	4%
Crossing - pedestrian crossover	0	0%	5	5%
Crossing marked crosswalk without right-of-way	0	0%	1	1%
Walking on roadway with traffic	0	0%	5	5%
Walking on roadway against traffic	0	0%	1	1%
On sidewalk or shoulder	0	0%	3	3%
Running onto roadway	0	0%	4	4%
Other	0	0%	1	1%
Total	8		92	

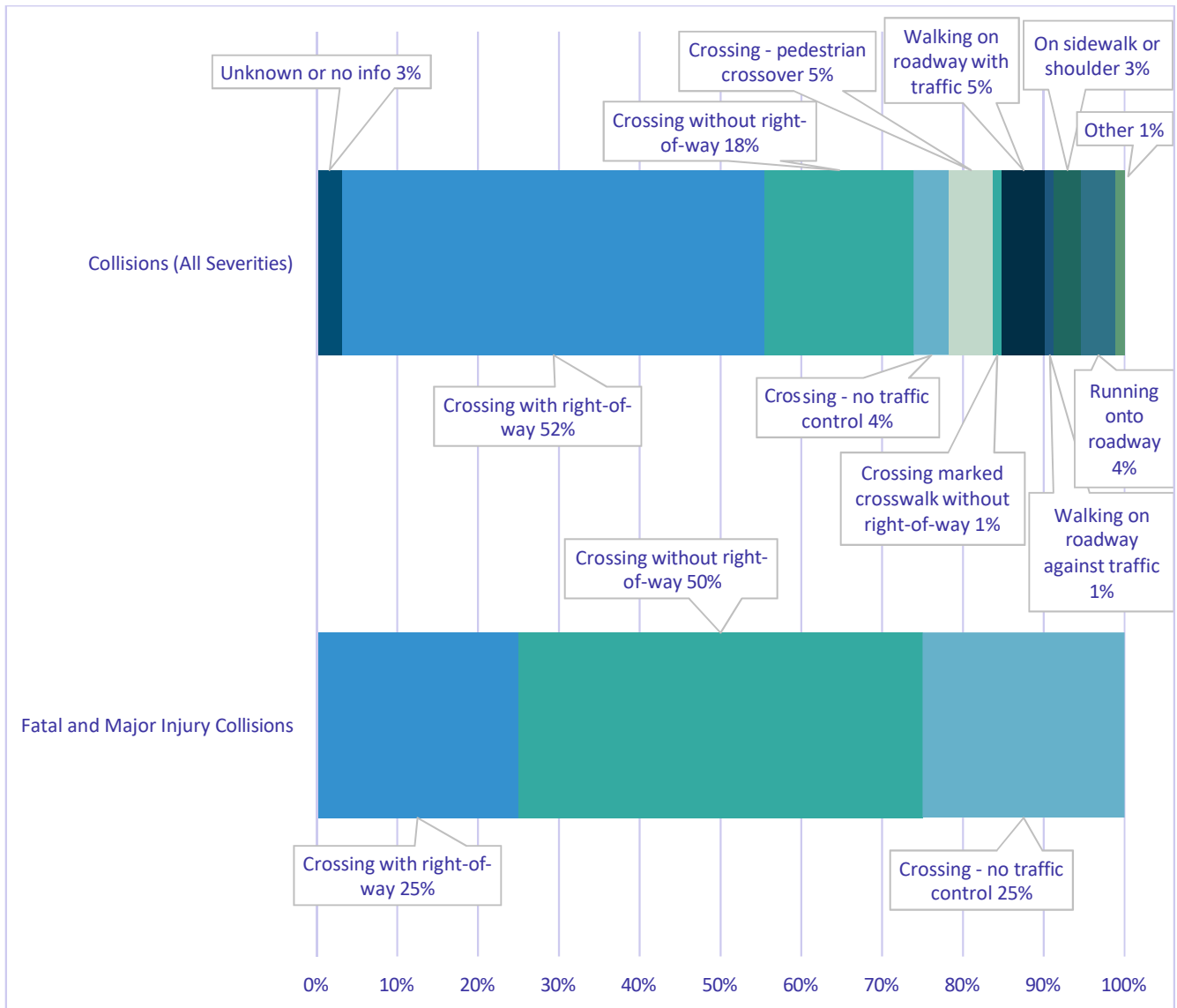


Figure 17: Pedestrian Actions – 2019

Driver Actions in Pedestrian Collisions

Driver actions in pedestrian collisions are summarized in Table 24 and Figure 18. For fatal and major injury pedestrian collisions, the most common driver action was “driving properly.” For pedestrian collisions overall, the most common driver action was “failed to yield right-of-way.”

Table 24: Driver Actions in Pedestrian Collisions – 2019

Driver Action	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Drivers	%	Drivers	%
Unknown or no info	0	0%	3	3%
Driving properly	6	75%	36	39%
Following too close	0	0%	1	1%
Improper turn	0	0%	3	3%
Disobeyed traffic control	0	0%	2	2%
Failed to yield right-of-way	2	25%	38	41%
Improper passing	0	0%	2	2%
Other	0	0%	7	8%
Total	8		92	

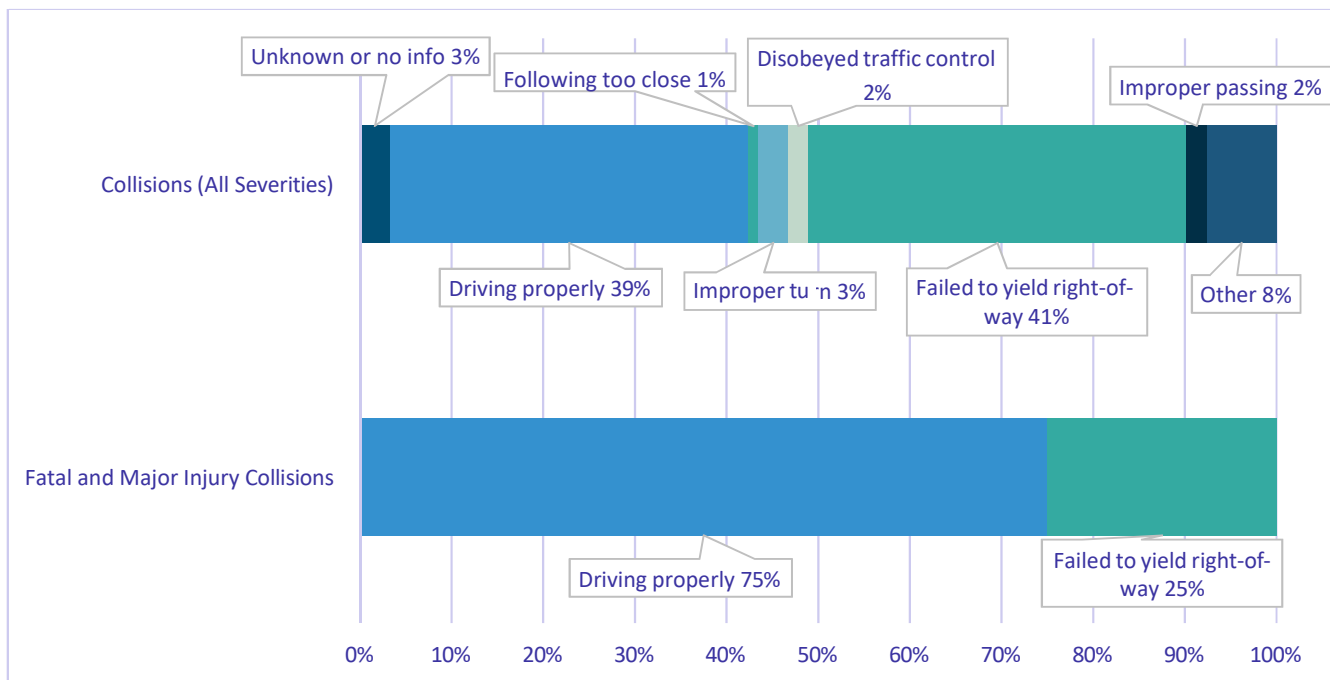


Figure 18: Driver Actions in Pedestrian Collisions – 2019

Pedestrian Conditions

Pedestrian condition is summarized in Table 25 and Figure 19. For fatal and major injury collisions, half of pedestrians had normal condition and half were noted as inattentive. For pedestrian collisions overall, the most common pedestrian condition was “normal.”

Table 25: Pedestrian Condition – 2019

Pedestrian Condition	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Pedestrians	%	Pedestrians	%
Unknown or no info	0	0%	3	3%
Normal	4	50%	73	79%
Medical or physical disability	0	0%	2	2%
Inattentive	4	50%	14	15%
Total	8		92	

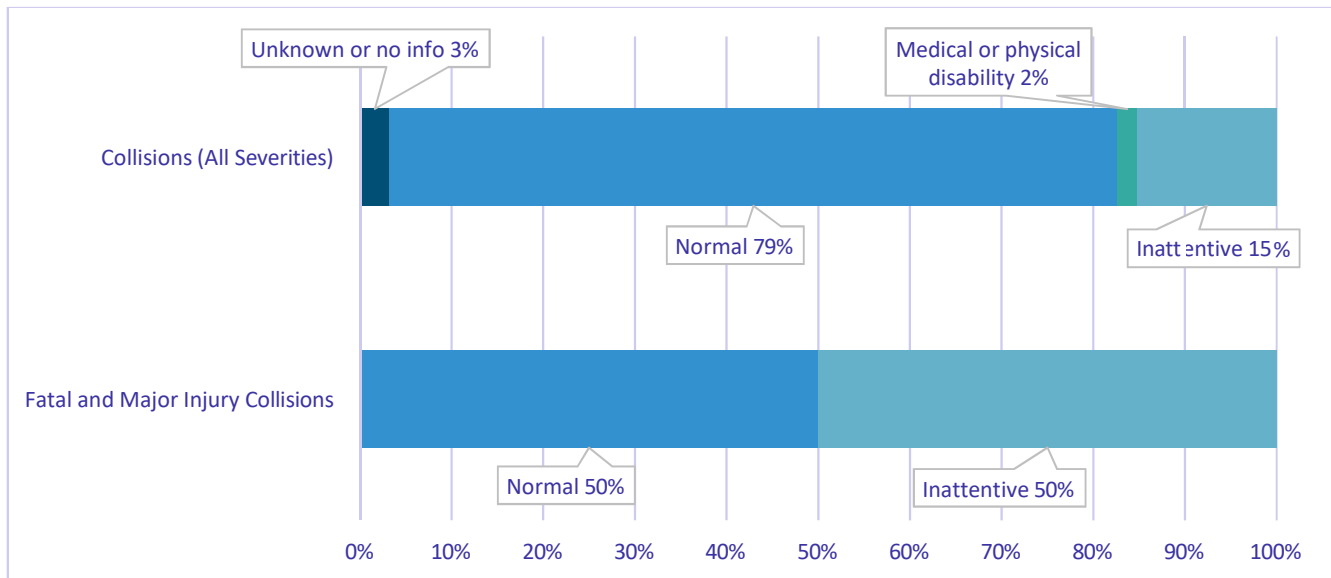


Figure 19: Pedestrian Condition – 2019

Locations of Pedestrian Collisions

Locations that experienced at least one fatal or major injury pedestrian collision over the 2015-2019 period are summarized in Table 26 and

Table 27.

