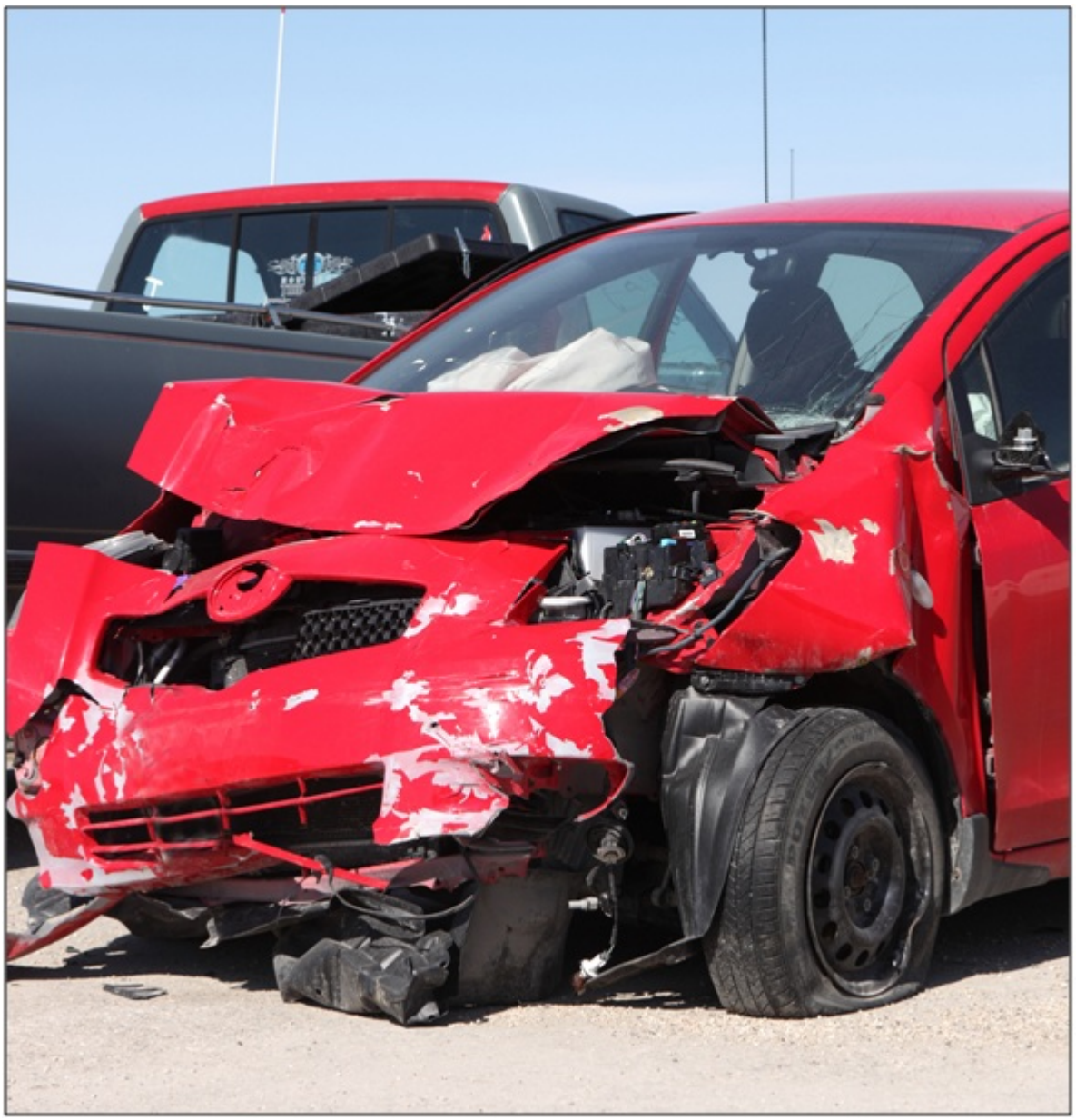
Traffic Collision Statistics Report 2013

Manitoba Public Insurance

EXECUTIVE SUMMARY



2013 Traffic Collision Statistics Report – Executive Summary

Motor vehicle collisions resulting in a fatality, injury or property damage only are required by law to be reported to either a law enforcement agency and/or to Manitoba Public Insurance. Subsequently, a Traffic Accident Report (TAR) for the collision is created. The *Traffic Collision Statistics Report* deals with these reportable collisions and the TARs arising from them.

The *Traffic Collision Statistics Report* is the official report of traffic collision statistics in Manitoba. It reports the details surrounding traffic collisions in Manitoba, allowing users to analyze the reasons why collisions occur. Knowing more about collisions helps policy makers, traffic safety experts, public safety programmers and legislators to pinpoint areas for review and create targeted approaches to preventing and reducing traffic collisions.

Due to amendments to the *Highway Traffic Act* that took effect in 2011, this report uses two sources for Traffic Accident Reports (TARs); TARs completed by a law enforcement agency and TARs completed when a collision claim is registered with Manitoba Public Insurance. When comparing 2013 to the five year average from 2008 to 2012, there will be an increase in collision counts that is primarily a result of this change to two reporting sources. This change resulted in an increase in minimal injury and property damage only (PDO) collisions in the Traffic Accident Report Database that had previously been underreported.

The following is a presentation of the key highlights of this report for 2013.

Licensed Drivers and Vehicle Registrations
In 2013, there are 855,791 licensed drivers in Manitoba, an increase of 2% compared to 2012.

Overall, there are 1,012,793 vehicles registered in Manitoba (commercial and non-commercial, combined) in 2013, a 2% increase from 2012.

Traffic Collisions
In 2013, there are a total of 41,819 traffic collisions that conform to the reportable collision requirement for Traffic Accident Reports. Of these:

- 69 involve a fatality (0.2% of all collisions);
- 8,729 involve an injury, but not a fatality (21% of all collisions); and,
- 33,021 involve property damage only (79% of all collisions).

Overall traffic collisions in Manitoba in 2013 increased compared to 2012 and compared to the previous five year (2008 to 2012) annual average. There are 41,819 collisions in 2013, up from 38,972 collisions in 2012 and 30,823 on average in the five year period 2008 to 2012. This increase is mostly due to an increase in PDO collisions reported (up 35% compared to the previous five years). Conversely, the number of fatal collisions decreased by nearly 23% compared to 2012 and by 20% to the previous five years. The count of fatal collisions in 2013 is the lowest it has been in two decades.

People Killed and Injured in Collisions
In 2013, there are 11,234 victims (or casualties) of traffic collisions. Of these:

- 85 are killed (fewer than the average in the previous five years, 94);
- 307 are seriously injured (fewer than the average in the previous five years, 354);
- 2,242 sustain minor injuries (fewer than the average in the previous five years, 2,596);
- 8,488 sustain minimal injuries (more than the average in the previous five years, 4,461); and,
- 112 sustain injuries that are undefined in terms of severity (fewer than the average in the previous five years, 758).

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2013 (871.3) has increased by 4% compared to 2012 (835.5) and by 30% compared to the previous five years (2008 to 2012) annual average (668.8). Victim involvement rates in traffic collisions in 2013 where the person:

- Is killed (6.6 in 2013) is 13% lower than in 2012 and 14% lower than in the previous five years; and,
- Is injured, including all levels of severity but excluding killed (864.8 in 2013), is 4% higher than in 2012 and 31% higher than in the previous five years.

Traffic collisions in urban locations account for the majority of casualties overall while in rural locations account for the majority of people killed and seriously injured. In 2013, 86% of all casualties resulted from collisions in urban areas, primarily in Winnipeg (74% of all casualties). Collisions in rural locations, however, account for 73% of people killed and 47% of people seriously injured. In the previous five year (2008 to 2012) annual average, 78% of all victims are from collisions in urban locations (65% in Winnipeg) while 67% of people killed and 54% of people seriously injured are from collisions in rural locations.

In 2013 (and very similar to the previous five years), the count of victims is lowest in the late spring and summer months (ranging from 6% to nearly 8% of all victims in each month from April to September) and is highest in late fall, winter and early spring (ranging from 8% to 13% from October to March). Conversely, people are most often killed and seriously injured in traffic collisions in June, July, August and September (12%, 18%, 18% and 13% of people killed, respectively – 9%, 10%, 13% and 14% of people seriously injured, respectively). This is relatively consistent with the previous five years.

Considering people killed and seriously injured in Manitoba traffic collisions in 2013:

- Drivers account for the largest proportion of people killed (48%) and seriously injured (58%);
- Passengers account for 29% of people killed and 25% of people seriously injured;
- Pedestrians account for 12% of people killed and 7% of people seriously injured;
- Motorcyclists (including mopeds riders) account for 6% of people killed and 7% of people seriously injured; and,
- Bicyclists account for 5% of people killed and 3% of people seriously injured.

In 2013, most vehicle occupant victims (including drivers, passengers and motorcyclists/moped riders) were using safety equipment at the time of the collision (98% of all victims where use is known). However, 35% of the people killed and 7% of the people seriously injured in traffic collisions are recorded as not wearing or using the available safety equipment at the time of the collision.

In 2013, nearly 98% of driver and passenger victims were using the available safety equipment (seatbelts and child safety seats) and were not ejected from the vehicle. However, nearly 85% of people ejected and killed and 38% of the people ejected and seriously injured were not using the available safety equipment at the time of the collision.

Drivers and Vehicles Involved in Collisions

In 2013, there are 63,501 drivers involved in traffic collisions. Of these:

- 106 are involved in fatal collisions;
- 15,539 are involved in injury collisions; and,
- 47,856 are involved in PDO collisions.

The rate of involvement for drivers in traffic collisions in 2013 is 742.0 per 10,000 licensed drivers, an increase of 6% compared to the rate in 2012 (702.2) and an increase of 26% from the previous five year (2008 to 2012) annual average. In 2013, the driver involvement in:

- Fatal collisions (1.2) decreased by 13% from 2012 and by 17% compared to the previous five years;
- Injury collisions (181.6) increased by 4% from 2012 and by 37% compared to the previous five years; and,
- PDO collisions (559.2) increased by 6% from 2012 and by 23% compared to the previous five years.

Young drivers have a much higher rate of involvement in traffic collisions than older drivers. In 2013, drivers aged 16 to 24 years old have an involvement rate (per 10,000 licensed drivers) in traffic collisions of 1,099.7. This is:

- 1.2 times that of drivers aged 25 to 34 (rate of 920.8);
- 1.4 times that of drivers aged 35 to 44 (rate of 811.3);
- 1.6 times that of drivers aged 45 to 54 (rate of 698.4);
- Twice that of drivers aged 55 to 64 (rate of 554.4); and,
- Two-and-a-half times that of drivers aged 65 and older (rate of 415.3).

The reader should note that neither the count of drivers involved in collisions nor the calculated rate of involvement takes into account exposure to risk in terms of hours of driving, kilometres driven or driving situations.

In 2013, there are 64,316 vehicles involved in traffic collisions. Of these:

- 111 are involved in fatal collisions;
- 15,663 are involved in injury collisions; and,
- 48,542 are involved in PDO collisions.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) has increased in 2013 compared to 2012 and to the previous five year (2008 to 2012) annual average. The vehicle involvement rate in collisions in 2013 for:

- Total collisions is 754.8; increased by 6% from 2012, and by 23% from the previous five years;
- Fatal collisions is 1.3; decreased by 13% from 2012, and by 19% from the previous five years;
- Injury collisions is 183.85; increased by 4% from 2012, and by nearly 36% from the previous five years; and,
- PDO collisions is 569.7; increased by 7% from 2012, and by 20% from the previous five years.

Contributing Factors to Collisions

In 2013, 77% of all collisions have some at-fault contributing factor recorded (84% of fatal collisions; 74% of injury collisions). In 2013:

- A driver action is a contributing factor in 62% of all **collisions** (nearly 73% of fatal collisions; 68% of injury collisions; 60% of PDO collisions);
- A human condition is a contributing factor in 1% of all **collisions** (38% of fatal collisions; nearly 3% of injury collisions; 1% of PDO collisions); and,
- Environmental conditions are contributing factors in 17% of all **collisions** (13% of fatal collisions; 8% of injury collisions; 20% of PDO collisions).

The most prevalent **contributing factors recorded for collisions** in 2013 include:

- Distracted driving – 16% of all collisions (26% fatal; nearly 16% injury; 16% PDO);
- “Following too closely” – 15% of all collisions (three fatal; nearly 24% injury; nearly 13% PDO);
- The actions of a wild animal – 11% of all collisions (none fatal; 2% injury; 14% PDO);
- “Backing unsafely” – 7% of all collisions (none fatal; 2% injury; 8% PDO);
- Speed – 6% of all collisions (nearly 15% fatal; 6% injury; 6% PDO);
- “Turning improperly” – 5% of all collisions (none fatal; 6% injury; 5% PDO);
- “Fail to yield right-of-way” – 5% of all collisions (10% fatal; 7% injury; 4% PDO);
- “Changing lanes improperly” – 4% of all collisions (one fatal; 3% injury; 4% PDO);
- “Lost control/Drive off the road” – 4% of all collisions (23% fatal; 4% injury; 4% PDO); and
- “Slippery road surface” – 4% of all collisions (9% fatal; 4% injury; 4% PDO).

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2013 include:

- Distracted driving – 33% of people killed and 21% of people seriously injured;
- Impaired – 22% of people killed and 10% of people seriously injured;
- "Lost control/Drive off the road" – 21% of people killed and 13% of people seriously injured;
- Speed – nearly 17% of people killed and 12% of people seriously injured;
- "Fail to yield right-of-way" – 11% of people killed and nearly 9% of people seriously injured;
- "Slippery road surface" – 7% of people killed and 5% of people seriously injured;
- "Disobey traffic control device/officer" – 7% of people killed and 4% of people seriously injured;
- "Following too closely" – 6% of people killed and 5% of people seriously injured;
- "Pedestrian error/confusion" – 6% people killed and 3% of people seriously injured;
- "Passing improperly" – 6% of people killed and 1% of people seriously injured;
- "Weather" – Nearly 4% of people killed and 2% of people seriously injured;
- "Extreme fatigue/Fell asleep" – 2% of people killed and 2% of people seriously injured;
- "Turning improperly" – none of people killed and 5% of people seriously injured; and,
- The actions of a wild animal – none of people killed and 4% of people seriously injured.

Off-Road Vehicle (ORV) Collisions

In 2013, there are 56 off-road vehicle collisions, involving 62 victims, 71 vehicles and 66 drivers. Of the total off-road vehicle collisions:

- 12 are fatal collisions;
- 37 are injury collisions; and,
- 7 are PDO collisions.

Alcohol-related Criminal Code Convictions

In 2012[1], there are a total of 1,979 alcohol-related Criminal Code offence convictions, including:

- 1,180 convictions for driving with a blood alcohol concentration (BAC) over .08;
- 693 convictions for impaired driving; and,
- 106 convictions for refusing to provide a breath or blood sample.

In the 20-year period from 1993 to 2012, the total alcohol-related Criminal Code convictions declined by nearly 39%, from 3,217 in 1993 to 1,979 in 2012. Total convictions in 2012 (1,979 convictions) are up slightly compared to 2011 (1,956 convictions) but down by 4% compared to the previous five year (2007 to 2011) annual average (2,067 convictions).