Locations that experienced at least three pedestrian collisions – of any severity – over the 2015-2019 period are summarized in Table 28 and Table 29.

Table 26: Intersection Pedestrian Collision Locations (Fatal and Major Injury) – 2015 to 2019

Rank	Compeky	Description	Control	Fatalities and Major Injuries – Pedestrian Collisions 2015-2019
1	287362	Wyandotte St E @ Chilver Rd	Unsignalized	2
2	289253	Tecumseh Rd E @ Forest Glade Dr	Signalized	1
2	290860	Tecumseh Rd E @ Plaza Access Rd-Canadian Tire/Easttown	Signalized	1
2	288952	Raymond Ave @ Jefferson Blvd	Signalized	1
2	287756	Ontario St @ Pillette Rd	Unsignalized	1
2	288383	Grand Marais Rd E @ Central Ave & Plymouth Dr	Signalized	1
2	288067	Tecumseh Rd E @ Factoria Rd	Unsignalized	1
2	287182	Giles Blvd E @ Parent Ave	Signalized	1
2	287018	Elliott St E & Goyeau St	Signalized	1
2	287461	Tecumseh Rd E @ Kildare Rd	Signalized	1
2	286976	Wyandotte St E @ Goyeau St	Signalized	1
2	286931	Park St W @ Pelissier St	Signalized	1
2	286826	Riverside Dr W @ Ouellette Ave & Riverside Dr E	Signalized	1
2	286493	Foster Ave @ Walker Rd	Signalized	1
2	286973	Wyandotte St W @ Ouellette Ave & Wyandotte St E	Signalized	1
2	286692	Tecumseh Rd E @ Mercer St	Unsignalized	1
2	284953	Felix Ave @ Tecumseh Rd W	Unsignalized	1
2	285135	Wyandotte St W @ Oak St	Unsignalized	1
2	285082	University Ave W @ Patricia Rd	Unsignalized	1
2	284758	Sandwich @ Brock St	Signalized	1
2	285136	Wyandotte St W @ Crawford Ave	Signalized	1

Table 27: Midblock Pedestrian Collision Locations (Fatal and Major Injury) – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Fatalities and Major Injuries – Pedestrian Collisions 2015-2019
1	292626	Tecumseh Rd E	Serbian Centre Access Road	East Park Dr	Class 2 Arterial	2
2	292083	Walker Rd	Plaza Access Rd-Home Depot/Walker	Plaza Access Rd-Canadian Tire/Walker	Class 2 Arterial	1
2	171602	Tecumseh Rd W	Crawford Ave	South Cameron Blvd	Class 2 Arterial	1
2	175173	Jefferson Blvd	South Service Rd E	Rhodes Dr	Class 2 Arterial	1
2	169627	Tecumseh Rd E	Annie St	Lauzon Rd	Class 2 Arterial	1
2	169701	Milloy St	Drouillard Rd	Cadillac St	Local Residential	1
2	169846	Lauzon Rd	McHugh St	Plaza Access Rd-Tecumseh Mall/Easttown	Class 2 Arterial	1
2	166650	Dominion Blvd	Arcadia St	Ojibway St	Class 1 Collector	1
2	167990	Brock St	Baby St	Bloomfield Rd	Local Residential	1
2	167610	Howard Ave	Lens Ave	Memorial Dr	Class 2 Arterial	1
2	161324	E C Row E/B On Ramp	Dominion Blvd	E C Row Expy E/B	Expressway	1
2	164046	Wyandotte St E	Raymo Rd	Westminster Blvd	Class 2 Arterial	1
2	160933	California Ave	Ojibway St	Clery St	Local Residential	1
2	127741	Sandwich St	Brock St	Chippawa St	Class 2 Arterial	1
2	127327	Northway Ave	Tecumseh Rd W	Algonquin St	Local Residential	1
2	126340	Dougall Ave	Jackson St	Plaza Access Rd-Zehr's/Dorwin	Class 1 Collector	1
2	126409	Ellis St E	Ouellette Ave	Dufferin Pl	Local Residential	1
2	126126	Chatham St E	Goyeau St	McDougall St	Class 1 Collector	1

Table 28: Intersection Pedestrian Collision Locations (All Severities) – 2015 to 2019

Rank	Compkey	Description	Control	Pedestrian Collisions (All Severities) 2015-2019
1	286973	Wyandotte St W @ Ouellette Ave & Wyandotte St E	Signalized	8
2	286493	Foster Ave @ Walker Rd	Signalized	6
3	287868	Seminole St @ Pillette Rd	Signalized	4
3	286913	University Ave W @ Ouellette Ave & University Ave E	Signalized	4
3	286691	Tecumseh Rd E @ McDougall St	Signalized	4
3	286896	Chatham St E @ Goyeau St	Signalized	4
3	285116	Wyandotte St W @ California Ave	Signalized	4
3	285123	Wyandotte St W @ Campbell Ave	Signalized	4
9	289248	Tecumseh Rd E @ Annie St	Signalized	3
9	289249	Tecumseh Rd E @ Lauzon Rd	Signalized	3
9	287254	Ellis St W @ Ouellette Ave & Ellis St E	Signalized	3
9	287461	Tecumseh Rd E @ Kildare Rd	Signalized	3
9	286976	Wyandotte St E @ Goyeau St	Signalized	3

9	286931	Park St W @ Pelissier St	Signalized	3
9	286930	Park St W @ Victoria Ave	Signalized	3
9	286827	Riverside Dr E @ Goyeau St	Signalized	3
9	286981	Wyandotte St E @ Mercer St	Unsignalized	3
9	286985	Wyandotte St E @ Marentette Ave	Unsignalized	3
9	285121	Wyandotte St W @ Bridge Ave	Unsignalized	3
9	284987	Huron Church Rd @ Malden Rd	Signalized	3
9	284937	Huron Church Rd @ Tecumseh Rd W	Signalized	3
16	<i>Tie (44 locations)</i>			2
16	<i>Tie (136 locations)</i>			1

Table 29: Midblock Pedestrian Collision Locations (All Severities) – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Pedestrian Collisions (All Severities) 2015-2019
1	292083	Walker Rd	Plaza Access Rd-Home Depot/Walker	Plaza Access Rd-Canadian Tire/Walker	Class 2 Arterial	3
1	127400	Ouellette Ave	Tecumseh Rd E	Eugenie St E	Class 2 Arterial	3
3	<i>Tie (9 locations)</i>					2
12	<i>Tie (110 locations)</i>					1

Motorcyclists

Motorcyclist collisions are summarized by classification and year in Table 30 and Figure 20. In 2019, there were 27 collisions involving motorcyclists; this represents a decrease of 41% from 2018 and 33% from the 2015-2019 average.

Table 30: Motorcyclist Collisions by Classification

Year	Fatality	Non-Fatal Injury	Property Damage Only	Total
2006	2	26	13	41
2007	0	20	10	30
2008	2	25	11	38
2009	1	18	6	25
2010	0	33	9	42
2011	1	27	8	36
2012	2	28	11	41
2013	1	28	12	41
2014	0	12	9	21
2015	3	46	9	58
2016	0	33	14	47
2017	0	25	4	29
2018	1	28	12	41
2019	1	21	5	27
2015-2019 Average	1	30.6	8.8	40.4

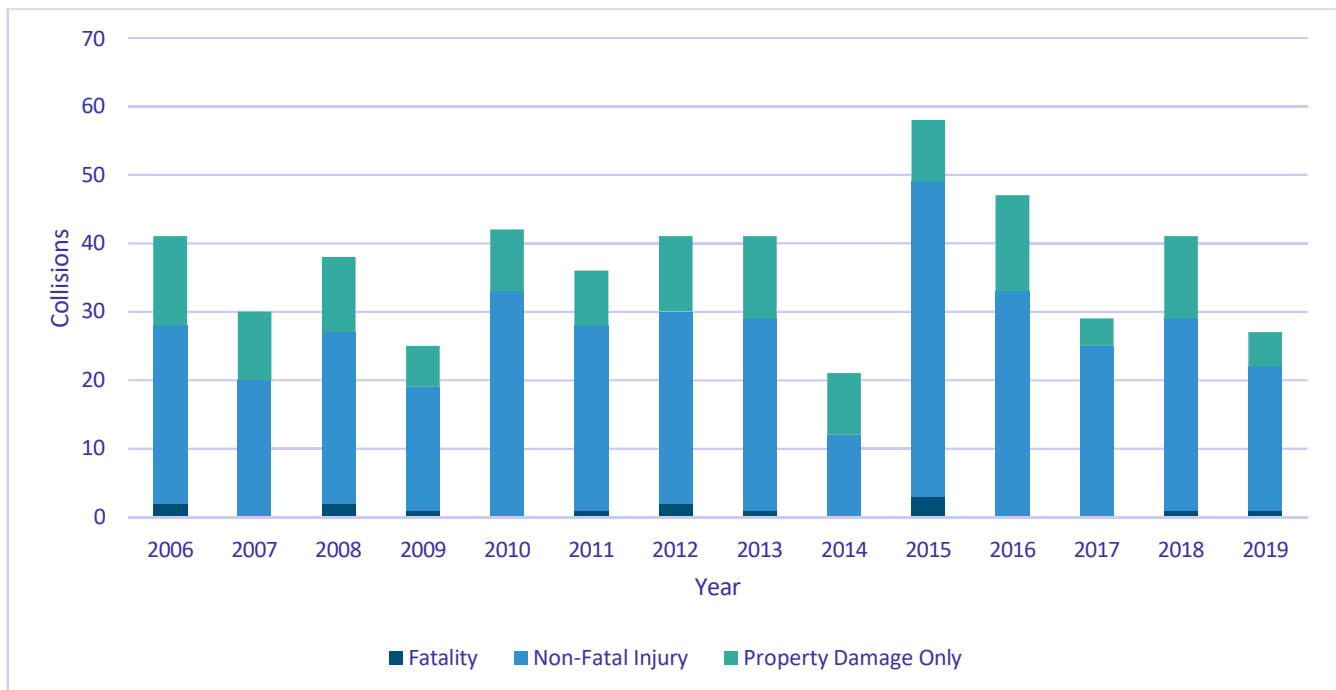


Figure 20: Motorcyclist Collisions by Classification

Motorcyclist Actions

Motorcyclist actions in motorcyclist collisions are given in Table 31 and Figure 21. The most common motorcyclist action in collisions overall as well as fatal and major injury collisions was “driving properly.”

Table 31: Motorcyclist Actions – 2019

Motorcyclist Action	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Motorcycle Drivers	%	Motorcycle Drivers	%
Unknown or no info	0	0%	1	4%
Driving properly	2	67%	17	63%
Following too close	0	0%	1	4%
Exceeding speed limit	1	33%	1	4%
Speed too fast for condition	0	0%	2	7%
Improper passing	0	0%	2	7%
Lost control	0	0%	3	11%
Total	3		27	

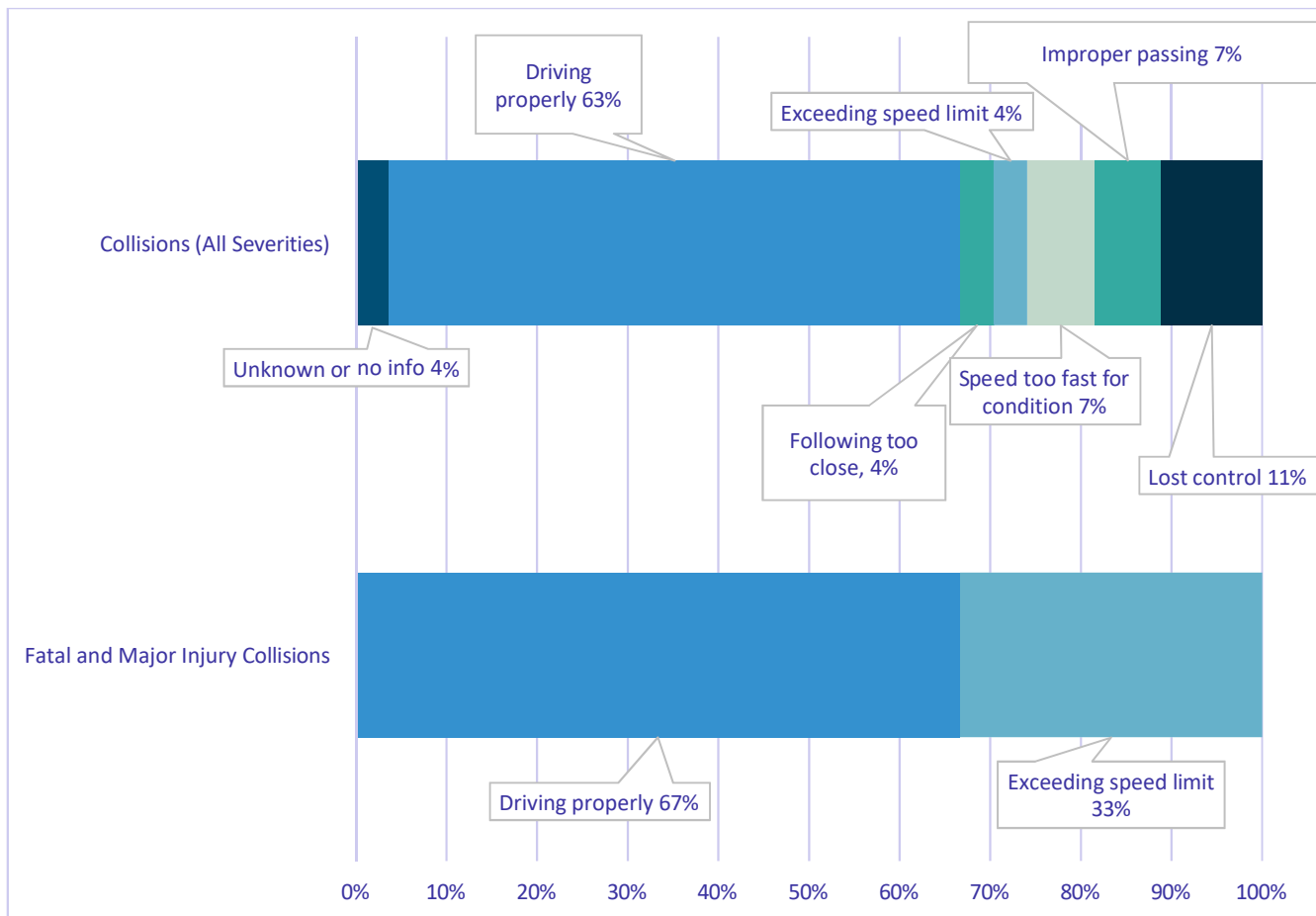


Figure 21: Motorcyclist Actions – 2019

Other Driver Actions in Motorcyclist Collisions

Of the 27 motorcyclist collisions that occurred in 2019, 5 were single-vehicle crashes and 22 involved another motor vehicle. All fatal and major injury collisions over the same period involved another motor vehicle.

Actions by the non-motorcycle driver in motorcycle collisions are summarized in Table 32 and Figure 22. For fatal and major collisions, the most common action by the non-motorcycle driver was “improper turn.” For collisions of all severities, the most common improper driver action was “failed to yield right-of-way.”

Table 32: Other Driver Actions in Motorcyclist Collisions – 2019

Driver Action	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Drivers	%	Drivers	%
Driving properly	0	0%	5	23%
Following too close	0	0%	2	9%
Improper turn	2	67%	4	18%
Disobeyed traffic control	1	33%	1	5%
Failed to yield right-of-way	0	0%	5	23%
Improper lane change	0	0%	2	9%
Improper passing	0	0%	1	5%
Other	0	0%	2	9%
Total	3		22	

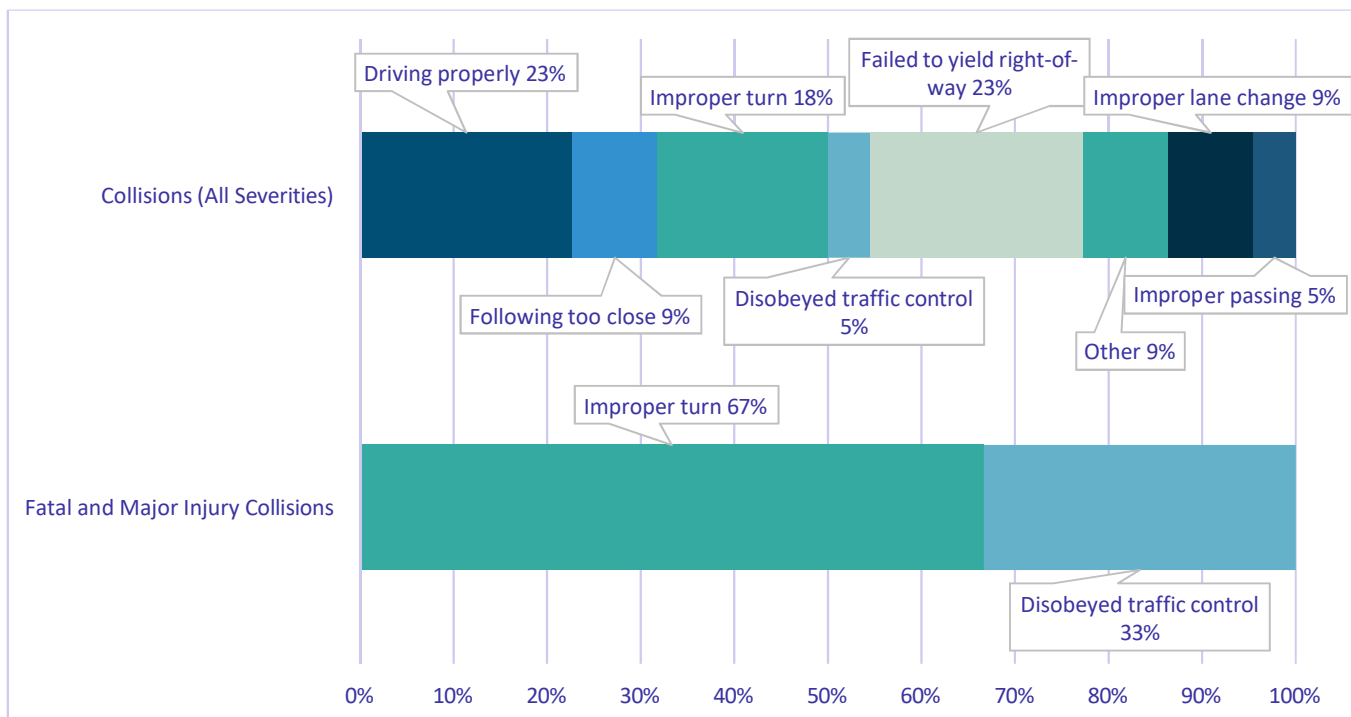


Figure 22: Other Driver Actions in Motorcyclist Collisions – 2019

Motorcyclist Conditions

Motorcyclist condition is summarized in Table 33 and Figure 23. Motorcyclist condition was “normal” for the majority of collisions overall as well as fatal and major injury collisions.