Over the past twenty years, alcohol-related Criminal Code convictions have declined in all age groups in Manitoba. Comparing the total number of convictions in 2012 to 1993 among drivers:

- Under 25 years of age, convictions declined by 33%;
- 25 to 44 years of age, convictions declined by 45%;
- 45 to 64 years of age, convictions declined by 22%; and,
- 65 years of age and older, convictions declined by 54%.

Licensed drivers up to the age of 44 are overrepresented in alcohol-related Criminal Code convictions.

- Licensed drivers under age 25 represented 14% of the licensed drivers in 2012, but accounted for 29% of convictions.
- Drivers between the ages of 25 to 44 represented nearly 34% of the licensed drivers in 2012, but accounted for 51% of convictions.

Rates of recidivism, indicated by a second occurrence or third and subsequent occurrences, decreased substantially from 2002 to 2012. There was a 47% reduction in rate at which drivers are convicted of a second alcohol-related Criminal Code offence, and a 53% reduction in the rate for third and subsequent offences in 2012 compared to 2002.

[1] There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2012 is the most current year for which these statistics are available.

PREFACE

Motor vehicle collisions resulting in a fatality, injury or property damage are required by law to be reported to either a law enforcement agency and/or to Manitoba Public Insurance. Subsequently, a Traffic Accident Report (TAR) for the collision is created. The *Traffic Collision Statistics Report* deals with these reportable collisions and the TARs arising from them.

The *Traffic Collision Statistics Report* is the official report of traffic collision statistics in Manitoba. It reports the details surrounding traffic collisions in Manitoba, allowing users to analyze the reasons why collisions occur. Knowing more about collisions helps policy makers, traffic safety experts, public safety programmers and legislators to pinpoint areas for review and create targeted approaches to preventing and reducing traffic collisions.

Annual collision statistics, such as those contained in the *Traffic Collision Statistics Report*, are used to:

- Indicate trends;
- Identify driver and vehicle factors in accidents;
- Evaluate current programs and new provincial road safety initiatives;
- Monitor commercial vehicle collisions in accordance with the National Safety Code; and,
- Guide development of new policies and programs to reduce the frequency and severity of traffic collisions in the province.

A brief Synopsis of each section of this Report can be found below.

Section 1 – Drivers, Vehicle and Collision Rates: Historical Trends
This section calculates involvement rates for total collisions as well as for fatal, injury and property damage only (PDO) collisions using licensed drivers and vehicles registered for the years 2003 to 2013 inclusive. This section also deals with relative involvement rates of drivers by specific age groups.

Section 2 – Licensed Drivers
This section deals with Active and Suspended Drivers by specific Age Groups, Gender and Manitoba Licence Class.

Section 3 – Vehicle Registrations
This section deals with vehicle registrations and examines these by three major categories: Commercial; Non-commercial; and, Snowmobiles (Recreational).

Section 4 – Traffic Collisions
This section counts the number of collisions in Manitoba and provides detail for collisions of different severity; fatal, injury and property damage only (PDO). Historical information regarding the number of collisions, victims, vehicles and drivers involved in collisions over the ten year period 2003 to 2012 is presented and compared to 2013. Details are provided for 2013 traffic collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Section 5 – Collision Victims
This section counts the number of victims killed and injured in traffic collisions and examines the severity of the injury received by the victim. Month, time and day of occurrences are examined, as well as the age of the victim. Victim involvement rates in traffic collisions per 100,000 people in the general population are also calculated.

Section 6 – Pedestrian Victims
This section counts the number of pedestrian victims killed and injured in traffic collisions and examines the severity of the injury received by the pedestrian victim. Month, time and day of occurrence are examined and breaks are provided for the age of the pedestrian. The specific pedestrian actions taken immediately prior to the collision are also presented. Pedestrian involvement rates in traffic collisions per 100,000 people in the general population are also calculated.

Section 7 – Vehicle Involvement
This section counts the number of vehicles involved in traffic collisions. Vehicle involvement in a collision is calculated for each vehicle type (such as passenger vehicles, vans, pick-up trucks, types of emergency vehicles). Vehicle involvement rates in traffic collisions per 10,000 registered vehicles are also calculated.

Section 8 – Driver Involvement
This section counts the number of drivers involved in traffic collisions and breaks this down by age and gender of the driver. Driver involvement rates in traffic collisions per 10,000 licensed drivers are also detailed.

Section 9 – Contributing Factors
This section examines the contributing factors to traffic collisions as reported on the Traffic Accident Report (TAR). Detail is provided at the collision level, at the victim level and at the driver level. Driver involvement rates (per 10,000 licensed drivers) in collisions with specific contributing factors are calculated and discussed.

Section 10 – National Safety Code Monitoring Report
This section counts the number of commercial vehicles involved in collisions, the severity of those collisions and the victims killed and injured in those collisions.

Section 11 – Off-Road Vehicle Collisions
This section counts the number of off-road vehicle (ORV) collisions in Manitoba and provides detail for collisions of different severity: fatal, injury and property damage only (PDO). Information regarding the number of ORV collisions, victims, vehicles, and drivers involved over the eleven year period 2002 to 2013 is presented. Details are provided for 2013 ORV collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location, and type of collision.

Section 12 – Alcohol-Related Criminal Code Convictions
This section counts the number of drivers convicted of alcohol-related Criminal Code offences for the year 2012 by age at the time of the offence and includes historical statistics for the period 1993 to 2011 in comparison to 2012. Details are provided for ‘first’, ‘second’ and ‘third and subsequent’ (i.e., third, fourth, fifth, etc. combined) offences and whether or not a youth was present in the vehicle at the time of the offence.

TABLE OF CONTENTS

SECTION 1 – Drivers, Vehicle and Collision Rates: Historical Trends

Introduction

This section calculates involvement rates for total collisions as well as for fatal, injury and property damage only (PDO) collisions using licensed drivers and vehicles registered for the years 2003 to 2013. This section also presents involvement rates for drivers by specific age groups.

Key Highlights

In 2013, there are a total of 41,819 traffic collisions reported to Manitoba Public Insurance and law enforcement agencies in Manitoba that conform to the reportable collision requirement for Traffic Accident Reports. Of these:

- 69 involve a fatality (0.2% of all collisions);
- 8,729 involve an injury, but not a fatality (21% of all collisions); and,
- 33,021 involve property damage only (79% of all collisions).

In 2013, overall traffic collisions in Manitoba increased compared to 2012 and compared to the previous five year (2008 to 2012) annual average. There are:

- 41,819 collisions in 2013;
- 38,972 collisions in 2012; and,
- 30,823 collisions on average in the five year period 2008 to 2012.

Involvement in traffic collisions in Manitoba increased from 2012 and from the previous five year (2008 to 2012) annual average. Involvement in collisions (per 10,000 licensed drivers) is:

- 488.7 in 2013;
- 464.8 in 2012; and,
- 385.3 on average in the five year period 2008 to 2012.

The increase in the total number of collisions in 2013 compared to 2012 is attributable to increases in injury collisions and PDO collisions. There are 449 more injury collisions, and 2,418 more PDO collisions reported in 2013 than in 2012, representing proportional increases of 5%, and 8%, respectively.

Major Elements Examined

Counts of collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) generated by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions. To be included in the Traffic Accident Database, these reportable collisions must occur on a public roadway.

Involvement in collisions is calculated for total collisions and for collisions of different severity (fatal, injury and PDO). It is calculated both for licensed drivers and for vehicles registered. Involvement per 10,000 licensed drivers by different age groups is also examined.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Reportable Collision"

- Prior to a change in the Highway Traffic Account (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of $1,000 were required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completed a Traffic Accident Report for the collision.
- Amendments to the Highway Traffic Act (which received Royal Ascent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police report be made if the driver is aware, has reason to believe, or is later made aware, that a collision involves: a fatality; an injury requiring admittance to hospital for observation or treatment; another driver not having a valid driver's licence; another vehicle not validly registered; the driver of another vehicle not providing the required particulars; the driver of another vehicle not stopping at the scene of the accident; or, alcohol or another intoxicating substance as a factor in the accident.
- As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public Insurance.
- As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of $2,000 damage (all vehicles combined) is necessary for property damage only (PDO) collisions to be included in this report.
- This report deals with these reportable collisions and the TARs arising from them, regardless of whether the TAR is generated by law enforcement agencies or by Manitoba Public Insurance.

"Public Roadway"

- A public roadway in Manitoba is considered to be any provincial road (PR), provincial trunk highway (PTH) or municipal road, including the entrances to and exits from these roadways. This excludes all off-road areas, parking lots, private property and First Nation Reserve roads (unless the road is a PR or PTH running through, across or on Reserve lands).

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence. Fatal collisions resulting from suicide, where the fatality occurs because of a medical condition and collisions that do not occur on public roadways are excluded.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Involvement"

- A calculation of the number of collisions per specific unit of licensed drivers or registered vehicles. For the purposes of this report, involvement is calculated per 10,000 licensed drivers or registered vehicles.

"Licensed drivers"

- A count of all Manitobans aged 16 and older who hold a valid licence within the licensing year including active and suspended drivers. (See *Section 2 Licensed Drivers* for more information)

Table 1-1 Fatal, Injury and Property Damage Collisions by Total Licensed Drivers

Table 1-1
Fatal, Injury, and Property Damage Collisions by Total Licensed Drivers: 2003 to 2013

Year	Licensed Drivers	Total Collisions	Collisions /10,000 Drivers	Total Fatal	Fatal /10,000 Drivers	Total Injury	Injury /10,000 Drivers	Total PDO	PDO /10,000 Drivers
2003	703,889	34,771	494.0	95	1.3	7,273	103.3	27,403	389.3
2004	711,488	35,002	492.0	90	1.3	6,855	96.3	28,057	394.3
2005	716,169	33,164	463.1	88	1.2	6,482	90.5	26,594	371.3
2006	724,330	31,738	438.2	104	1.4	6,503	89.8	25,131	347.0
2007	752,398	29,494	392.0	96	1.3	6,415	85.3	22,983	305.5
2008	765,014	27,092	354.1	85	1.1	5,974	78.1	21,033	274.9
2009	776,209	26,578	342.4	83	1.1	5,396	69.5	21,099	271.8
2010	790,330	27,172	343.8	78	1.0	5,386	68.1	21,708	274.7
2011	813,691	34,302	421.6	94	1.2	6,309	77.5	27,899	342.9
2012	838,481	38,972	464.8	89	1.1	8,280	98.8	30,603	365.0
2013	**855,791**	**41,819**	**488.7**	**69**	**0.8**	**8,729**	**102.0**	**33,021**	**385.9**
2008-12 Average	796,745	30,823	385.3	86	1.1	6,269	78.4	24,468	305.9

Relative to ten years ago, the total number of collisions in 2013 has increased by 20% (41,819 in 2013 compared to 34,771 in 2003). However, crash involvement per 10,000 licensed drivers has decreased by 1% in the same time period (488.7 in 2013 compared to 494.0 in 2003). Compared to 2012, total collisions have increased by 7% (up from a total of 38,972) and involvement has increased by 5%. Compared to the previous five year (2008 to 2012) annual average, total collisions have increased 36% and involvement has increased by 27%.

Compared to recent historical figures, collision counts of different severities all increased in 2012 with the exception of fatal collisions.

- Fatal collisions have decreased by 27% compared to 2003, by nearly 23% compared to 2012, and by 20% compared to the previous five year (2008 to 2012) annual average.
- Injury collisions have increased by 20% compared to 2003, by 5% compared to 2012 and by 39% compared to the previous five year (2008 to 2012) annual average.
- PDO collisions have increased by nearly 21% compared to 2003 and by 8% compared to 2012. They have also increased by 35% compared to the previous five year (2008 to 2012) annual average.

Differences in the crash counts and rates in 2013 compared to the previous five year (2008 to 2012) annual average are at least somewhat affected by the reporting change that took effect late in 2011. Please see the definition of “Reportable Collision” for detail regarding this change.

Table 1-2 Percentage Change Year-over-Year in Involvement (per 10,000 Licensed Drivers) in Fatal, Injury, and Property Damage Only Collisions

Table 1-2

Percentage Change Year-Over-Year in Relative Involvement Rate (per 10,000 Licensed Drivers) in Fatal, Injury, and PDO Collisions: 2003 to 2013

Year	Collisions /10,000 Drivers	% change to previous year	Fatal /10,000 Drivers	% change to previous year	Injury /10,000 Drivers	% change to previous year	PDO /10,000 Drivers	% change to previous year
2003	494.0	-	1.3	-	103.3	-	389.3	-
2004	492.0	-0.4%	1.3	-6.3%	96.3	-6.8%	394.3	1.3%
2005	463.1	-5.9%	1.2	-2.9%	90.5	-6.1%	371.3	-5.8%
2006	438.2	-5.4%	1.4	16.9%	89.8	-0.8%	347.0	-6.6%
2007	392.0	-10.5%	1.3	-11.1%	85.3	-5.0%	305.5	-12.0%
2008	354.1	-9.7%	1.1	-12.9%	78.1	-8.4%	274.9	-10.0%
2009	342.4	-3.3%	1.1	-3.8%	69.5	-11.0%	271.8	-1.1%
2010	343.8	0.4%	1.0	-7.7%	68.1	-2.0%	274.7	1.0%
2011	421.6	22.6%	1.2	17.1%	77.5	13.8%	342.9	24.8%
2012	464.8	10.3%	1.1	-8.1%	98.8	27.4%	365.0	6.4%
2013	**488.7**	**5.1%**	**0.8**	**-24.0%**	**102.0**	**3.3%**	**385.9**	**5.7%**
2008-12 Average*	385.3	4.1%	1.1	-3.1%	78.4	4.0%	305.9	4.2%

*The "% change to previous year" for "2008-12 Average" is an average rate of change for the time period 2008 to 2012.

Recognizing that collision counts could be impacted either positively or negatively by changing population statistics, involvement rates per 10,000 licensed drivers are examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on how many drivers are being involved in collisions instead of simply a raw count of collisions overall.

Involvement (per 10,000 licensed drivers) in collisions is up overall as well as for collisions of different severities with the exception of fatal collisions. The involvement in collisions per 10,000 drivers in 2013 is:

- 488.7 for all collisions, up 5% from 2012 and by 27% compared to the previous five year (2008 to 2012) annual average;
- 0.8 for fatal collisions, down 24% from 2012 and by 25% compared to the previous five year (2008 to 2012) annual average;
- 102.0 for injury collisions, up 3% from 2012 and by 30% from the previous five year (2008 to 2012) annual average; and,
- 385.9 for PDO collisions, up 6% from 2012 and by 26% compared to the previous five year (2008 to 2012) annual average.

The previous downward trend in collision rates and involvement that had continued from 2004 though to 2010 has been reversed in 2012 to 2013.