Table 33: Motorcyclist Condition – 2019

Motorcyclist Condition	Fatal and Major Injury Collisions		Collisions (All Severities)	
	Motorcyclists	%	Motorcyclists	%
Normal	2	67%	24	89%
Inattentive	0	0%	1	4%
Unknown or no info	1	33%	2	7%
Total	3		27	

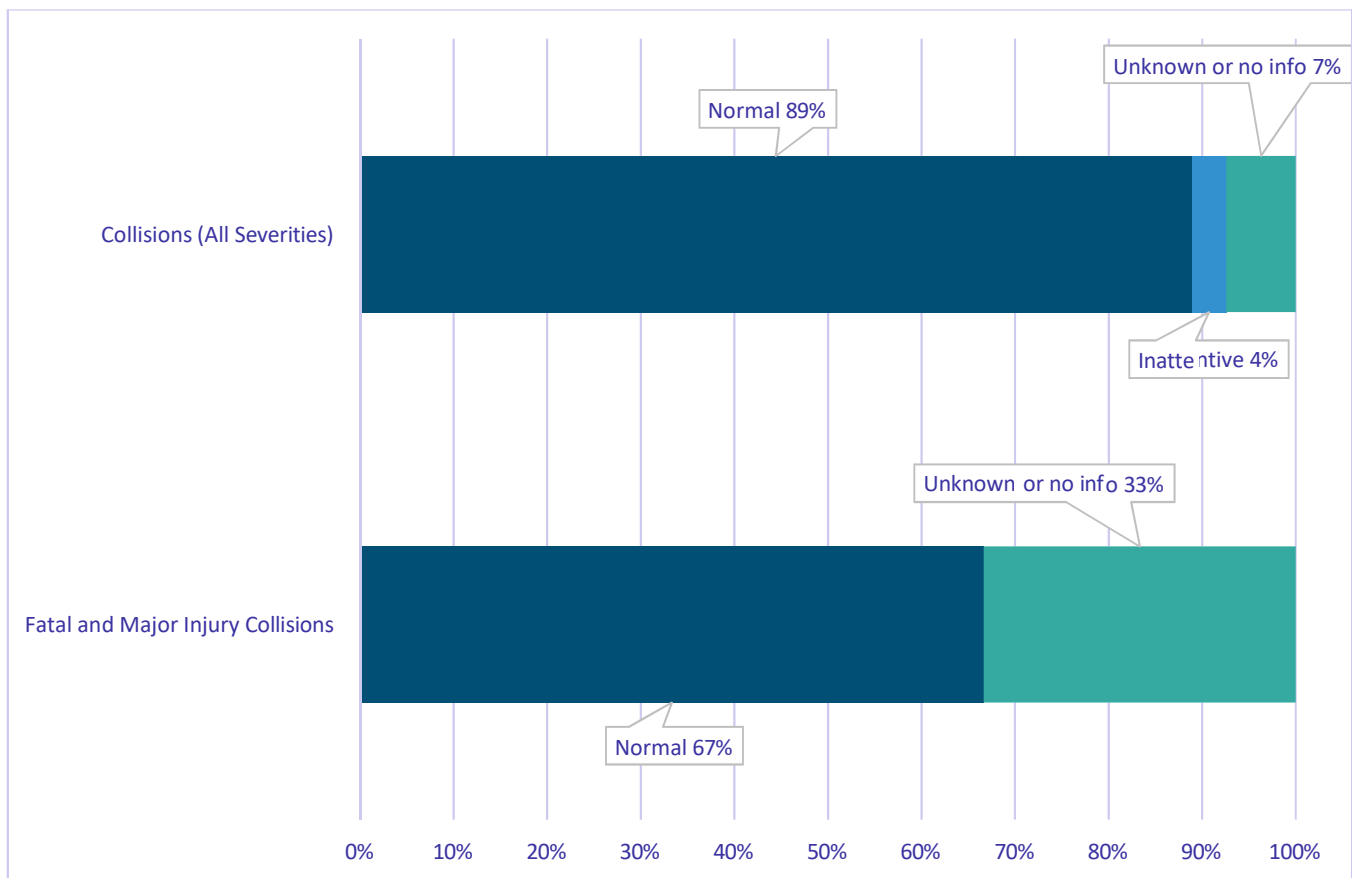


Figure 23: Motorcyclist Condition – 2019

Locations of Motorcyclist Collisions

Locations that experienced at least one fatal or major injury pedestrian collision over the 2015-2019 period are summarized in Table 34 and Table 35.

Locations that experienced at least two motorcyclist collisions – of any severity – over the 2015-2019 period are summarized in

Table 36 and Table 37.

Table 34: Intersection Motorcyclist Collision Locations (Fatal and Major Injury) – 2015 to 2019

Rank	Compkey	Description	Control	Fatalities and Major Injuries – Motorcyclist Collisions 2015-2019
1	289477	County Road 42 @ County Road 17	Signalized	1
1	289026	Lauzon Rd @ Lauzon Line (W) & McHugh St (E)	Signalized	1
1	288383	Grand Marais Rd E @ Central Ave & Plymouth Dr	Signalized	1
1	287862	Seminole St @ Tourangeau Rd	Unsignalized	1
1	287756	Ontario St @ Pillette Rd	Unsignalized	1
1	288382	Grand Marais Rd E @ Meldrum Rd	Unsignalized	1
1	287426	Ottawa St @ Walker Rd	Signalized	1
1	287403	Richmond St @ Chilver Rd	Unsignalized	1
1	287087	Erie St W @ Ouellette Ave & Erie St E	Signalized	1
1	287553	St Julien Ave @ Walker Rd	Unsignalized	1
1	286984	Wyandotte St E @ Louis Ave	Unsignalized	1
1	286985	Wyandotte St E @ Marentette Ave	Unsignalized	1
1	286987	Wyandotte St E @ Langlois Ave	Unsignalized	1
1	285643	Norfolk St @ Everts Ave	Unsignalized	1
1	285263	Tecumseh Rd W @ Crawford Ave	Signalized	1
1	284953	Felix Ave @ Tecumseh Rd W	Unsignalized	1
1	289477	County Road 42 @ County Road 17	Signalized	1

Table 35: Midblock Motorcyclist Collision Locations (Fatal and Major Injury) – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Fatalities and Major Injuries – Motorcyclist Collisions 2015-2019
1	127647	Riverside Dr W	Huron Church Rd	Rosedale Ave	Scenic Parkway	2
2	185841	Banwell Rd	Wyandotte St E	Beverly Glen St	Class 2 Arterial	1
2	175845	Chrysler Centre	Somme Ave	Grand Marais Rd E	Class 1 Collector	1
2	169621	Riverside Dr W	Caron Ave	Crawford Ave	Scenic Parkway	1
2	169917	Tecumseh Rd E	Chandler Rd	Meighen Rd	Class 2 Arterial	1
2	167962	Peter St	South St	Watkins St	Local Residential	1
2	161398	E C Row E/B Off Ramp	E C Row Expy E/B	E C Row E/B Off Ramp	Expressway	1
2	161295	E C Row Expy W/B	Walker Rd	Howard Ave	Expressway	1
2	161290	E C Row Expy W/B	Jefferson Blvd	Central Ave	Expressway	1
2	164149	George Ave	Franklin St	Metcalfe St	Class 1 Collector	1
2	128212	Wyandotte St E	Gladstone Ave	Lincoln Rd	Class 2 Arterial	1
2	126171	Church St	University Ave W	Park St W	Local Residential	1

Table 36: Intersection Motorcyclist Collision Locations (All Severities) – 2015 to 2019

Rank	Compkey	Description	Control	Motorcyclist Collisions (All Severities) 2015-2019
1	288786	WYANDOTTE ST E @ JEFFERSON BLVD	Signalized	3
2	288383	GRAND MARAIS RD E @ CENTRAL AVE & PLYMOUTH DR	Signalized	2
2	288135	TECUMSEH RD E @ PILLETTE RD	Signalized	2
2	285817	DOUGALL AVE @ CABANA RD W	Signalized	2
5	<i>Tie (106 locations)</i>			1

Table 37: Midblock Motorcyclist Collision Locations (All Severities) – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Motorcyclist Collisions (All Severities) 2015-2019
1	171310	Central Ave	Somme Ave	Grand Marais Rd E	Class 2 Arterial	3
2	169621	Riverside Dr W	Caron Ave	Crawford Ave	Scenic Parkway	2
2	165307	Edinborough St	Windsor Ave	Howard Ave	Local Residential	2
2	161295	E C Row Expy W/B	Walker Rd	Howard Ave	Expressway	2
2	127958	Tecumseh Rd E	Penang Lane	Forest Glade Dr	Class 2 Arterial	2
6	<i>Tie (75 locations)</i>					1

5. Environment

Weather and Light Condition

Environment condition in collisions is summarized in Table 38 and Figure 24. Most collisions, and most fatal and major injuries, occurred under clear conditions.

Lighting condition in collisions is summarized in Table 39 and Figure 25. Most collisions, and most fatal and major injuries, occurred under daylight conditions.