Table 1-3 Fatal, Injury and Property Damage Collisions by Vehicles Registered

Table 1-3
Fatal, Injury, and Property Damage Collisions by Vehicles Registered: 2003 to 2013

Year	Vehicles Registered *	Total Collisions	Collisions /10,000 Vehicles	Total Fatal	Fatal /10,000 Vehicles	Total Injury	Injury /10,000 Vehicles	Total PDO	PDO /10,000 Vehicles
2003	714,170	34,771	486.9	95	1.3	7,273	101.8	27,403	383.7
2004	725,590	35,002	482.4	90	1.2	6,855	94.5	28,057	386.7
2005	730,838	33,164	453.8	88	1.2	6,482	88.7	26,594	363.9
2006	740,636	31,738	428.5	104	1.4	6,503	87.8	25,131	339.3
2007	753,705	29,494	391.3	96	1.3	6,415	85.1	22,983	304.9
2008	773,596	27,092	350.2	85	1.1	5,974	77.2	21,033	271.9
2009	783,426	26,578	339.3	83	1.1	5,396	68.9	21,099	269.3
2010	799,327	27,172	339.9	78	1.0	5,386	67.4	21,708	271.6
2011	814,808	34,302	421.0	94	1.2	6,309	77.4	27,899	342.4
2012	838,553	38,972	464.8	89	1.1	8,280	98.7	30,603	364.9
2013	**852,105**	**41,819**	**490.8**	**69**	**0.8**	**8,729**	**102.4**	**33,021**	**387.5**
2008-12 Average*	801,942	30,823	383.0	86	1.1	6,269	77.9	24,468	304.0

*Vehicles registered exclude off-road vehicles, non-commercial snow vehicles, non-commercial trailers, non-farm tractors and PSV trailers.

Involvement in collisions per 10,000 vehicles registered is another way to view collision rates in a standardized format. It attempts to account for fluctuations in the total number of vehicles registered for use on Manitoba roadways.

In 2013, there are 490.8 collisions for every 10,000 vehicles registered in Manitoba, up by 6% compared to the rate in 2012 (464.8) and increased by 28% compared to the rate in the previous five year (2008 to 2012) annual average (383.0).

The rate of involvement in collisions at each level of severity has also increased in 2013 compared to recent years, with the exception of fatal collisions. In 2013, there are 0.8 fatal collisions for every 10,000 vehicles, down 24% from 2012 (rate of 1.1) and from the previous five year (2008 to 2012) annual average (rate of 1.1). The involvement rate for injury collisions (102.4 in 2013) is up 4% compared to 2012 (rate of 98.7) and nearly 32% from the previous five year (2008 to 2012) annual average (rate of 77.9). Involvement in PDO collisions (387.5 in 2013) is up 6% compared to 2012 (rate of 364.9) and by nearly 28% compared to the previous five year (2008 to 2012) annual average (rate of 304.0).

Involvement rates between 2003 and 2013 for collisions in Manitoba, both per 10,000 licensed drivers and per 10,000 registered vehicles, are noted in Figures 1-1, 1-2, 1-3 and 1-4 on the following pages. The spike in rates for overall collisions, injury collisions, and PDO collisions in 2011 and 2012 is attributable to a change in the reporting requirements, discussed under the “Reportable Collisions” definition. Year over year changes in the 2013 collision rates, however, are not due to changes in what constitutes a reportable collision.

Figure 1-1 Involvement in Total Collisions by Licensed Drivers and Vehicles Registered

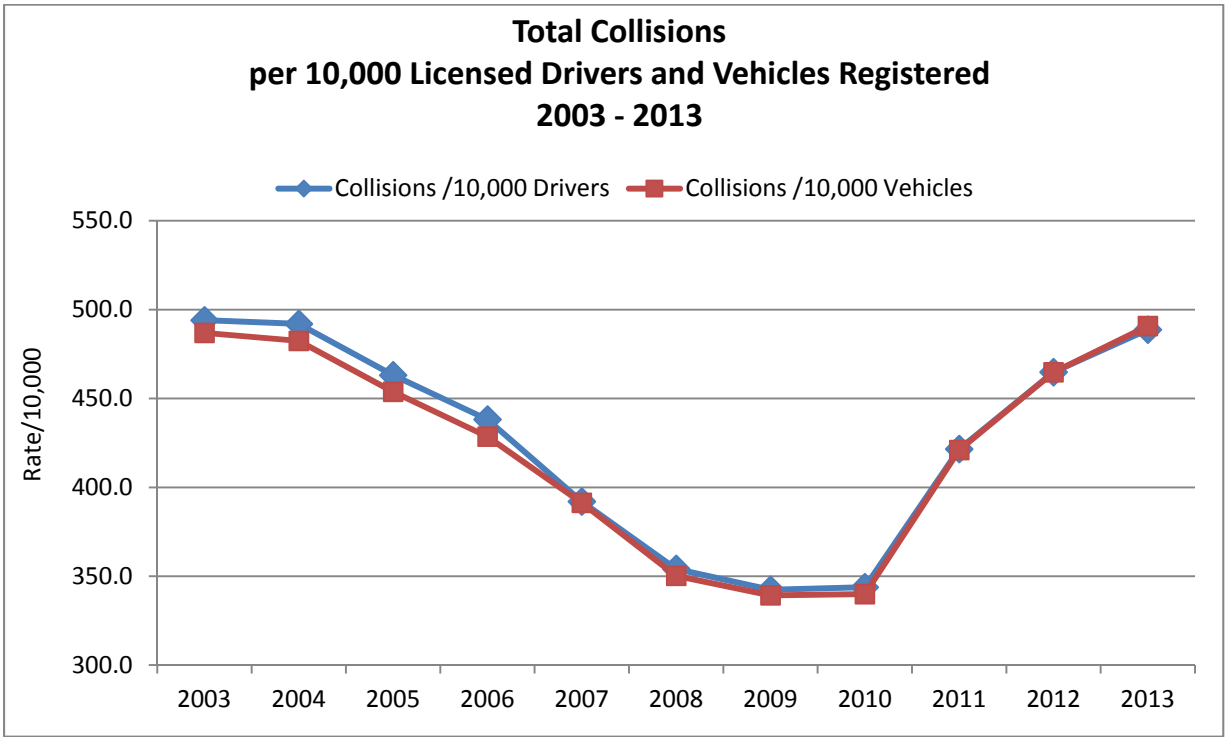


Figure 1-2 Involvement in Fatal Collisions by Licensed Drivers and Vehicles Registered

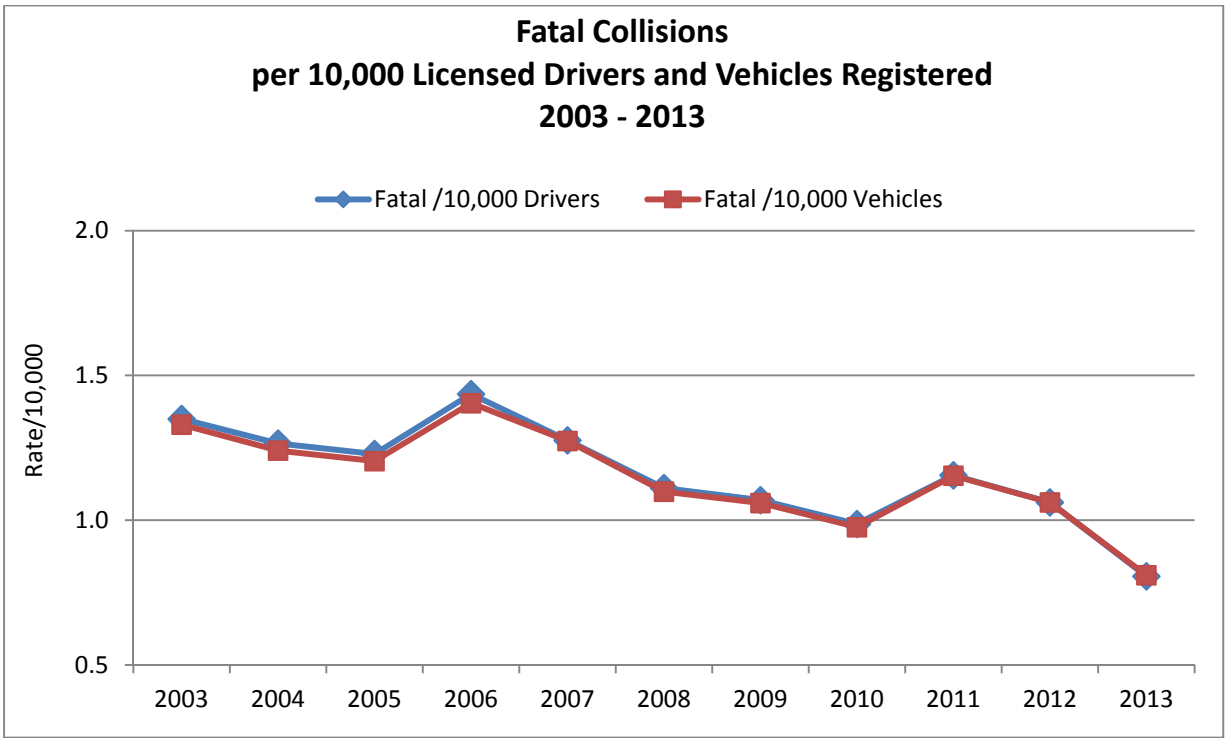


Figure 1-3 Involvement in Injury Collisions by Licensed Drivers and Vehicles Registered

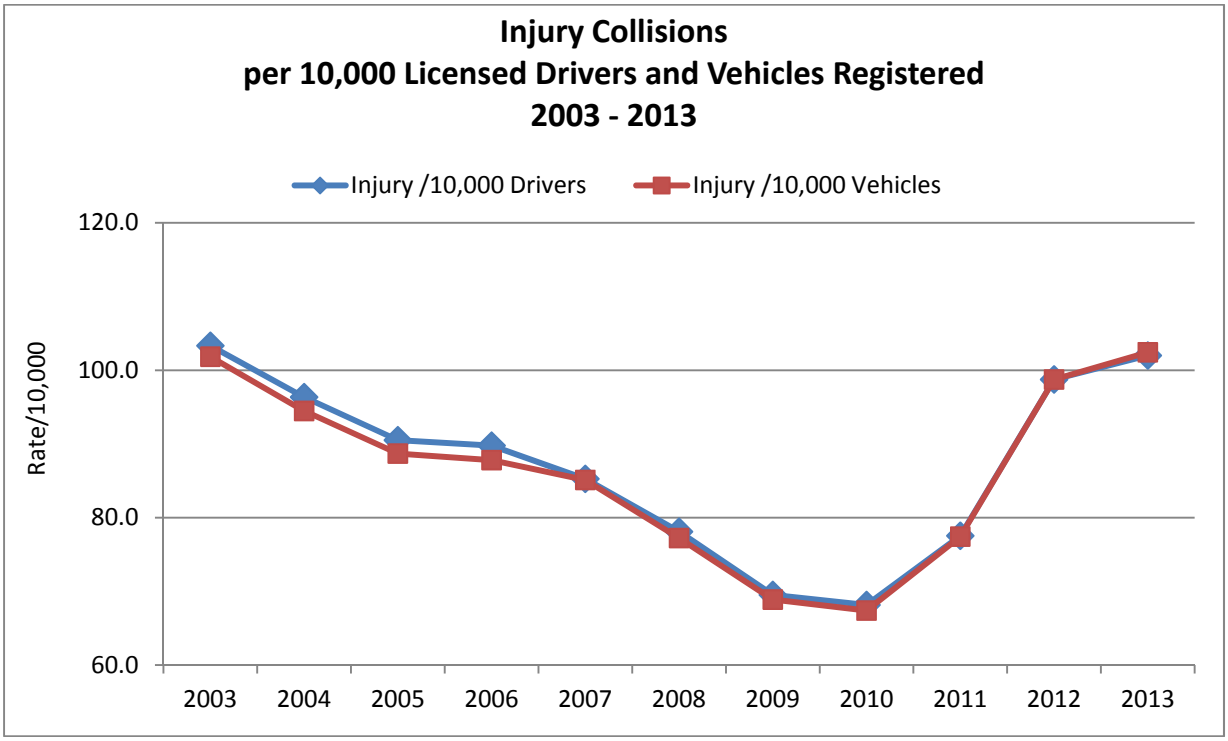


Figure 1-4 Involvement in Property Damage Only (PDO) Collisions by Licensed Drivers and Vehicles Registered

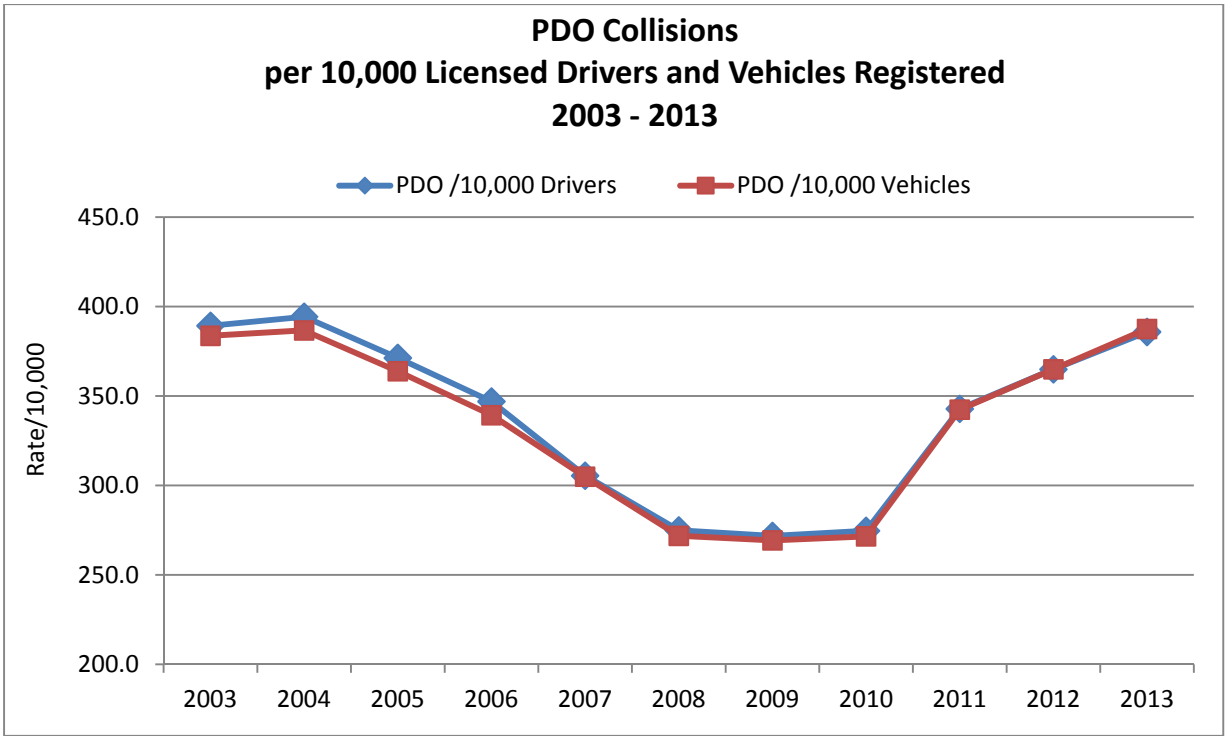


Table 1-4 Involvement (Total Collisions) per 10,000 Licensed Drivers by Age Group

Table 1-4
Involvement (Total Collisions) /10,000 Licensed Drivers by Age Group: 2003 to 2013

Age Group	Year											2008-2012 Average
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	**2013**	
16-19	1,099.7	1,071.2	973.8	937.9	838.7	771.7	756.1	737.3	890.8	1,095.7	**1,068.3**	853.3
20-24	866.1	868.7	786.1	747.6	706.2	673.8	648.8	630.4	851.6	1,114.4	**1,121.0**	792.6
25-34	615.3	617.4	578.3	541.9	511.6	493.2	460.6	470.5	671.8	860.0	**920.8**	598.3
35-44	566.7	582.6	545.3	498.9	466.1	450.5	444.0	432.1	586.9	741.6	**811.3**	532.4
45-54	511.1	494.3	484.2	452.5	429.1	402.9	393.0	397.9	524.2	645.0	**698.4**	473.1
55-64	446.9	461.8	426.8	397.1	378.6	347.6	340.4	353.0	441.6	529.8	**554.4**	405.8
65-74	390.4	375.7	359.0	342.6	310.0	296.9	289.8	285.0	366.9	416.9	**458.1**	334.2
75>	364.7	337.8	318.6	321.2	276.5	237.4	235.2	254.9	292.5	342.7	**353.4**	274.3

In 2013, the youngest driver age groups in Manitoba continue to have the highest rates of involvement in collisions. At 1,068.3, the involvement rate of drivers aged 16 to 19 is:

- Only slightly below the rate of those aged 20 to 24;
- 16% higher than those aged 25 to 34;
- 32% higher than those aged 35 to 44;
- 53% higher than those aged 45 to 54;
- Nearly double those aged 55 to 64; and,
- Nearly triple the rate of those aged 65 and older.