Table 38: Environment Condition – 2019

Environment Condition	Fatal and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Unknown	0	0%	1	0%
Clear	32	86%	3,966	87%
Rain	5	14%	398	9%
Snow	0	0%	142	3%
Freezing rain	0	0%	12	0%
Drifting snow	0	0%	2	0%
Fog, mist, smoke, dust	0	0%	8	0%
Other	0	0%	7	0%
Total	37		4,536	

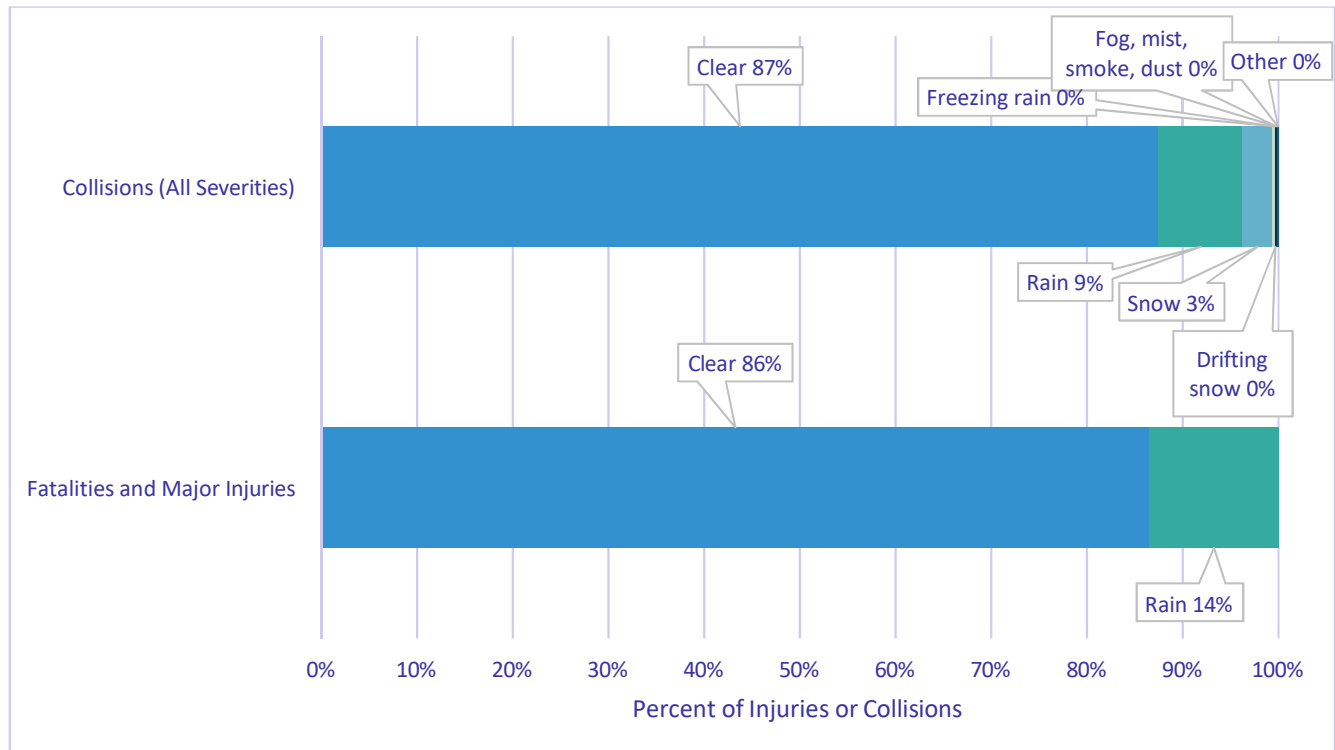


Figure 24: Environment Condition – 2019

Table 39: Lighting Condition – 2019

Lighting Condition	Fatal and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Unknown	0	0%	1	0%
Daylight	26	70%	3,442	76%
Daylight, artificial	0	0%	15	0%
Dawn	0	0%	8	0%
Dawn, artificial	0	0%	14	0%
Dusk	0	0%	46	1%
Dusk, artificial	2	5%	46	1%
Dark	1	3%	754	17%
Dark, artificial	8	22%	209	5%
Other	0	0%	1	0%
Total	37		4,536	

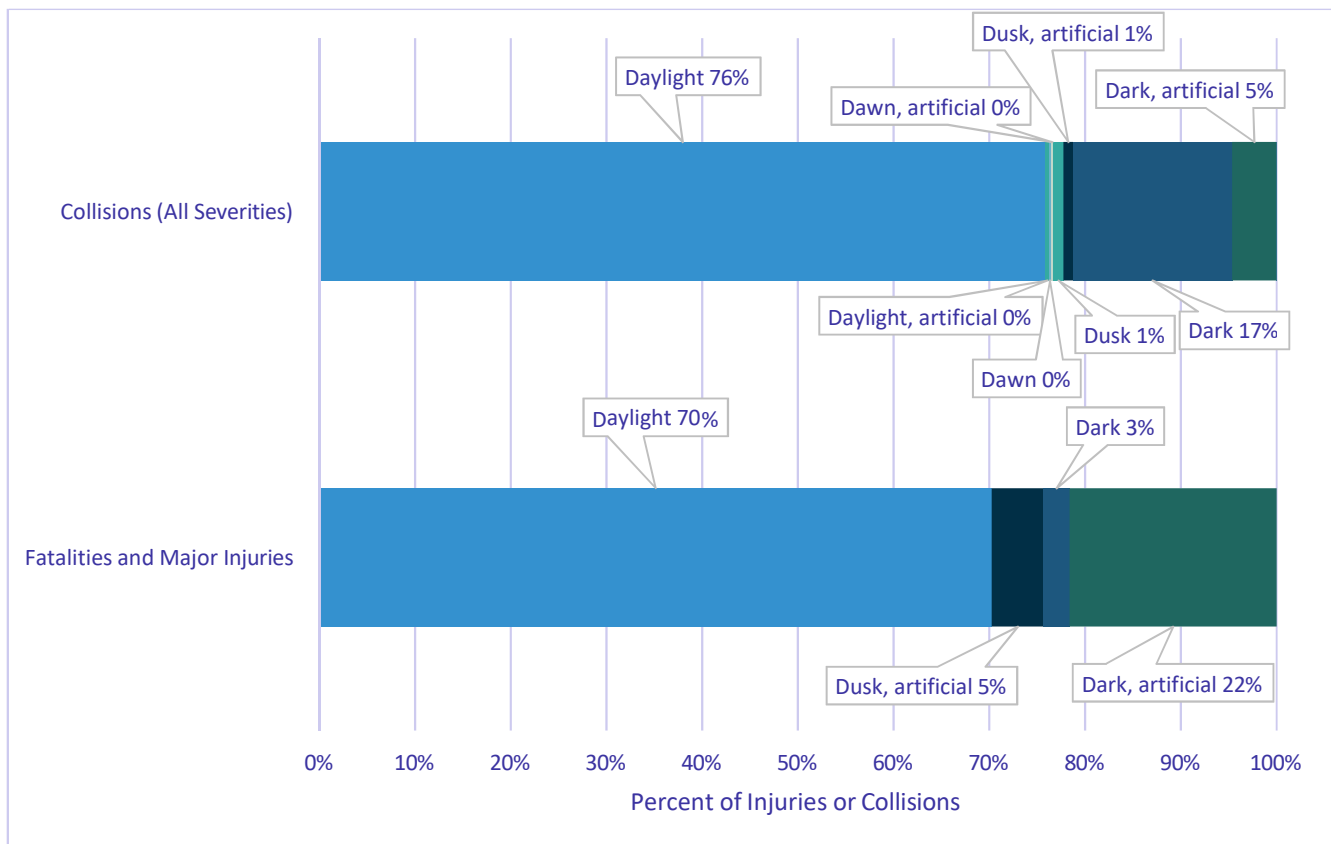


Figure 25: Lighting Condition – 2019

Road Surface Condition

Road surface condition in collisions is summarized in Table 40 and Figure 26. Most collisions, and most fatal and major injuries, occurred with dry road surface conditions.

Table 40: Road Surface Condition – 2019

Road Surface Condition (Road 1)	Fatal and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Unknown or no info	0	0%	1	0%
Dry	32	86%	3,766	83%
Wet	5	14%	522	12%
Loose snow	0	0%	151	3%
Slush	0	0%	12	0%
Packed snow	0	0%	27	1%
Ice	0	0%	52	1%
Mud	0	0%	0	0%
Loose sand or gravel	0	0%	1	0%
Spilled liquid	0	0%	0	0%
Other	0	0%	4	0%
Total	37		4,536	

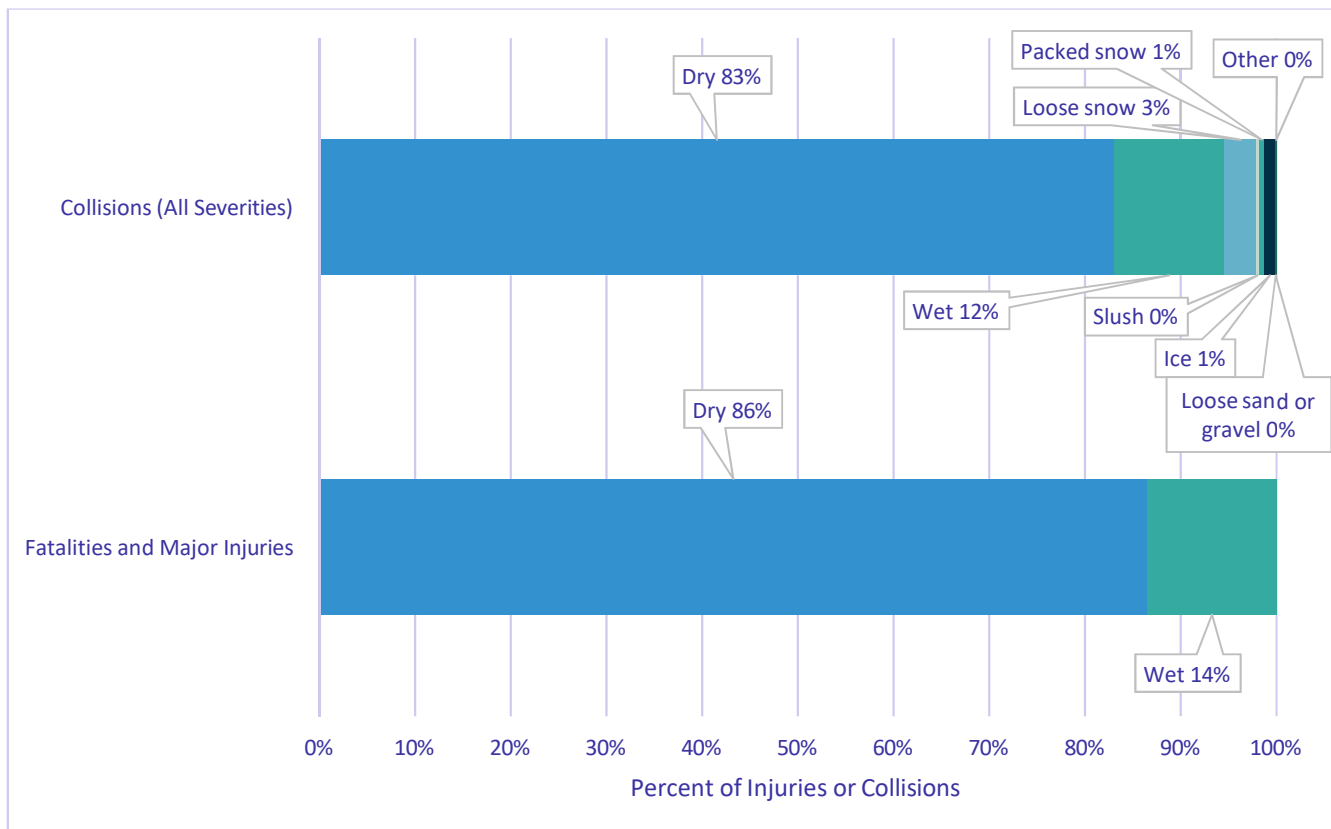


Figure 26: Road Surface Condition – 2019

Pavement Marking Condition

Pavement marking condition in collisions is summarized in Table 41 and Figure 27. For most collisions, and most fatal and major injuries, pavement markings were present and were not obscured or faded.

Table 41: Pavement Marking Condition – 2019

Pavement Marking Condition (Road 1)	Fatal and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Unknown or no info	0	0%	1	0%
Existent	32	86%	3,585	79%
Non-existent	5	14%	925	20%
Obscured	0	0%	17	0%
Faded	0	0%	8	0%
Total	37		4,536	

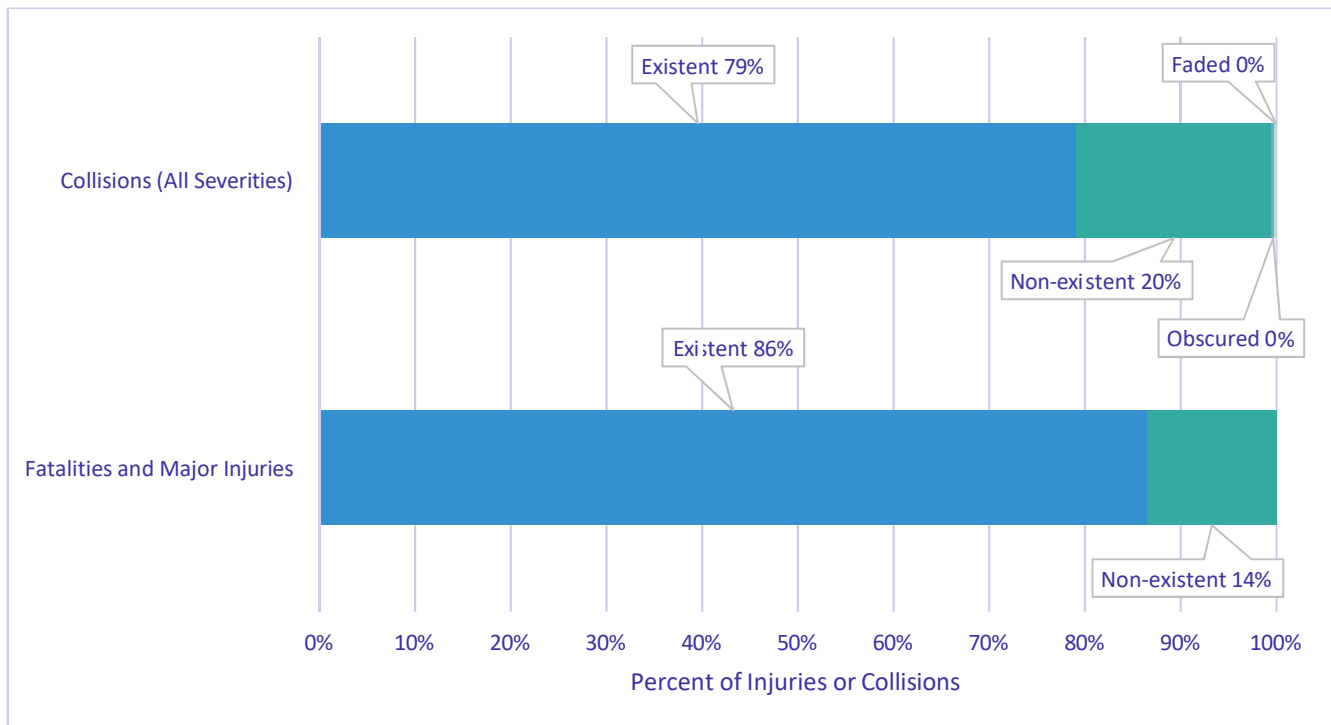


Figure 27: Pavement Marking Condition – 2019

Traffic Control Condition

“Traffic control” includes any measures or devices that indicate right-of-way for road users, including stop signs, traffic signals, and pedestrian crossovers.

Traffic control condition in collisions is summarized in Table 42 and Figure 28. Traffic control was identified as functioning for the majority of both collisions of all severities and fatal and major collisions.

“Unknown, no info, or no traffic control present” includes locations where no intersection traffic control is provided.

Table 42: Traffic Control Condition – 2019

Traffic Control Condition	Fatalities and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Unknown, no info, or no traffic control present	18	49%	1,341	30%
Functioning	19	51%	3,168	70%
Not Functioning	0	0%	25	1%
Obscured	0	0%	2	0%
Missing/Damaged	0	0%	0	0%
Total	37		4,536	

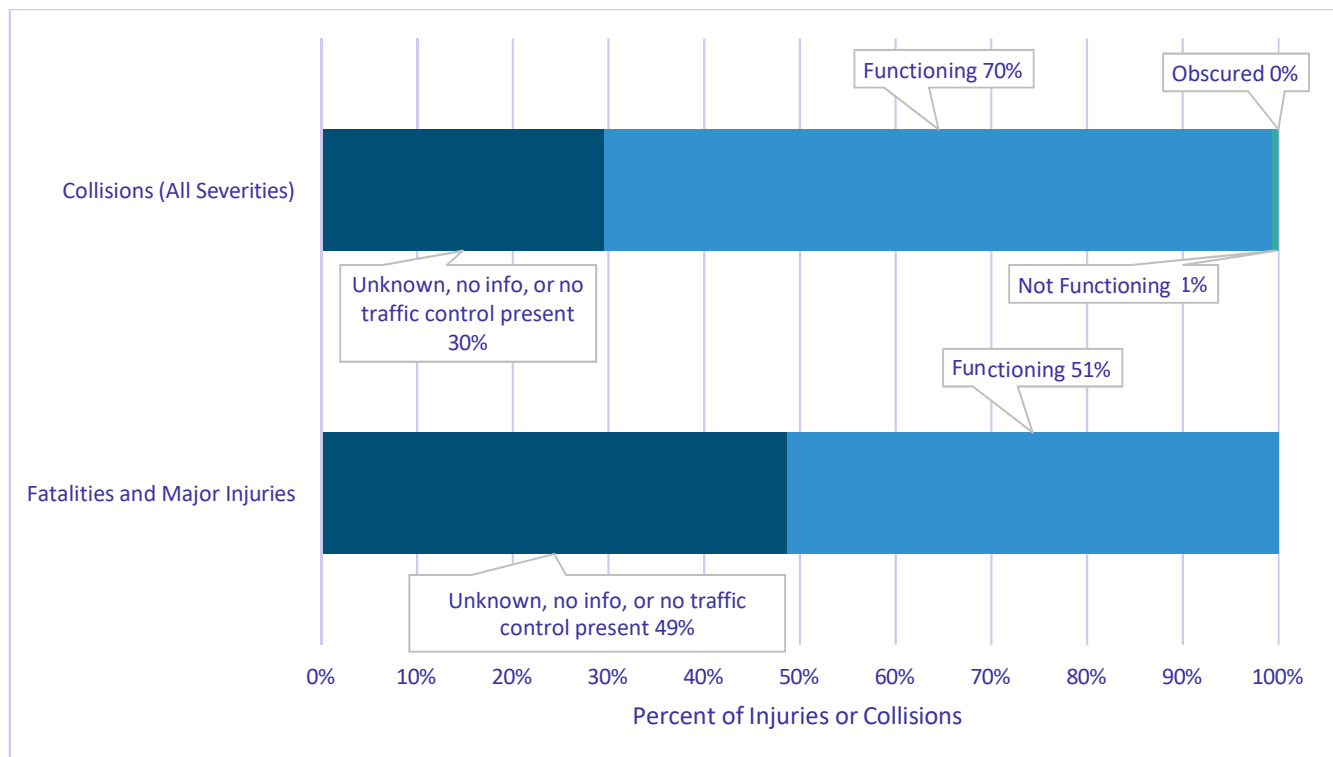


Figure 28: Traffic Control Condition – 2019

6. Location

Collision Location

Collision location type is summarized in Table 43 and Figure 29. For fatalities and major injuries, the most common collision location type was “non-intersection.” For collisions of all severities, the most common collision location type was “at intersection.”