Manitobans aged 20 to 24 have the highest rate of involvement collisions in 2013. At 1,121.0, the involvement rate of drivers aged 20 to 24 is:

- 22% higher than those aged 25 to 34;
- 38% higher than those aged 35 to 44;
- Nearly 61% higher than those aged 45 to 54;
- Double those aged 55 to 64; and,
- Nearly triple those aged 65 and older.

Manitobans aged 25 to 34, while having a lower involvement rate than younger drivers, have a higher involvement rate than drivers in older age groups. At 920.8, the involvement rate of drivers aged 25 to 34 is:

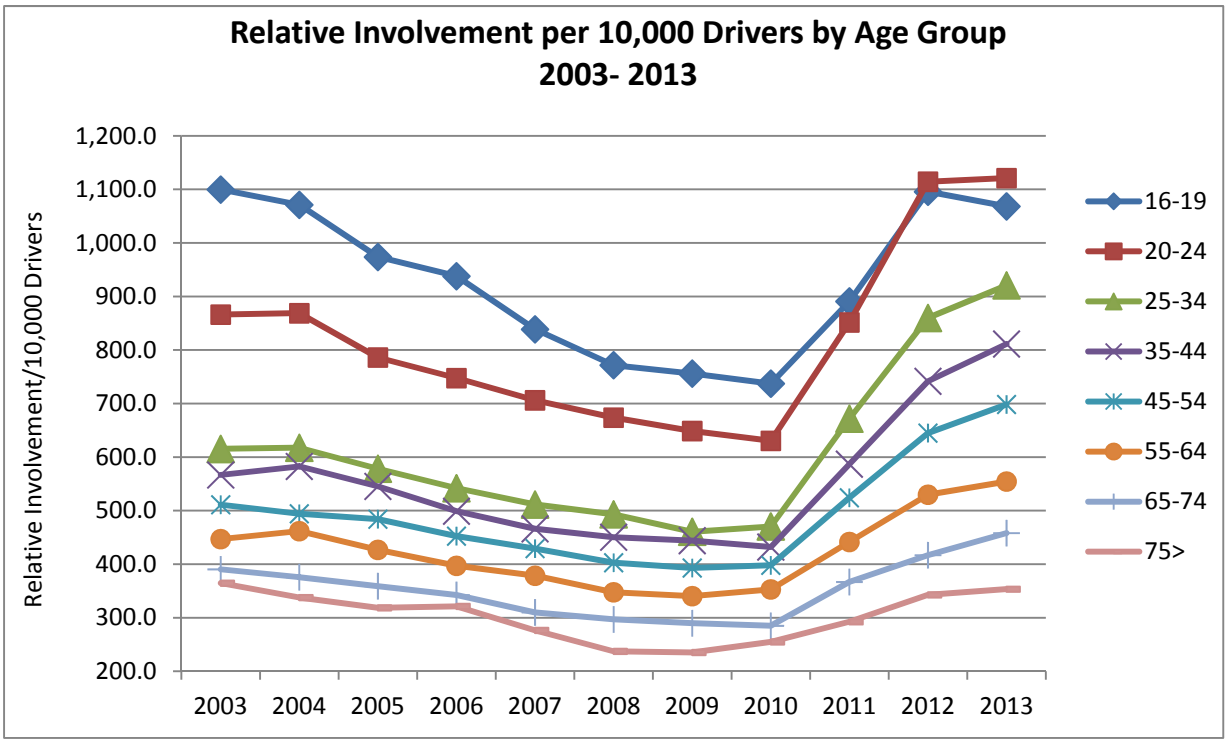
- Nearly 14% higher than those aged 35 to 44;
- 32% higher than those aged 45 to 54;
- 66% higher than those aged 55 to 64; and,
- More than double those aged 65 and older.

The involvement rate for drivers in each successive age group beginning at age 35 drops off quite rapidly, decreasing by about 20% with each ten-year bracket.

Collision involvement rates for drivers in nearly all age groups have increased in 2013 compared to 2012 and to the previous five year (2008 to 2012) annual average. Involvement per 10,000 licensed drivers in 2013 by age group:

- Age 16 to 19 – 1,068.3 in 2013, down nearly 3% compared to 2013 but up by 25% compared to the previous five year annual average.
- Age 20 to 24 – 1,121.0 in 2013, up nearly 1% compared to 2012 and by 41% compared to the previous five year annual average.
- Age 25 to 34 – 920.8 in 2013, up 7% compared to 2012 and by 54% compared to the previous five year annual average.
- Age 35 to 44 – 811.3 in 2013, up 9% compared to 2012 and by 52% compared to the previous five year annual average.
- Age 45 to 54 – 698.4 in 2013, up 8% compared to 2012 and by 48% compared to the previous five year annual average.
- Age 55 to 64 – 554.4 in 2013, up 5% compared to 2012 and by 37% compared to the previous five year annual average.
- Age 65 to 74 – 458.1 in 2013, up 10% compared to 2012 and by 37% compared to the previous five year annual average.
- Age 75 and over – 353.4 in 2013, up 3% compared to 2012 and by 29% compared to the previous five year annual average.

Figure 1-5 Involvement (per 10,000 Licensed Drivers) in Total Collisions by Age Group



SECTION 2 – Licensed Drivers

Introduction

This section deals with Active and Suspended Drivers by specific Age Groups, Gender and Manitoba Licence Class.

Key Highlights
There is an average of 855,791 licensed drivers in Manitoba in 2013, an increase of 2% compared to 2012. Of these:

- 96% are Active drivers, 4% are Suspended drivers;
- 52% are Male, 48% are Female;
- 69% are between the ages of 25 and 64; and
- Men account for 68% of all Suspended drivers in Manitoba.

There is an average of 66,908 licensed motorcycle drivers in Manitoba in 2013, an increase of nearly 3% compared to 2012.

Major Elements Examined
Counts of licensed drivers in Manitoba for 2013 represent an average for the 2013 calendar year. That is, "point-in-time" observations (licensed drivers by age, licence class and gender) are recorded as of the first of each month and then an average for the year is calculated and reported. Due to rounding in this process, some columns and rows may not add to the total. This is different from some previous years. Methodological improvements were made to licensed driver counts in 2008. To enable historical comparisons of licensed driver counts, data reported here for the years 2003 through 2007 have been adjusted to reflect this new methodology.

At the beginning of this section, there is a quick reference chart of Manitoba's Driver Licence and Vehicle Class descriptions. A review of these charts will indicate which Driver Licence Class is required to operate specific Vehicle Classes.

As it is a requirement for Class 6 licence holders to first possess a Class 1-5 licence prior to obtaining a Class 6 licence, Class 1 to 5 licence holders are discussed separately from Class 6 licence holders to avoid duplication of licence counts. Tables 2-6, 2-7, 2-8, 2-9 and 2-10 present the number of Class 6 active motorcycle licensed drivers by Gender, Age Group and Driver Licence Class.

Terms and Definitions
"Licence Class"

- A Manitoba Driver's Licence of a specific level which permits the holder to operate vehicles within a specific Vehicle Class

"Vehicle Class"

- Category of vehicles meeting specific designations and specifications

"Active drivers"

- Drivers holding an active Manitoba Driver's Licence of any specific Licence Class

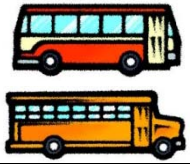
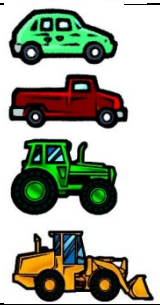
"Suspended drivers"

- Drivers holding a Manitoba Driver's Licence of any specific Licence Class who have been disqualified from driving for some reason. Although the list is extensive, some possible suspensions could be for driving violations, medical conditions, administrative suspensions and criminal code convictions.

"Graduated Driver Licensing (GDL)"

- A three-stage program designed to help new drivers, regardless of age, acquire the knowledge and skill needed to safely operate a motor vehicle. Each licence stage has specific rules and restrictions governing when and under what circumstances the holder is allowed to operate a motor vehicle, enabling novice drivers to gain more experience under a greater variety of driving conditions. Both Class 5 and Class 6 licences have a GDL stage associated with them.
- Three stages of GDL: Learner (5/L or 6/L); Intermediate (5/I or 6/I); and, Full (5/F or 6/F).
- To view a full discussion of the GDL program in Manitoba, please visit:
    - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGuide.pdf; ou en Français,
    - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGUIDEfr.pdf

Chart 2-1 Class Licence System Quick Reference Chart

Manitoba Licence Class	Allows the Licence Holder to Operate	Minimum Age	Requirements
1 	Semi-trailer trucks including all vehicles in Classes 2, 3, 4, and 5.	18	• Must hold a minimum Class 5 Intermediate or Class 5 Authorized Instruction licence to obtain authorized instruction in Classes 1–4. • Must pass written or oral knowledge test. • Requires supervising driver for Authorized Instruction. • Must pass road test. For Classes 1, 2, 3 or 4 (buses and trucks only), the test includes a pre-trip inspection of vehicle (and air brake system if applicable) by the applicant.
2 	Buses[1] having a seating capacity of over 24 passengers (while carrying passengers), school buses[2] having a seating capacity over 36 passengers (while carrying passengers). Includes all vehicles in Classes 3, 4 and 5.		
3 	Trucks with more than two axles, including any combination of vehicles, OR a truck with two axles towing a vehicle with a registered gross vehicle weight of more than 4,540 kg (but does not include a semi-trailer truck). Includes all vehicles in Classes 4 and 5.		
4 	Taxis, ambulances, and other emergency vehicles, buses[1] with a seating capacity between 10 and 24 passengers (while carrying passengers) and school buses[2] with a seating capacity between 10 and 36 passengers (while carrying passengers). Includes all vehicles in Class 5.		
5 	Passenger cars, a bus while not carrying passengers, trucks with two axles, and any combination of vehicles consisting of a truck with two axles and a towed vehicle with a registered gross vehicle weight of **up to** 4,540 kg. May operate Class 3 vehicles if registered as a farm truck and the driver holds a Class 5 Intermediate or Full Stage Licence. May operate a Moped[3], if 16 years of age or older. Note: *A person must hold a valid minimum Class 5 Intermediate Stage driver's licence to operate a special mobile machine, implement of husbandry or tractor on a provincial highway, or a highway within the municipal boundaries of a city, town, village or urban municipality. For further information please call 204-985–7000 or toll-free 1 800-665-2410.*	16 or 15½ if enrolled in high school driver education course	• Must pass written or oral knowledge and sign tests for Class 5 Learner licence (minimum nine- month Learner Stage). (Must wait seven days for re-tests.) • Requires supervising driver for a Class 5 Learner Stage or Authorized Instruction. • Requires supervising driver for a Class 5 Intermediate if carrying more than one passenger between the hours of 12 midnight and 5 a.m. • Must pass road test to advance to the Intermediate Stage (minimum 15-month Intermediate Stage). (Must wait 14 days for re-test).
6 	Motorcycles.	16	• Driver must hold a valid licence of any class and stage. • Must pass written or oral knowledge test. (Must wait seven days for re-tests.) • Must obtain Class 6 M Stage licence in order to complete motorcycle training course. The course is required before Learner Stage Licence is issued. (Contact Manitoba Safety Council for motorcycle course charges.) • Minimum nine-month Learner Stage. • Must pass road test to advance to the Intermediate Stage (minimum 15–months Intermediate Stage). (Must wait 14 days for re-test.)
Air Brake Endorsement 	Air Brake Endorsement—permits the holder to drive vehicles equipped with Air Brakes in the class of vehicle for which the person is licenced. Drivers of a Class 3 truck registered as a farm truck equipped with air brakes are exempt from this requirement.		• Must pass written or oral test. • Must pass Air Brake practical test for "A" (Authorized) endorsement. • Must pass adjustment of the manual slack adjusters for "S" (Slack Adjuster) endorsement. • There is no additional charge for the Air Brake practical test if it is completed at the same time you are road-tested for a higher class of licence.

1. A bus is any vehicle with a seating capacity of at least 11 persons (including the driver) used primarily to carry passengers. It excludes vehicles used for personal transportation by the owner or with the owner's permission.
2. School bus certificate is required. For further information contact the Manitoba Education, Training and Youth, Pupil Transportation at 204-945–6900.
3. Mopeds are not allowed to be driven on highways with a speed limit exceeding 80 km/h, but may cross these highways.

Table 2-1 Class 1-5 Licensed Drivers by Year and Driver Status

Table 2-1
Class 1-5 Licensed Drivers by Year and Driver Status: 2003-2013

Licensing Year	Active Drivers	Suspended Drivers	Total Drivers	% Change to Previous Year
2003	683,060	20,829	703,889	
2004	690,568	20,919	711,488	-1.1%
2005	695,091	21,077	716,169	0.7%
2006	703,051	21,279	724,330	1.1%
2007*	728,047	24,351	752,398	3.9%
2008	744,049	20,965	765,014	1.7%
2009	754,485	21,724	776,209	1.5%
2010	767,222	23,108	790,330	1.8%
2011	788,046	25,645	813,691	3.0%
2012	805,519	32,962	838,481	3.0%
2013	**818,303**	**37,487**	**855,791**	2.1%
Average 2008-2012**	771,864	24,881	796,745	2.2%

*The count of "Suspended Drivers" in 2007 is artificially high due to a system error that was later corrected to recode licences displayed as suspended, but not actually suspended.
**The "% Change to Previous Year" for "2008-12 Average" is an average rate of change for the time period 2008 to 2012.

Compared to 2012, the total number of licensed drivers in Manitoba in 2013 increased by 2% to 855,791. This is in line with historical increases seen in recent years; the rate of change over the past five years (2008-2012) was a 2% increase on average each year.

The proportion of suspended drivers increased by 13.7% in 2013 compared to 2012, up to 37,487 from 32,962, respectively. The count of suspended drivers in 2013 is somewhat higher than historical figures. Similarly, in 2011 and 2012 the suspended driver count was higher than historical figures (representing year-over-year increases of 3% each year).

Table 2-2 Class 1-5 Licensed Drivers by Age Group, Gender and Driver Status

Table 2-2
Class 1-5 Licensed Drivers by Age Group, Gender and Driver Status: 2013

Age Group	Gender	Active Drivers	Suspended Drivers	Total Drivers	% of "All Ages"	% Suspended in Category
16-17	Male	11,135	142	11,277	2.5	1.3
	Female	10,609	112	10,721	2.6	1.0
	Total	21,744	254	21,998	2.6	1.2
18-19	Male	13,465	637	14,102	3.2	4.5
	Female	12,789	422	13,212	3.2	3.2
	Total	26,255	1,059	27,314	3.2	3.9
20-24	Male	35,175	2,410	37,585	8.5	6.4
	Female	33,745	1,496	35,241	8.5	4.2
	Total	68,920	3,906	72,825	8.5	5.4
25-34	Male	70,336	4,565	74,900	16.9	6.1
	Female	68,029	2,300	70,328	17.1	3.3
	Total	138,364	6,864	145,228	17.0	4.7
35-44	Male	69,616	3,787	73,403	16.6	5.2
	Female	67,784	1,587	69,371	16.8	2.3
	Total	137,400	5,373	142,773	16.7	3.8
45-54	Male	79,765	3,798	83,563	18.8	4.5
	Female	76,012	1,299	77,311	18.8	1.7
	Total	155,778	5,097	160,874	18.8	3.2
55-64	Male	69,511	2,643	72,154	16.3	3.7
	Female	66,543	870	67,413	16.4	1.3
	Total	136,054	3,513	139,567	16.3	2.5
65-74	Male	42,707	1,879	44,585	10.1	4.2
	Female	40,389	788	41,177	10.0	1.9
	Total	83,095	2,666	85,762	10.0	3.1
75-84	Male	20,688	2,330	23,018	5.2	10.1
	Female	19,707	1,168	20,875	5.1	5.6
	Total	40,395	3,497	43,892	5.1	8.0
85+	Male	5,461	3,435	8,896	2.0	38.6
	Female	4,838	1,823	6,661	1.6	27.4
	Total	10,299	5,258	15,557	1.8	33.8
All Ages	Male	417,858	25,624	443,482	100.0	5.8
	Female	400,445	11,864	412,309	100.0	2.9
	Total	818,303	37,487	855,791	100.0	4.4

In 2013, the proportion of suspended drivers aged 75 or older is more than four times the proportion of suspended drivers under age 75 (15% of drivers aged 75 or older are suspended; 4% of drivers aged 16 to 74 are suspended).

Table 2-3 Class 1-5 Licensed Drivers by License Class, Driver Status and Gender

Table 2-3
Class 1-5 Licensed Drivers by License Class, Driver Status and Gender: 2013

License Class	Active Drivers				Suspended Drivers				Total	%
	Male	Female	Subtotal	%	Male	Female	Subtotal	%		
1	36,366	1,437	37,803	4.6	921	29	950	2.5	38,753	4.5
2	4,695	1,628	6,322	0.8	90	25	115	0.3	6,437	0.8
3	10,741	323	11,064	1.4	241	3	244	0.7	11,308	1.3
4	13,002	4,239	17,241	2.1	429	64	493	1.3	17,734	2.1
5/F	327,466	357,852	685,318	83.7	20,094	8,555	28,649	76.4	713,967	83.4
5/I	9,680	9,536	19,217	2.3	506	212	718	1.9	19,935	2.3
5/L	13,344	20,663	34,006	4.2	1,958	2,094	4,053	10.8	38,059	4.4
5/A	2,556	4,767	7,324	0.9	678	594	1,272	3.4	8,596	1.0
Other	9	1	9	<0.1	706	287	994	2.7	1,003	0.1
Total	417,858	400,445	818,303	100.0	25,624	11,864	37,487	100.0	855,791	100.0

Manitoba Class 5 Driver's Licence Stages:

- 5/F Full Class 5 licence (including Full Stage Class 5 under Graduated Driver Licensing)
- 5/I Intermediate Stage under Graduated Driver Licensing
- 5/L Learner Stage under Graduated Driver Licensing
- 5/A Learner drivers who are not in Graduated Driver Licensing
- Other Unlicensed drivers assigned a licence number

The vast majority of Manitobans with a licence hold a Full Class 5 (83%). Novice drivers, holding either Learner (5/L) or an Intermediate (5/I) Stage licence, account for the next largest group (7% of all licensed drivers in Manitoba), followed by Class 1 licensed drivers (nearly 5%).

Very little has changed in the proportion of licence holders by class when comparing 2013 to 2012.

Table 2-4 Class 1-5 Male Drivers by Age Group, Driver Status and License Class

Table 2-4
Class 1-5 Male Drivers by Age Group, Driver Status and License Class: 2013

Age Group	Status	Licence Class										Total
		1	2	3	4	1-4/A	5/F	5/I	5/L	5/A	5 Other	
16-17	Active	0	0	0	0	0	735	5,011	5,388	1	0	11,135
	Suspended	0	0	0	0	0	6	47	89	0	0	142
	Subtotal	0	0	0	0	0	742	5,058	5,476	1	0	11,277
18-19	Active	109	1	29	76	0	8,961	1,966	2,298	25	0	13,465
	Suspended	1	0	0	1	0	251	99	284	0	0	637
	Subtotal	111	1	30	77	0	9,213	2,065	2,582	25	0	14,102
20-24	Active	1,265	41	431	860	2	27,765	1,522	3,070	219	0	35,175
	Suspended	23	0	12	15	0	1,342	195	813	10	0	2,410
	Subtotal	1,288	41	443	875	2	29,107	1,717	3,883	229	0	37,585
25-34	Active	5,113	321	1,575	3,227	2	56,632	829	1,673	964	0	70,336
	Suspended	112	4	36	57	0	3,266	135	577	259	119	4,565
	Subtotal	5,225	325	1,611	3,284	2	59,898	964	2,250	1,224	119	74,900
35-44	Active	7,669	686	1,797	3,307	4	54,764	258	515	616	0	69,616
	Suspended	208	12	36	71	0	2,911	25	135	170	219	3,787
	Subtotal	7,876	698	1,834	3,378	4	57,675	283	650	785	219	73,403
45-54	Active	10,267	1,409	2,716	3,133	1	61,500	73	266	401	0	79,765
	Suspended	232	32	43	120	0	3,014	5	49	88	215	3,798
	Subtotal	10,499	1,441	2,759	3,253	1	64,513	77	315	489	215	83,563
55-64	Active	8,570	1,508	3,086	1,914	1	54,095	18	108	212	0	69,511
	Suspended	173	21	57	96	0	2,165	0	9	41	81	2,643
	Subtotal	8,743	1,529	3,143	2,010	1	56,260	18	116	253	81	72,154
65-74	Active	2,983	662	975	454	0	37,532	2	26	73	0	42,707
	Suspended	110	8	30	43	0	1,637	1	2	20	27	1,879
	Subtotal	3,093	670	1,005	497	0	39,169	3	28	92	27	44,585
75-84	Active	382	64	130	29	0	20,047	1	0	35	0	20,688
	Suspended	48	8	18	16	0	2,184	0	0	43	13	2,330
	Subtotal	430	73	147	45	0	22,231	1	0	78	13	23,018
85+	Active	9	3	2	2	0	5,434	0	1	12	0	5,461
	Suspended	14	4	9	10	0	3,319	0	0	46	33	3,435
	Subtotal	22	7	11	12	0	8,753	0	1	58	33	8,896
Total	Active	36,366	4,695	10,741	13,002	9	327,466	9,680	13,344	2,556	0	417,858
	Suspended	921	90	241	429	0	20,094	506	1,958	678	706	25,624
	Total	37,287	4,784	10,982	13,431	9	347,559	10,186	15,302	3,234	706	443,482

Men aged 45 to 54 make up the largest number of licensed drivers in Manitoba (10% of all drivers; 19% of all male drivers). Men aged 25 to 34 account for the largest proportion of suspended male drivers (18%) under the age of 75.

Table 2-5 Class 1-5 Female Drivers by Age Group, Driver Status and License Class

Table 2-5
Class 1-5 Female Drivers by Age Group, Driver Status and License Class: 2013

Age Group	Status	License Class										Total
		1	2	3	4	1-4/A	5/F	5/I	5/L	5/A	5 Other	
16-17	Active	0	0	0	0	0	667	4,507	5,434	1	0	10,609
	Suspended	0	0	0	0	0	1	17	95	0	0	112
	Subtotal	0	0	0	0	0	668	4,524	5,529	1	0	10,721
18-19	Active	3	0	2	35	0	8,158	1,745	2,836	9	0	12,789
	Suspended	0	0	0	0	0	82	44	296	0	0	422
	Subtotal	3	0	2	35	0	8,240	1,789	3,133	9	0	13,212
20-24	Active	29	4	23	328	0	27,080	1,530	4,589	162	0	33,745
	Suspended	0	0	0	3	0	558	86	840	10	0	1,496
	Subtotal	29	4	23	331	0	27,639	1,615	5,429	171	0	35,241
25-34	Active	156	98	65	1,143	0	59,515	1,181	4,026	1,846	0	68,029
	Suspended	3	3	0	15	1	1,320	54	610	257	37	2,300
	Subtotal	159	101	65	1,158	1	60,835	1,235	4,636	2,103	37	70,328
35-44	Active	354	354	49	1,176	0	61,675	441	2,335	1,400	0	67,784
	Suspended	9	4	0	11	0	1,143	7	170	161	81	1,587
	Subtotal	363	358	49	1,188	0	62,818	448	2,505	1,560	81	69,371
45-54	Active	517	613	74	1,046	0	71,627	114	1,103	918	0	76,012
	Suspended	10	7	1	19	0	1,022	4	68	88	81	1,299
	Subtotal	527	621	74	1,065	0	72,648	118	1,171	1,005	81	77,311
55-64	Active	322	463	80	457	0	64,597	14	281	330	0	66,543
	Suspended	5	8	1	7	0	776	0	12	18	43	870
	Subtotal	326	471	81	465	0	65,373	14	293	348	43	67,413
65-74	Active	56	94	29	47	0	40,029	4	55	76	0	40,389
	Suspended	2	1	1	5	0	745	0	3	12	19	788
	Subtotal	58	95	30	51	0	40,775	4	58	87	19	41,177
75-84	Active	1	2	2	5	0	19,675	1	3	18	0	19,707
	Suspended	0	0	0	2	0	1,126	0	1	24	13	1,168
	Subtotal	1	2	2	8	0	20,801	1	4	43	13	20,875
85+	Active	0	0	0	0	0	4,829	0	0	9	0	4,838
	Suspended	0	1	0	3	0	1,782	0	0	25	13	1,823
	Subtotal	0	1	0	3	0	6,610	0	0	34	13	6,661
Total	Active	1,437	1,628	323	4,239	1	357,852	9,536	20,663	4,767	0	400,445
	Suspended	29	25	3	64	1	8,555	212	2,094	594	287	11,864
	Total	1,465	1,653	326	4,303	1	366,407	9,748	22,757	5,362	287	412,309

Women aged 45 to 54 make up the largest number of licensed female drivers in Manitoba (9% of all drivers; 19% of all female drivers).

Women account for 32% of all suspended drivers in Manitoba, even though they account for nearly half (48%) of all licensed drivers. Women aged 25 to 34 account for the highest proportion of suspended female drivers (19%).

Table 2-6 Total Class 6 Active Licensed Drivers by Year

Table 2-6
Total Class 6 Active Licensed Drivers by Year: 2003 to 2013

Licensing Year	Active Drivers	% Change to Previous Year
2003	51,569	-
2004	52,702	2.2%
2005	54,005	2.5%
2006	54,642	1.2%
2007	56,825	4.0%
2008	58,486	2.9%
2009	60,105	2.8%
2010	61,572	2.4%
2011	63,385	2.9%
2012	65,305	3.0%
2013	**66,908**	**2.5%**
Average 2008-2012*	61,771	2.8%

*The "% Change to Previous Year" for "2008-12 Average" is an average rate of change for the time period 2008 to 2012.

In 2013, the number of motorcycle licence holders increased by nearly 3% compared to 2012, in line with the annual average rate of change from 2008 through 2012 (3%).

As discussed in the introduction of this section, Class 6 Motorcycle licence holders in Manitoba also hold a Class 1-5 licence due to a requirement for those wishing to obtain a Class 6 licence to first obtain a licence in any other class (1-5). Because of this, Class 6 licence holders are counted separately to avoid any duplication of counts with Class 1-5 licence holders. This means Class 6 licence holders cannot be added to Class 1-5 licence holders.

Also, a licence suspension is applicable to all licence classes held by a suspended driver. Therefore, suspended Class 6 licences are not counted or addressed in the following discussion; they have been covered in the previous discussions of suspended Class 1-5 licence holders.

Table 2-7 Class 6 Active Licensed Drivers by Age Group, Gender and Driver Status

Table 2-7
Class 6 Active Licensed Drivers by Age Group and Gender: 2013

Age Group	Gender	Active Drivers	%
16-17	Male	108	
	Female	8	
	Total	116	0.2
18-19	Male	377	
	Female	37	
	Total	413	0.6
20-24	Male	2,252	
	Female	329	
	Total	2,582	3.9
25-34	Male	7,037	
	Female	1,187	
	Total	8,223	12.3
35-44	Male	8,481	
	Female	1,483	
	Total	9,964	14.9
45-54	Male	17,062	
	Female	2,568	
	Total	19,630	29.3
55-64	Male	17,242	
	Female	2,172	
	Total	19,413	29.0
65-74	Male	4,840	
	Female	482	
	Total	5,322	8.0
75-84	Male	997	
	Female	87	
	Total	1,084	1.6
85+	Male	153	
	Female	9	
	Total	162	0.2
All Ages	Male	58,547	
	Female	8,361	
	Total	66,908	100.0

Men account for nearly 9 in 10 of all Class 6 licence holders (88% overall). The vast majority of Class 6 licence holders are between the ages 35 and 64 (73%). Men aged 35 to 64 make up 64% of all Class 6 licence holders. Women in the same age group (aged 35 to 64) make up only 9%.

Table 2-8 Class 6 Active Licensed Drivers by License Class, Driver Status and Gender

Table 2-8
Class 6 Active Licensed Drivers by License Class and Gender: 2013

License Class	Active Drivers			
	Male	Female	Total	%
6/F	46,494	4,936	51,430	76.9
6/I	4	0	4	<0.1
6/L	7,027	2,149	9,176	13.7
6/A	2,462	372	2,834	4.2
6/M	2,561	903	3,464	5.2
Total	58,547	8,361	66,908	100.0

Manitoba Class 6 Driver's Licence Stages

6/F Full Class 6 licence (including Full Stage Class 6 under Graduated Driver Licensing)
6/I Intermediate Stage under Graduated Driver Licensing
6/L Learner Stage under Graduated Driver Licensing
6/A Learner drivers who are not in Graduated Driver Licensing
6/M Licence received after passing written test, entitling holder to take the Motorcycle Training Course

Under Manitoba's Graduated Driver Licensing (GDL) program, novice drivers are only required to complete the Intermediate Stage once. Credit for time served in the Intermediate Stage in Class 5 is given for the Intermediate Stage in Class 6. That is, if a novice driver completes the Intermediate stage of the GDL program for a Class 5 licence, they do not need to repeat the Intermediate Stage in order to obtain a Class 6 licence.