Table 43: Collision Location – 2019

Collision Location	Fatalities and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Non-intersection	14	38%	1,226	27%
Intersection related	6	16%	1,281	28%
At intersection	13	35%	1,328	29%
At/near private drive	4	11%	692	15%
At railway crossing	0	0%	4	0%
Overpass or bridge	0	0%	2	0%
Other - on highway	0	0%	3	0%
Total	37		4,536	

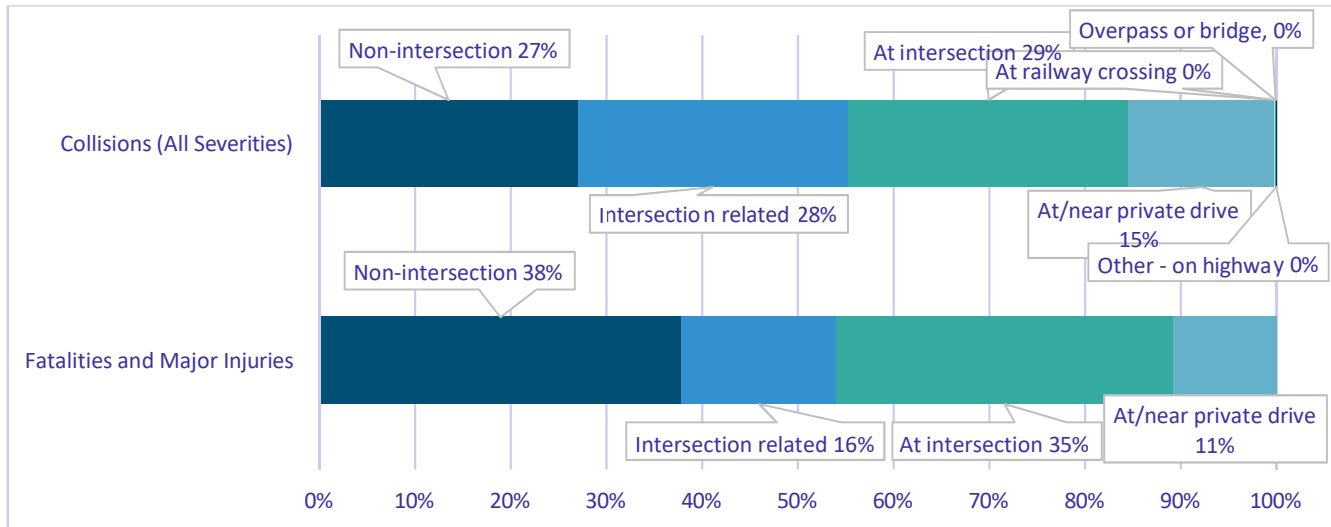


Figure 29: Collision Location – 2019

Road Character

Pavement marking condition in collisions is summarized in Table 44 and Figure 30. Most collisions, and most fatal and major injuries, occurred on undivided, two-way roads.

Table 44: Road Character – 2019

Road Character (Road 1)	Fatalities and Major Injuries		Collisions (All Severities)	
	Injuries	% of Total	Collisions	% of Total
Undivided - one-way	0	0%	248	5%
Undivided - two-way	25	68%	3,965	87%
Divided with restraining barrier	4	11%	139	3%
Divided - no barrier	8	22%	174	4%
Ramp	0	0%	6	0%
Collector lane	0	0%	1	0%
Express lane	0	0%	3	0%
Transfer lane	0	0%	0	0%
Total	37		4,536	

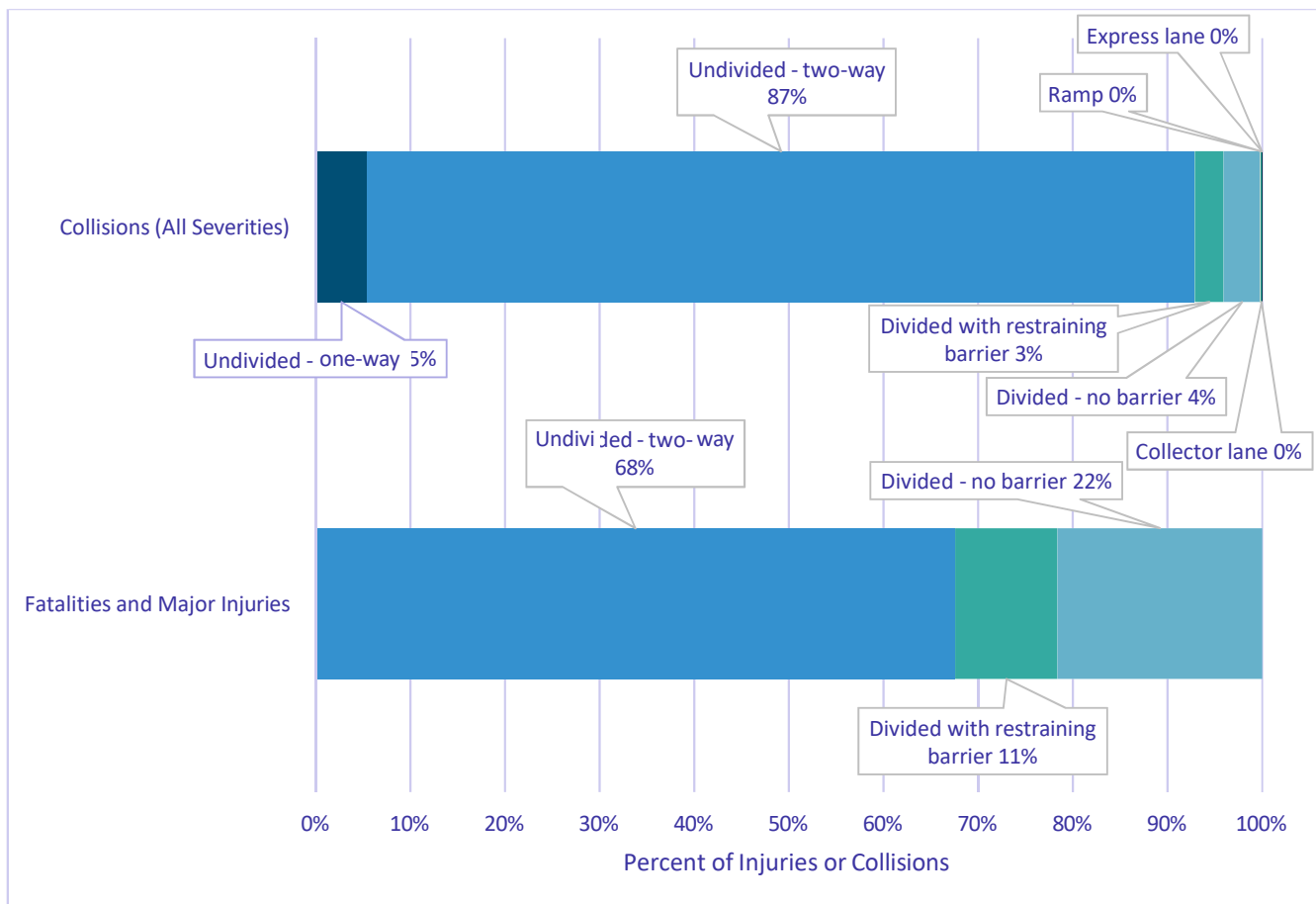


Figure 30: Road Character – 2019

Intersections

Fatalities and Major Injuries

From 2015 to 2019, 102 fatal and major injuries occurred at intersections. Locations with 2 or more fatalities or major injuries are listed in Table 45. There were an additional 66 locations with a single fatality or major injury between 2015 and 2019.

Table 45: Intersection Fatalities and Major Injuries – 2015 to 2019

Rank	Compkey	Location	Control	Fatalities and Major Injuries 2015-2019
1	288678	Central Ave @ E C Row W/B On Ramp & E C Row W/B Off Ramp	Signalized	4
2	289593	Walker Rd @ E C Row W/B On Ramp & E C Row Collector North	Signalized	3
2	286985	Wyandotte St E @ Marentette Ave	Unsignalized	3
4	289016	Tranby Ave @ Lauzon Rd & Lauzon Pky	Signalized	2
4	287756	Ontario St @ Pillette Rd	Unsignalized	2
4	288383	Grand Marais Rd E @ Central Ave & Plymouth Dr	Signalized	2
4	288450	Tecumseh Rd E @ Westminster Blvd	Signalized	2
4	287362	Wyandotte St E @ Chilver Rd	Unsignalized	2
4	287553	St Julien Ave @ Walker Rd	Unsignalized	2
4	287621	Wyandotte St E @ Drouillard Rd	Signalized	2
4	286826	Riverside Dr W @ Ouellette Ave & Riverside Dr E	Signalized	2
4	286715	Wear St @ Dougall Ave	Unsignalized	2
4	286278	Medina St W @ Dougall Ave	Unsignalized	2
4	284953	Felix Ave @ Tecumseh Rd W	Unsignalized	2
4	285166	College Ave @ Campbell Ave	Signalized	2
4	284937	Huron Church Rd @ Tecumseh Rd W	Signalized	2
17	<i>Tie (66 locations)</i>			1
Total				102

Signalized Intersections

The top 30 signalized intersections, ranked by collision rate, are listed in Table 46. The average collision rate for signalized intersections City-wide between 2015 and 2019 was 0.62 collisions per million vehicles entering.

Table 46: Signalized Intersection Collisions – 2015 to 2019

Rank	Compkey	Location	Collisions 2015 - 2019	Daily Volume Entering	Collision Rate [collisions per million vehicles entering]
1	289253	Tecumseh Rd E @ Forest Glade Dr	97	27,100	1.96
2	286972	Wyandotte St W @ Pelissier St	68	21,100	1.77
3	289476	County Road 42 @ Lauzon Pky	75	23,700	1.73
4	289245	Lauzon Pky @ Forest Glade Dr	112	41,350	1.48
5	284934	Huron Church Rd @ College Ave	117	43,700	1.47
6	285136	Wyandotte St W @ Crawford Ave	61	22,850	1.46
7	285400	Northwood St @ Dominion Blvd	64	24,500	1.43
8	287426	Ottawa St @ Walker Rd	73	28,150	1.42
9	289026	Lauzon Rd @ Lauzon Line (W) & McHugh St (E)	42	16,550	1.39
10	285095	University Ave W @ Campbell Ave	26	10,450	1.36
11	286930	Park St W @ Victoria Ave	12	4,900	1.34
12	288803	Wyandotte St E @ Lauzon Rd	67	27,850	1.32
13	287621	Wyandotte St E @ Drouillard Rd	53	22,150	1.31
14	286694	Tecumseh Rd E @ Howard Ave	114	49,000	1.27
15	288383	Grand Marais Rd E @ Central Ave & Plymouth Dr	91	39,200	1.27
16	288691	Central Ave @ E C Row Collector South & E C Row E/B On Ramp	73	33,800	1.18
17	286687	Tecumseh Rd W @ Ouellette Ave & Tecumseh Rd E	105	48,800	1.18
18	288091	Tecumseh Rd E @ Central Ave	84	39,450	1.17
19	286826	Riverside Dr W @ Ouellette Ave & Riverside Dr E	45	21,250	1.16
20	285994	Provincial Rd @ Walker Rd	102	48,300	1.16
21	289593	Walker Rd @ E C Row W/B On Ramp & E C Row Collector North	94	44,600	1.15
22	286980	Wyandotte St E @ McDougall St	55	26,200	1.15
23	286691	Tecumseh Rd E @ McDougall St	70	33,600	1.14
24	286931	Park St W @ Pelissier St	11	5,300	1.14
25	289240	Lauzon Pky @ Tecumseh Rd E	122	58,900	1.13
26	289145	McHugh St @ Banwell Rd & McNorton St	42	20,300	1.13
27	285490	Labelle St @ Dominion Blvd	51	24,800	1.13
28	285166	College Ave @ Campbell Ave	33	16,250	1.11
29	286973	Wyandotte St W @ Ouellette Ave & Wyandotte St E	68	34,050	1.09
30	288674	Temple Dr @ Central Ave & North Service Rd E	80	41,450	1.06

Unsignalized Intersections

The top 30 unsignalized intersections, ranked by total number of collisions, are listed in Table 47.