In 2013, Full Class 6 licence holders account for 77% of all Manitoba Class 6 licence holders and Learners account for 14%. This distribution is similar to 2012.

Table 2-9 Active Class 6 Male Drivers by Age Group and License Class

Table 2-9
Active Class 6 Male Drivers by Age Group and License Class: 2013

Age Group	License Class					Total	% of Total
	6/F	6/I	6/L	6/A	6/M		
16-17	4	2	59	0	43	108	0.2
18-19	52	1	193	1	130	377	0.6
20-24	495	1	1,179	8	569	2,252	3.8
25-34	2,616	0	2,878	496	1,047	7,037	12.0
35-44	5,770	0	1,308	1,014	390	8,481	14.5
45-54	15,317	0	861	661	223	17,062	29.1
55-64	16,499	0	417	219	107	17,242	29.4
65-74	4,626	0	120	52	43	4,840	8.3
75-84	965	0	10	10	11	997	1.7
85+	150	0	2	1	0	153	0.3
Total	46,494	4	7,027	2,462	2,561	58,547	

Table 2-10 Active Class 6 Female Drivers by Age Group and License Class

Table 2-10
Active Class 6 Female Drivers by Age Group and License Class: 2013

Age Group	License Class					Total	% of Total
	6/F	6/I	6/L	6/A	6/M		
16-17	0	0	6	0	2	8	0.1
18-19	2	0	20	0	15	37	0.4
20-24	36	0	182	0	112	329	3.9
25-34	252	0	621	51	263	1,187	14.2
35-44	605	0	572	127	179	1,483	17.7
45-54	1,693	0	539	127	208	2,568	30.7
55-64	1,800	0	200	60	112	2,172	26.0
65-74	454	0	9	5	13	482	5.8
75-84	86	0	0	1	0	87	1.0
85+	8	0	0	1	0	9	0.1
Total	4,936	0	2,149	372	903	8,361	

SECTION 3 – Vehicle Registrations

Introduction

This section deals with vehicle registrations and examines these by three major categories: Commercial; Non-commercial; and, Snowmobiles (Recreational).

Key Highlights

There are a total of 911,781 Non-commercial vehicles registered in Manitoba in 2013.

- This is a 2% increase over 2012 and a 14% increase from 2003.
- This is a nearly 8% increase over the average registrations for the period 2008-2012.

There are a total of 101,012 Commercial vehicles registered in Manitoba in 2013.

- This is a 3% increase over 2012 and a 48% increase from 2003.
- This is a 12% increase over the average registrations for the period 2008-2012.

Overall, there is a 2% increase in the total vehicle registrations (commercial and non-commercial, combined) in Manitoba from 993,390 in 2012 to 1,012,793 in 2013.

There are a total of 32,851 Snowmobiles registered in Manitoba in 2013.

- There are 2,201 more registered snowmobiles in 2013 than in 2012 (a 7% increase); a 76% increase from 2003.
- This is a 15% increase over the average registrations for the period 2008-2012.

Major Elements Examined

Counts for each Commercial and Non-commercial registration types represent an average registration over the twelve-month period January through December 2013. That is, active vehicle registrations as of the first of each month are recorded for each vehicle category and then an average for the year is calculated and reported. Counts for Snowmobiles use a similar “point-in-time” average calculation, but include December 2012 through to and including April 2013 to cover the snowmobile riding season.

Terms and Definitions

“Vehicle Class”

- Category of vehicles meeting specific designations and specifications
- Non-commercial vehicle classes are vehicles registered for private use and include:
    - Passenger
    - Antique
    - Motorcycle/Moped
    - Truck
    - Farm Truck
    - Snow Vehicle
    - Trailer
    - Tractor (non-farm)
- Commercial vehicle classes are those involving vehicles registered to or for the use of a business and include:
    - Truck
    - Public Service Vehicles (PSV) Truck
    - Dealer/Repairer
    - Taxi/Livery
    - PSV Bus
    - Trailers
    - PSV Trailers
- A detailed description of each class noted above can be found in the “Glossary” of the Report

Table 3-1 Non Commercial Vehicle Class

Table 3-1
Non-Commercial Vehicle Class: 2013

Vehicle Class*	Total	%
Passenger	545,723	59.9
Antique	134	<0.1
Motorcycle/Moped	12,658	1.4
Truck	149,295	16.4
Farm Truck	43,361	4.8
Snow Vehicle	43	<0.1
Trailer	160,451	17.6
Tractor (Other than Farm-type)	116	<0.1
Total Non-Commercial Vehicles Registered	**911,781**	**100.0**
Snowmobiles (Recreational)		
Snowmobiles	32,851	

*For definition of these motor vehicle classes refer to the “Terms and Definitions” of this Section and “Glossary” of this Report.

Table 3-2 Commercial Vehicle Class

Table 3-2
Commercial Vehicle Class: 2013

Vehicle Class*	Total	%
Commercial Truck	31,407	31.1
Public Service Vehicle (PSV) Truck	11,337	11.2
Dealer and Repairer	6,210	6.1
Taxi/Livery/Limousine	892	0.9
Public Service Vehicle (PSV) Bus	153	0.2
Commercial Trailer	50,936	50.4
Public Service Vehicle (PSV) Trailer	78	<0.1
Total Commercial Vehicles Registered	**101,012**	**100.0**

*For definition of these motor vehicle classes refer to the “Terms and Definitions” of this Section and “Glossary” of this Report.

Table 3-3 Vehicle Registration Summary

Table 3-3
Vehicle Registrations Summary: 2003 to 2013

Registration Class	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5-year (2008-2012) Average	**2013**	% Change 2013 vs. 2012	% Change (2013 vs. 2008-2012 average)
Non-Commercial Vehicle Class														
Passenger	476,834	483,274	487,158	491,363	499,078	509,856	516,185	521,894	529,406	539,384	523,345	**545,723**	1.2	4.3
Antique**	79	71	74	80	82	84	77	95	103	131	98	**134**	2.2	37.1
Motorcycle/Moped	7,210	7,339	7,605	8,357	9,143	10,059	10,413	10,732	11,229	12,329	10,952	**12,658**	2.7	15.6
Truck	113,302	114,818	115,755	117,278	120,217	123,766	127,154	133,057	139,530	145,405	133,782	**149,295**	2.7	11.6
Farm Truck	48,370	47,650	46,512	45,083	44,477	44,073	43,746	43,517	42,942	43,384	43,532	**43,361**	<0.1	-0.4
Snow Vehicle**	55	52	49	48	49	47	49	50	48	46	48	**43**	-7.7	-11.1
Trailer	88,375	92,396	97,684	103,840	111,630	120,891	127,080	134,358	143,249	154,603	136,036	**160,451**	3.8	17.9
Tractor (non-farm)	140	131	122	125	120	117	122	123	120	117	120	**116**	-1.6	-3.6
Subtotal	734,365	745,731	754,959	766,174	784,796	808,892	824,824	843,825	866,628	895,400	847,914	**911,781**	1.8	7.5
Commercial Vehicle Class														
Truck	23,130	23,520	23,833	24,305	24,987	26,123	26,851	27,690	28,928	30,391	27,997	**31,407**	3.3	12.2
PSV Truck	7,366	8,313	8,988	9,526	10,115	9,863	9,818	9,849	10,244	10,934	10,142	**11,337**	3.7	11.8
Dealer/Repairer	6,987	6,644	6,561	6,512	6,511	6,546	6,347	6,229	6,185	6,178	6,297	**6,210**	0.5	-1.4
Taxi/Livery	735	756	764	772	769	778	834	854	871	885	844	**892**	0.8	5.7
PSV Bus**	135	132	135	134	143	146	155	161	150	143	151	**153**	6.6	1.0
Trailers*	30,022	33,073	33,453	37,226	38,183	42,304	41,846	45,249	45,221	49,389	44,802	**50,936**	3.1	13.7
PSV Trailers**	57	57	54	58	56	51	57	57	57	71	58	**78**	10.2	33.6
Subtotal	68,432	72,495	73,788	78,533	80,764	85,811	85,909	90,089	91,655	97,991	90,291	**101,012**	3.1	11.9
Total Registrations - Non-Commercial and Commercial Vehicle Classes														
Total Registrations	802,797	818,226	828,747	844,707	865,560	894,703	910,732	933,914	958,283	993,390	938,204	**1,012,793**	2.0	8.0
Snowmobiles* **														
Total	18,647	19,321	19,852	20,832	23,401	26,359	27,664	28,064	30,421	30,650	28,631	**32,851**	7.2	14.7
Off-Road Vehicle Dealer Plates														
Total	415	417	398	446	429	473	464	454	471	469	466	**505**	7.6	8.3

*Commercial trailers include semi-trailers.
**Due to small numbers, percentage change figures are expected to be somewhat erratic year-over-year and should be interpreted with extreme caution.
***Snowmobile registration count reflects the average number of active policies at a point in time during the riding season, from December to April (e.g., for 2013, December 2012 through April 2013, inclusive).

Over the previous five years (2008 to 2012), total vehicle registrations (excluding snowmobiles and ORV dealer plates) have increased by an average of 3% each year. In 2013, the increase in total vehicle registrations is slightly lower than this rate of change, increasing by 2% compared to 2012.

The total increase in overall vehicle registrations in 2013 comes from an increase in both non-commercial and commercial vehicle registrations. Non-commercial vehicle registrations increased by 2% in 2013 compared to 2013. Commercial vehicle registrations increased by 3% in 2013 compared to 2012.

Snowmobile registrations increased by nearly 8% in 2013 over 2012 (a total count of 2,201 snowmobiles) and by 8% compared to the 5-year (2008-2012) average registrations.

SECTION 4 – Traffic Collisions

Introduction

This section counts the number of collisions in Manitoba and provides detail for collisions of different severity; fatal, injury and property damage only (PDO). Historical information regarding the number of collisions, the number of victims, the number of vehicles and the number of drivers involved in collisions over the ten year period 2003 to 2012 is presented and compared to 2013. Details are provided for 2013 traffic collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Key Highlights

In 2013, there are 11,234 victims from 41,819 collisions involving 64,316 vehicles and 63,501 drivers. Of the 41,819 collisions:

- 69 are fatal collisions involving 111 vehicles and 106 drivers, resulting in 85 people killed and 77 people injured;
- 8,729 are injury collisions involving 15,663 vehicles and 15,539 drivers, resulting in 11,072 people injured; and,
- 33,021 are PDO collisions involving 48,542 vehicles and 47,856 drivers.

Collisions on public roadways in Manitoba in 2013 most frequently occur:

- In Winnipeg (65% of all collisions; nearly 15% of fatal, 76% of injury and 62% of PDO collisions) and in rural locations (17% of all collisions, 68% of fatal, 13% of injury and 19% of PDO collisions);
- In the winter months (January, February, and December) – 35% of all collisions; 13% of fatal, 33% of injury and 36% of PDO collisions;
- On weekdays (Monday through Friday) with Friday specifically accounting for 17% of all collisions; 17% of fatal, 17% of injury and 17% of PDO collisions; and,
- Between the hours of 3 and 6 p.m. (15:00 to 17:59) – 25% of all collisions; 20% of fatal, 29% of injury and 24% of PDO collisions.

Collisions on public roadways in Manitoba in 2013 are most frequently:

- “Motor vehicle to motor vehicle” in nature – 63% of all collisions; 54% of fatal, 79% of injury and 58% of PDO collisions; and,
- “Rear end” collisions (36% of all collisions), collisions occurring at 90° intersections (nearly 18% of all collisions), side-swipe collisions (12% of all collisions), collisions involving a fixed object (12% of all collisions), collisions resulting from leaving the road (8% of all collisions), collisions associated with turning (6% of all collisions), and head-on collisions (5% of all collisions).

Major Elements Examined

Counts of collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

Collisions, victims, vehicles and drivers are presented separately at the beginning of this section with counts provided for the years 2003 through 2013. Following that, the majority of this section explores traffic collisions occurring in 2013 and provides comparisons to annual average counts of collisions for the time period 2008 to 2012.

It is important to note that the number of collisions is not equal to the number of victims as each collision can result in multiple victims. Likewise, the number of vehicles involved is not equal to the number of drivers involved as a driverless vehicle (e.g., a parked car; vehicles that do not have a licensed driver) could be involved in a collision.

“Drivers” in this section refers to the number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

The terms ‘crash’, ‘collision’ and ‘accident’ are used interchangeably in this report.

The terms ‘fatally injured’ and ‘killed’ are used interchangeably in this report.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions can have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Urban Location"

- Collisions occurring within the municipal boundaries of urban locations, including Winnipeg, Brandon, Portage la Prairie, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and others.

"Rural Location"

- Collisions occurring on primary highways, secondary highways and local roadways, including the Trans Canada Highway and excluding those that occur within the municipal boundaries of an urban area.

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes collisions involving more than one configuration or sequence of events.

Table 4-1 Historical Summary of Traffic Collisions

Table 4-1
Historical Summary of Traffic Collisions: 2003 to 2013

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	**2013**	2008-2012 Average
Total Collisions	34,771	35,002	33,164	31,738	29,494	27,092	26,578	27,172	34,302	38,972	**41,819**	30,823
Fatal	95	90	88	104	96	85	83	78	94	89	**69**	86
Injury	7,273	6,855	6,482	6,503	6,415	5,974	5,396	5,386	6,309	8,280	**8,729**	6,269
PDO	27,403	28,057	26,594	25,131	22,983	21,033	21,099	21,708	27,899	30,603	**33,021**	24,468
Total Victims	9,821	9,314	8,753	8,825	8,632	7,924	7,302	7,130	8,337	10,623	**11,234**	8,263
Killed	102	99	113	119	109	92	86	87	110	96	**85**	94
Injured	9,719	9,215	8,640	8,706	8,523	7,832	7,216	7,043	8,227	10,527	**11,149**	8,169
Total Vehicles Involved	57,280	57,219	54,343	51,620	48,491	44,555	43,610	44,979	53,516	59,556	**64,316**	49,243
Fatal	142	131	135	151	141	141	126	110	141	126	**111**	129
Injury	12,750	12,090	11,489	11,312	11,099	10,219	9,268	9,358	10,956	14,802	**15,663**	10,921
PDO	44,388	44,998	42,719	40,157	37,251	34,195	34,216	35,511	42,419	44,628	**48,542**	38,194
Total Drivers Involved	52,403	52,013	48,898	46,380	44,814	42,120	41,097	42,310	51,279	58,877	**63,501**	47,137
Fatal	138	127	126	145	135	121	120	105	130	119	**106**	119
Injury	12,248	11,647	11,044	10,827	10,696	9,854	8,938	8,969	10,644	14,696	**15,539**	10,620
PDO	40,017	40,239	37,728	35,408	33,983	32,145	32,039	33,236	40,505	44,062	**47,856**	36,397

In 2013, there are 11,234 victims from 41,819 collisions involving 64,316 vehicles and 63,501 drivers. Of the 41,819 collisions:

- 69 are fatal collisions involving 111 vehicles and 106 drivers, resulting in 85 people killed and 77 people injured;
- 8,729 are injury collisions involving 15,663 vehicles and 15,539 drivers, resulting in 11,072 people injured; and,
- 33,021 are PDO collisions involving 48,542 vehicles and 47,856 drivers.

Total collisions in 2013 are up 7% compared to 2012 and 36% compared to the number of collisions in the previous five year (2008 to 2012) annual average.

- Fatal collisions decreased by nearly 23% compared to 2012 and by 20% compared to the previous five years.
- Injury collisions increased by 5% compared to 2012 and by 39% compared to the previous five years.
- PDO collisions are up 8% compared to 2012 and by 35% compared to the previous five years.

The total number of collision victims in 2013 increased by 6% over 2012 and by 36% compared to the previous five year (2008 to 2012) annual average. However, the number of people killed in collisions in 2013 is down by nearly 12% compared to 2012 and by 10% compared to the previous five years. In recent years, the number of people killed in fatal collisions has fluctuated significantly (2013 – 85; 2012 – 96; 2011 – 110; 2010 – 87; 2009 – 86; 2008 – 92). The total in 2013 is the lowest number of people killed on public roads in Manitoba over the past thirty years.

The total number of drivers involved in collisions in 2013 is up 8% compared to 2012 and by 35% compared to the previous five year (2008 to 2012) annual average. The number of vehicles involved in 2013 is up 8% from 2012 and 31% compared to the previous five years.

Figure 4-1 Historical Summary – Count of Traffic Collisions, Victims, Vehicles and Drivers

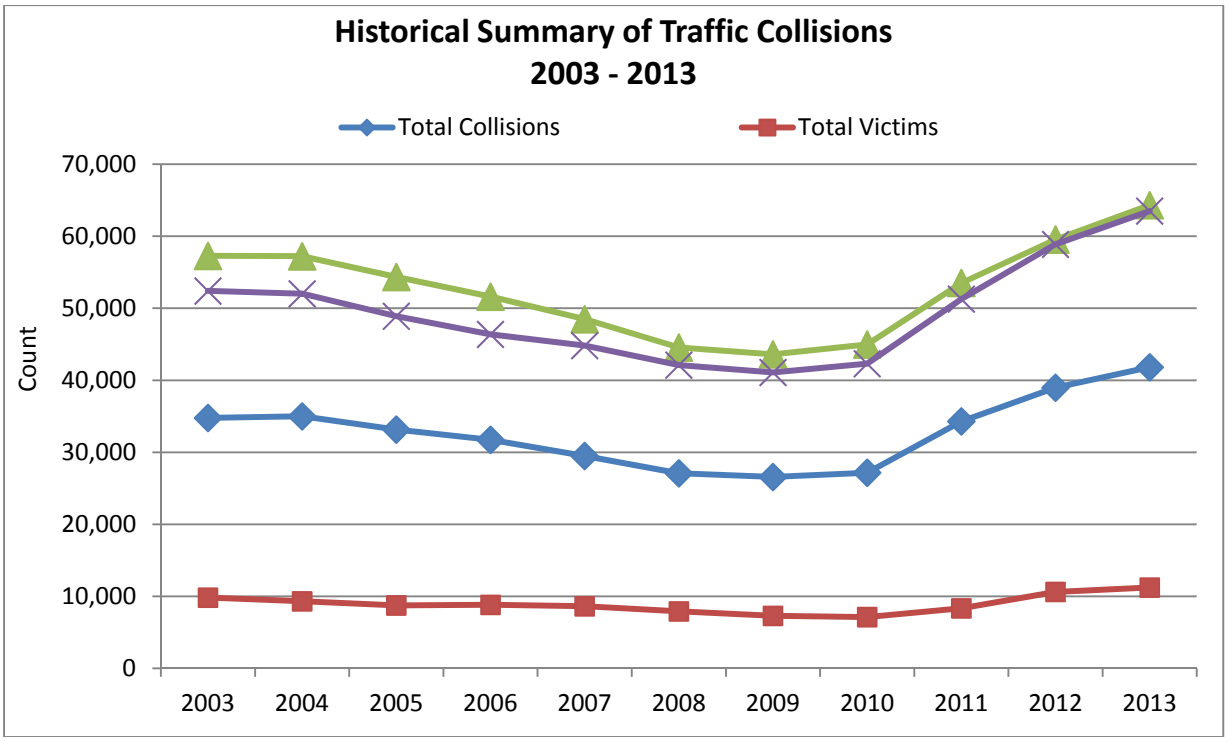


Table 4-2 Traffic Collisions by Month of Occurrence and Collision Severity

Table 4-2
Traffic Collisions by Month of Occurrence and Collision Severity: 2013, 2008-2012 Average

Month	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
January	2	2.9%	1,005	11.5%	4,486	13.6%	**5,493**	13.1%	5	670	2,687	3,362	10.9%
February	3	4.3%	681	7.8%	3,024	9.2%	**3,708**	8.9%	5	549	2,103	2,657	8.6%
March	1	1.4%	740	8.5%	2,912	8.8%	**3,653**	8.7%	4	528	1,865	2,397	7.8%
April	2	2.9%	504	5.8%	2,201	6.7%	**2,707**	6.5%	7	402	1,374	1,783	5.8%
May	6	8.7%	533	6.1%	1,978	6.0%	**2,517**	6.0%	6	442	1,465	1,913	6.2%
June	9	13.0%	553	6.3%	2,064	6.3%	**2,626**	6.3%	10	467	1,643	2,120	6.9%
July	10	14.5%	607	7.0%	2,013	6.1%	**2,630**	6.3%	9	433	1,527	1,969	6.4%
August	13	18.8%	576	6.6%	1,913	5.8%	**2,502**	6.0%	8	462	1,498	1,968	6.4%
September	9	13.0%	644	7.4%	2,061	6.2%	**2,714**	6.5%	9	484	1,696	2,189	7.1%
October	6	8.7%	698	8.0%	2,378	7.2%	**3,082**	7.4%	9	561	2,373	2,943	9.5%
November	4	5.8%	1,002	11.5%	3,567	10.8%	**4,573**	10.9%	7	642	3,060	3,709	12.0%
December	4	5.8%	1,186	13.6%	4,424	13.4%	**5,614**	13.4%	7	629	3,177	3,814	12.4%
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

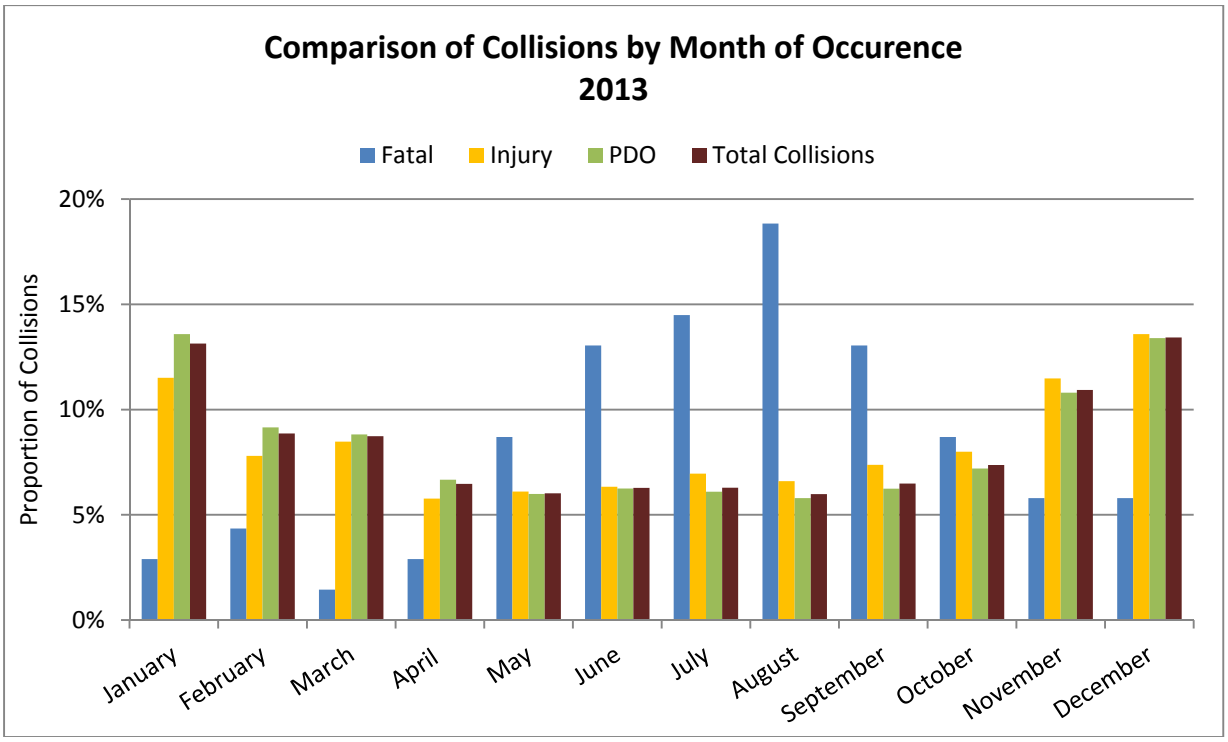
Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

The winter months of January, February and December continue to account for a high proportion of collisions in Manitoba, with more than one-third (35%) of all collisions happening in these months in 2013. In the previous five year period (2008-2012), these months accounted for an average of 32% of all collisions. In 2013, January, February and December, combined, account for:

- 13% of all fatal collisions;
- 33% of all injury collisions; and,
- 36% of all PDO collisions.

Fatal collisions in 2013 represent somewhat of a divergence from recent years. In 2013, the summer months account for a high proportion of fatal collisions overall. Nearly half (46%) of fatal collisions occur in June, July, and August (compared to 31% in 2008 to 2012). However, the spring months of March, April and May account for a lower proportion of fatal collision relative to the previous five years (2013 – 13% of fatal crashes; 2008-2012 annual average – 19% of fatal crashes).

Figure 4-2 Traffic Collisions by Month of Occurrence and Collision Severity



In 2013, injury collisions and PDO collisions occur most frequently in the months of November through March (53% of injury collisions and 56% of PDO collisions). In the previous five year period (2008 to 2012), these months account for 48% of injury collisions and 53% of PDO collisions.

Table 4-3 Traffic Collisions by Day of Occurrence and Collision Severity

Table 4-3
Traffic Collisions by Day of Week of Occurrence and Collision Severity: 2013, 2008-2012 Average

Day of Week	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Sunday	10	14.5%	809	9.3%	3,446	10.4%	**4,265**	10.2%	13	596	2,576	3,185	10.3%
Monday	8	11.6%	1,361	15.6%	4,930	14.9%	**6,299**	15.1%	9	876	3,275	4,161	13.5%
Tuesday	6	8.7%	1,387	15.9%	5,040	15.3%	**6,433**	15.4%	7	963	3,530	4,500	14.6%
Wednesday	10	14.5%	1,446	16.6%	4,969	15.0%	**6,425**	15.4%	13	976	3,626	4,615	15.0%
Thursday	7	10.1%	1,297	14.9%	4,721	14.3%	**6,025**	14.4%	14	985	3,735	4,734	15.4%
Friday	12	17.4%	1,472	16.9%	5,620	17.0%	**7,104**	17.0%	15	1,066	4,313	5,394	17.5%
Saturday	16	23.2%	957	11.0%	4,295	13.0%	**5,268**	12.6%	15	805	3,414	4,234	13.7%
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

Collisions in 2013 most frequently occur on weekdays, especially on Friday. Monday through Friday combined account for 77% of all collisions, 62% of fatal collisions, 80% of injury collisions and 77% of PDO collisions. In the previous five year (2008 to 2012) annual average, weekdays account for virtually the same proportions (76% of all collisions; 67% fatal; 78% injury; nearly 76% PDO).

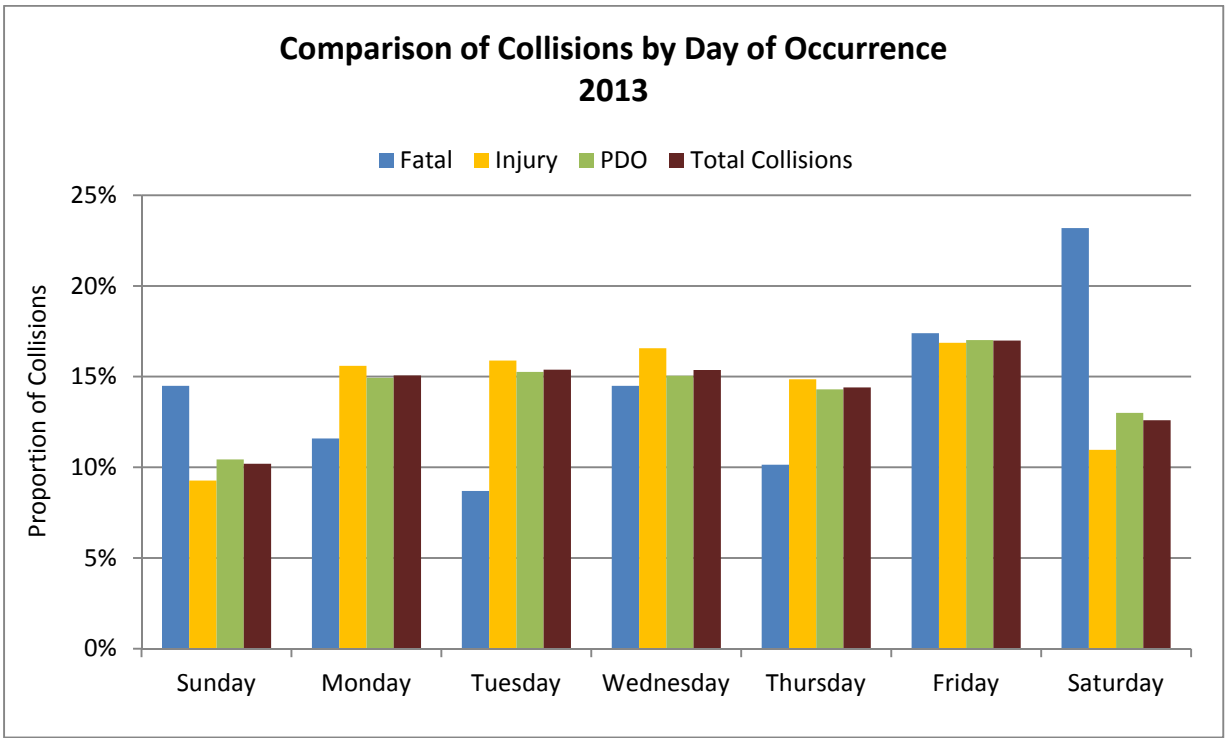
Overall, Friday accounts for the single largest proportion of collisions in 2013; this is also the case in the previous five year (2008 to 2012) annual average. Friday accounts for:

- 17% of all collisions in 2013 and nearly 18% in the previous five years;
- 17% of fatal collisions in 2013 and in the previous five years;
- 17% of injury collisions in 2013 and in the previous five years; and,
- 17% of PDO collisions in 2013 and 18% in the previous five years.