Table 47: Unsignalized Intersection Collisions – 2015 to 2019

Rank	Compkey	Location	Collisions 2015-2019
1	286606	Ouellette Pl @ Dougall Ave [Note 1]	76
2	286316	Howard Ave @ South Cameron Blvd	29
2	285645	Norfolk St @ Dominion Blvd	29
4	287104	Erie St E @ Parent Ave	28
5	284762	Sandwich @ Riverside Dr & University Ave W & Rosedale Ave	27
6	287346	Riverside Dr E @ Devonshire Rd	26
6	286987	Wyandotte St E @ Langlois Ave	26
8	286981	Wyandotte St E @ Mercer St	25
9	288404	South National St @ Jefferson St	24
9	286985	Wyandotte St E @ Marentette Ave	24
9	286274	Beals St W @ Dougall Ave	24
12	287324	Hanna St W @ Ouellette Ave & Hanna St E	23
12	287464	Tecumseh Rd E @ Turner Rd	23
12	286984	Wyandotte St E @ Louis Ave	23
15	289259	Lauzon Rd @ Hawthorne Dr	22
16	286343	E C Row Ave E @ Conservation Dr	21
17	287306	Shepherd St E @ Parent Ave	20
17	286513	Lappan Ave @ Walker Rd	20
19	285262	Tecumseh Rd W @ McKay Ave	19
20	289241	Lauzon Pky @ Enterprise Way	18
20	289473	County Road 42 @ 8th Con Rd	18
20	288086	Tecumseh Rd E @ Chandler Rd	18
20	287328	Hanna St E @ McDougall St	18
20	287159	Giles Blvd W @ Dougall Ave	18
20	287259	Ellis St E @ McDougall St	18
20	286692	Tecumseh Rd E @ Mercer St	18
20	285627	West Grand Blvd @ Bruce Ave	18
28	287190	Giles Blvd E @ Hall Ave	17
28	286693	Tecumseh Rd E @ Highland Ave	17
28	285923	Division Rd @ Riberdy Rd	17
28	285412	Dougall Ave @ South Cameron Blvd	17
28	285372	Daytona Ave @ Northwood St	17
28	285362	Ojibway St @ Dominion Blvd	17

Notes:

1. The intersection of Ouellette Place and Dougall Avenue was signalized in 2020. It was an unsignalized intersection for the 2015-2019 period.

Mid-Block Segments

Fatalities and Major Injuries

From 2015 to 2019, 85 fatal and major injury collisions occurred on midblock segments (i.e. not at intersections). Locations with 2 or more fatalities are listed in Table 48. There were an additional 67 locations with a single fatality or major injury between 2015 and 2019.

Table 48: Midblock Fatalities and Major Injuries – 2015 to 2019

Rank	Compkey	Street	From	To	Classification	Fatalities and Major Injuries 2015-2019
1	204315	E C Row Expy E/B	Howard Ave	Walker Rd	Expressway	4
2	292626	Tecumseh Rd E	Serbian Centre Access Road	East Park Dr	Class 2 Arterial	2
2	204319	E C Row Expy E/B	Lauzon Pky	Banwell Rd	Expressway	2
2	185905	County Rd 42	7th Con Rd	8th Con Rd	Class 2 Arterial	2
2	185907	County Rd 42	9th Con Rd	Lauzon Pky	Class 2 Arterial	2
2	310776	McHugh St	WFCU Centre West Access Rd	WFCU Centre East Access Rd	Class 2 Arterial	2
2	171602	Tecumseh Rd W	Crawford Ave	South Cameron Blvd	Class 2 Arterial	2
2	127647	Riverside Dr W	Huron Church Rd	Rosedale Ave	Scenic Parkway	2
9	<i>Tie (67 locations)</i>					1
Total						85

Collisions

The top 30 midblock segments, ranked by collision rate, are listed in Table 49. Streets where traffic volume data is unavailable, including all local streets, are not included in this listing.

Table 49: Midblock Collisions – 2015 to 2019

Rank	Compkey	Street	From	To	Annual Average Daily Traffic	Length [m]	Classification	Collisions 2015-2019	Collision Rate [collisions per million vehicle-km]
1	166826	Pitt St W	Bruce Ave	Janette Ave	350	103	Class 1 Collector	1	15.21
2	303597	E C Row E/B Off Ramp	E C Row E/B Off Ramp	Howard Ave	9,400	87	Expressway	22	14.74
3	127420	Park St W	Ouellette Ave	Pelissier St	3,200	86	Class 1 Collector	7	13.99
4	128050	Victoria Ave	Park St W	Wyandotte St W	2,500	307	Class 2 Collector	19	13.55
5	167722	Chatham St W	Dougall Ave	Church St	1,510	82	Class 1 Collector	3	13.24
6	165249	Pelissier St	University Ave W	Park St W	2,100	143	Class 2 Collector	7	12.80
7	163874	Chatham St W	Pelissier St	Ferry St	1,510	60	Class 1 Collector	2	12.10
8	127447	Pelissier St	Elliott St W	Erie St W	1,900	236	Class 2 Collector	9	11.00
9	127416	Park St W	Victoria Ave	Dougall Ave	2,400	94	Class 1 Collector	4	9.72
10	127450	Pelissier St	Wyandotte St W	Elliott St W	2,400	286	Class 2 Collector	12	9.59
11	166919	Parent Ave	Assumption St	Brant St	2,550	112	Class 2 Collector	5	9.58
12	167723	Chatham St W	Bruce Ave	Janette Ave	600	100	Class 1 Collector	1	9.10

Rank	Compkey	Street	From	To	Annual Average Daily Traffic	Length [m]	Classification	Collisions 2015-2019	Collision Rate [collisions per million vehicle-km]
13	165251	Pelissier St	Maiden Lane W	Wyandotte St W	2,400	126	Class 2 Collector	5	9.04
14	163876	Chatham St E	Ouellette Ave	Goyeau St	2,100	175	Class 1 Collector	6	8.95
15	165224	Janette Ave	University Ave W	Park St W	1,700	145	Class 1 Collector	4	8.92
16	127494	Pitt St E	Ouellette Ave	Goyeau St	2,600	169	Class 1 Collector	7	8.74
17	127007	Lincoln Rd	Riverside Dr E	Assumption St	1,100	247	Class 1 Collector	4	8.06
18	127496	Pitt St W	Ouellette Ave	Ferry St	2,100	136	Class 1 Collector	4	7.66
19	127825	South Cameron Blvd	Tecumseh Rd W	Curry Ave	3,500	43	Class 2 Collector	2	7.33
20	166877	Glengarry Ave	Assumption St	Brant St	4,000	112	Class 2 Arterial	6	7.32
21	167955	Sandwich St	Chappell Ave	John B Ave	11,000	81	Class 2 Arterial	11	6.80
22	126588	Glengarry Ave	Wyandotte St E	Tuscarora St	4,400	112	Class 2 Arterial	6	6.69
23	161327	E C Row W/B On Ramp	Dominion Blvd	E C Row Expy W/B	900	550	Expressway	6	6.64
24	165241	Victoria Ave	University Ave W	Park St W	2,900	143	Class 2 Collector	5	6.60
25	163868	Bruce Ave	Chatham St W	University Ave W	2,150	82	Class 1 Collector	2	6.22
26	127127	McDougall St	Hanna St E	Tecumseh Rd E	10,500	261	Class 1 Collector	31	6.19
27	166713	University Ave E	City Hall Sq E	McDougall St	6,700	40	Class 2 Arterial	3	6.15
28	126450	Erie St E	Marion Ave	Pierre Ave	4,950	108	Class 1 Collector	6	6.14
29	126329	Dougall Ave	Tecumseh Rd W	Wear St	12,500	230	Class 1 Collector	32	6.09
30	163873	Chatham St W	Ouellette Ave	Pelissier St	2,200	83	Class 1 Collector	2	6.00
							Expressway		0.46
							Class 1 Arterial		0.40
							Class 2 Arterial		0.96
							Class 1 Collector		1.09
							Class 2 Collector		1.35
							Scenic Parkway		0.46
Averages by Road Classification (where traffic volume data is available)									

7. Conclusion

The information in this report has been provided to inform road safety-related decision making in the City of Windsor.

The total number of collisions City-wide increased by 0.1% for 2019, from 4,531 in 2018 to 4,536 in 2019.

Fatalities and major injuries City-wide increased by 9% for 2019, from 34 in 2018 to 37 in 2019. The 2019 total (37 fatalities and major injuries) is slightly lower than the 2015-2019 five-year average (37.2 fatalities and major injuries).

Windsor's 2019 motor vehicle collision fatality rate (2.45 fatalities per 100,000 population) is lower than the 2019 provincial average (3.95 fatalities per 100,000 population), while Windsor's 2019 injury rate (7.91 injuries per 1,000 population) is higher than the 2019 provincial average (3.19 injuries per 1,000 population).