Weekends, including Friday, Saturday and Sunday combined, account for:

- 40% of all collisions in 2013 and 42% in the previous five years (2008 to 2012);
- 55% of fatal collisions in 2013 and 50% in the previous five years;
- 37% of injury collisions in 2013 and 39% in the previous five years; and,
- Nearly 41% of PDO collisions in 2013 and 42% in the previous five years.

Figure 4-3 Traffic Collisions by Day of Occurrence and Collision Severity



In 2013, fatal collisions happen most often on Saturday (count of 16 or 23% of fatal collisions). In the previous five year (2008 to 2012) annual average, Fridays and Saturdays account for the highest number of fatal crashes (15 each day), but are closely followed by Sundays (13), Wednesdays (13) and Thursdays (14).

Table 4-4 Traffic Collisions by Time of Occurrence and Collision Severity

Table 4-4
Traffic Collisions by Time of Occurrence and Collision Severity: 2013, 2008-2012 Average

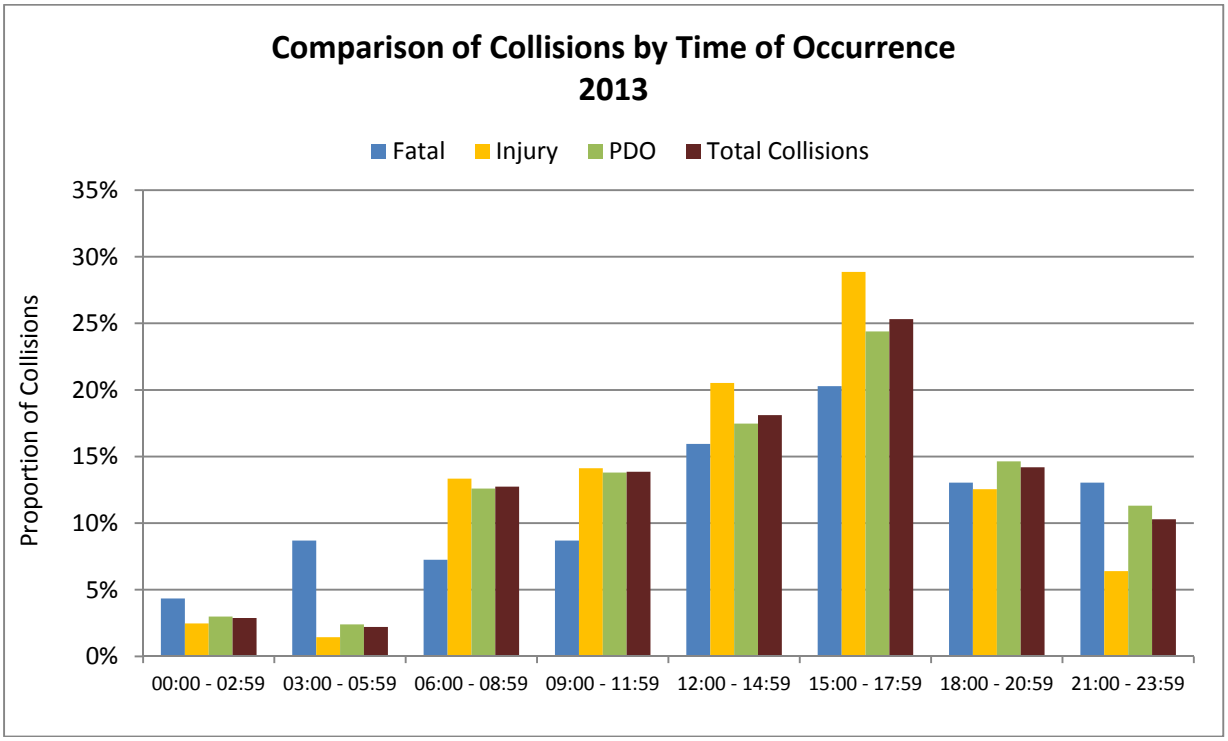
Time	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
00:00 - 02:59	3	4.3%	216	2.5%	985	3.0%	**1,204**	2.9%	7	179	766	952	3.1%
03:00 - 05:59	6	8.7%	126	1.4%	792	2.4%	**924**	2.2%	9	140	683	832	2.7%
06:00 - 08:59	5	7.2%	1,165	13.3%	4,160	12.6%	**5,330**	12.7%	5	798	2,954	3,757	12.2%
09:00 - 11:59	6	8.7%	1,233	14.1%	4,556	13.8%	**5,795**	13.9%	9	811	3,121	3,941	12.8%
12:00 - 14:59	11	15.9%	1,792	20.5%	5,770	17.5%	**7,573**	18.1%	12	1,197	4,264	5,473	17.8%
15:00 - 17:59	14	20.3%	2,519	28.9%	8,053	24.4%	**10,586**	25.3%	11	1,654	5,583	7,248	23.5%
18:00 - 20:59	9	13.0%	1,095	12.5%	4,834	14.6%	**5,938**	14.2%	15	802	3,620	4,436	14.4%
21:00 - 23:59	9	13.0%	559	6.4%	3,736	11.3%	**4,304**	10.3%	10	479	2,738	3,227	10.5%
Not Stated	6	8.7%	24	0.3%	135	0.4%	**165**	0.4%	8	210	740	958	3.1%
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

More than four in ten collisions in 2013 occur between noon and 6 p.m. (43% of all collisions, 36% of fatal collisions, 49% of injury collisions, and 42% of PDO collisions). This is consistent with the proportion of collisions occurring during these hours in the previous five year (2008 to 2012) annual average (41% of all collisions, 27% of fatal collisions, nearly 46% of injury collisions, and 40% of PDO collisions).

The largest proportion of total traffic collisions in 2013 occur between 3 and 6 p.m. (15:00 – 17:59), what is often be considered the "afternoon rush". One-quarter (25%) of all collisions occur during these hours (20% of fatal collisions, 29% of injury collisions and 24% of PDO collisions). This is relatively consistent with the proportion of collisions occurring during these hours in the previous five year (2008 to 2012) annual average, although fewer fatal collisions happened during this time than in 2013.

Figure 4-4 Traffic Collisions by Time of Occurrence and Collision Severity



In 2013, consistent with the previous five year annual average, a disproportionate number of fatal crashes occur between the hours of midnight and 6 a.m.. In 2013, 13% of fatal crashes occur during this time, compared to 4% of injury crashes and 5% or PDO crashes. In the previous five years, 18% of fatal crashes occur between the hours of midnight and 6 a.m. compared to 5% of injury crashes and 6% or PDO crashes.

Table 4-5 Traffic Collisions by Provincial Location and Collision Severity

Table 4-5
Traffic Collisions by Provincial Location and Collision Severity: 2013, 2008-2012 Average

Location	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Winnipeg	10	14.5%	6,641	76.1%	20,437	61.9%	**27,088**	64.8%	16	4,296	13,892	18,204	59.1%
Brandon	0	-	207	2.4%	1,113	3.4%	**1,320**	3.2%	1	200	1,033	1,235	4.0%
Portage	0	-	57	0.7%	259	0.8%	**316**	0.8%	<1	42	281	323	1.0%
Flin Flon	0	-	3	<0.1%	78	0.2%	**81**	0.2%	<1	11	93	104	0.3%
Dauphin	3	4.3%	35	0.4%	155	0.5%	**193**	0.5%	<1	28	150	179	0.6%
Thompson	1	1.4%	25	0.3%	227	0.7%	**253**	0.6%	<1	29	217	246	0.8%
The Pas	0	-	17	0.2%	129	0.4%	**146**	0.3%	<1	15	121	136	0.4%
Selkirk	0	-	64	0.7%	251	0.8%	**315**	0.8%	<1	48	209	257	0.8%
Other Urban	8	11.6%	582	6.7%	4,234	12.8%	**4,824**	11.5%	10	409	2,668	3,087	10.0%
All Rural	47	68.1%	1,098	12.6%	6,138	18.6%	**7,283**	17.4%	57	1,191	5,804	7,052	22.9%
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

Urban locations account for about four in five (83%) of all collisions in Manitoba, but only about one-third of fatal collisions (32%) in 2013 (87% of injury collisions and 81% of PDO collisions). Rural locations account for nearly one-fifth of all collisions (17%), but two-thirds of fatal collisions (68%). This is consistent with historical results. In the previous five year period (2008 to 2012), urban locations accounted for an average of 77% of all collisions, 30% of fatal collisions, 81% of injury collisions, and 76% of PDO collisions.

In 2013, 65% traffic collisions occur in Winnipeg while other urban locations (including Brandon, Portage, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and “Other urban”) account for 18% of all collisions. In the previous five year (2008 to 2012) annual average, 59% of all collisions occur in Winnipeg and 18% occur in other urban locations.

This pattern holds when we consider both injury and PDO collisions. In 2013:

- 76% of injury collisions occur in Winnipeg, 11% occur in other urban locations and 13% occur in rural locations.
- 62% of PDO collisions occur in Winnipeg, nearly 20% occur in other urban locations and 19% occur in rural locations.

Fatal collisions are different from the distribution of total crashes when it comes to the urban-rural split. In 2013, two-thirds of fatal collisions (68%) occur in rural locations, while nearly 15% occur in Winnipeg and 17% occur in other urban locations. The over-representation of rural locations for fatal collisions in 2013 is consistent with the previous five year (2008 to 2012) annual average, where 66% of fatal collisions occur in rural locations, 19% occur in Winnipeg and 15% occur in other urban locations.

Table 4-6 Collision Type by Urban/Rural Location

Table 4-6
Collision Type by Urban/Rural Location: 2013, 2008-2012 Average

Collision Type	Location													2008-2012 Average Count of Total Collisions				
	2013 Urban				2013 Rural				2013 Provincial Total				2013 Provincial Total as % of Total					
	Fatal	Injury	PDO	Total	Fatal	Injury	PDO	Total	Fatal	Injury	PDO	**Total**		Fatal	Injury	PDO	Total	% of Total
Collision with pedestrian	4	20	38	62	0	1	1	2	4	21	39	**64**	0.2%	11	295	19	325	1.1%
Collision with other motor vehicle	12	6,525	18,629	25,166	25	351	665	1,041	37	6,876	19,294	**26,207**	62.7%	30	4,365	15,746	20,141	65.3%
Collisions with train	0	1	4	5	0	0	0	0	0	1	4	**5**	<0.1%	1	3	8	13	<0.1%
Collision with motorcycle	0	4	5	9	1	1	0	2	1	5	5	**11**	<0.1%	3	84	37	124	0.4%
Collision with animal drawn vehicle	0	0	0	0	0	0	0	0	0	0	0	**0**	-	-	-	<1	<1	<0.1%
Collision with bicycle	0	13	35	48	0	2	0	2	0	15	35	**50**	0.1%	3	184	30	217	0.7%
Collision with animal	0	41	1,015	1,056	0	165	3,795	3,960	0	206	4,810	**5,016**	12.0%	<1	197	3,959	4,156	13.5%
Collision with fixed object	4	428	4,103	4,535	7	347	1,106	1,460	11	775	5,209	**5,995**	14.3%	7	379	2,239	2,625	8.5%
Collision with other object	1	485	2,628	3,114	1	73	431	505	2	558	3,059	**3,619**	8.7%	7	198	1,182	1,386	4.5%
Overturned in roadway	0	10	3	13	4	7	11	22	4	17	14	**35**	<0.1%	5	137	172	314	1.0%
Ran off roadway	1	25	31	57	9	86	32	127	10	111	63	**184**	0.4%	19	397	900	1,315	4.3%
Collision with moped	0	0	0	0	0	0	0	0	0	0	0	**0**	-	-	<1	<1	1	<0.1%
Other non-collision	0	79	392	471	0	65	97	162	0	144	489	**633**	1.5%	<1	30	176	206	0.7%
Total	22	7,631	26,883	34,536	47	1,098	6,138	7,283	69	8,729	33,021	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

The majority of crashes on public roadways in Manitoba are “motor vehicle to motor vehicle” collisions, both in 2013 and in the previous five year (2008 to 2012) annual average. In 2013 “motor vehicle to motor vehicle” collisions account for:

- 63% of all collisions;
- 54% of fatal collisions;
- 79% of injury collisions; and,
- 58% of PDO collisions.

Collisions occurring in urban locations are also predominantly “motor vehicle to motor vehicle” in nature. In urban locations in 2013, “motor vehicle to motor vehicle” collisions account for:

- 73% of all collisions;
- Nearly 55% of fatal collisions;
- Nearly 86% of injury collisions; and,
- 69% of PDO collisions.

Collisions occurring in rural locations are predominantly “motor vehicle to animal” in nature, with “motor vehicle to fixed object” the second most common configuration, and “motor vehicle to motor vehicle” as the third most common. In rural locations in 2013:

- 54% of all collisions are “motor vehicle to animal” in nature (no fatal collisions; 15% of injury collisions; and 62% of PDO collisions);
- 20% of all collisions are “motor vehicle to fixed object” in nature (15% of fatal collisions; 32% of injury collisions; and 18% of PDO collisions); and,
- 14% of all collisions are “motor vehicle to motor vehicle” in nature (53% of fatal collisions; 32% of injury collisions; and 11% of PDO collisions).

Collisions with pedestrians (accounting for less than 1% of all collisions in 2013) account for a high proportion of fatal collisions occurring in urban locations. In 2013, 6% of fatal collisions in the province were “motor vehicle to pedestrian”, but in urban locations, 18% of fatal collisions involve a motor vehicle hitting a pedestrian.

Table 4-7 Traffic Collisions by Road Surface Condition and Collision Severity

Table 4-7
Traffic Collisions by Road Surface Condition and Collision Severity: 2013, 2008-2012 Average

Road Surface Condition	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Dry	45	65.2%	4,254	48.7%	15,207	46.1%	**19,506**	46.6%	59	3,594	13,418	17,072	55.4%
Wet	8	11.6%	745	8.5%	2,373	7.2%	**3,126**	7.5%	6	724	2,380	3,110	10.1%
Mud	0	-	3	<0.1%	58	0.2%	**61**	0.1%	<1	8	55	63	0.2%
Snow	1	1.4%	904	10.4%	4,527	13.7%	**5,432**	13.0%	6	484	2,501	2,991	9.7%
Ice	5	7.2%	2,318	26.6%	8,979	27.2%	**11,302**	27.0%	8	1,090	4,658	5,756	18.7%
Slush	1	1.4%	227	2.6%	672	2.0%	**900**	2.2%	<1	120	354	475	1.5%
Loose Sand/Gravel/Dirt	4	5.8%	65	0.7%	311	0.9%	**380**	0.9%	2	77	210	290	0.9%
Fresh Oil	0	-	7	<0.1%	15	<0.1%	**22**	<0.1%	-	2	6	8	<0.1%
Other	0	-	19	0.2%	135	0.4%	**154**	0.4%	<1	5.0	37	43	0.1%
Not Applicable	0	-	97	1.1%	284	0.9%	**381**	0.9%	3	143	711	856	2.8%
Unknown	5	7.2%	90	1.0%	460	1.4%	**555**	1.3%	<1	22	137	160	0.5%
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

Most collisions in Manitoba occur under “dry” road conditions. Nearly half (47%) of all collisions in 2013 and 55% in the previous five year (2008 to 2012) annual average occur on “dry” roads.

In 2013, 65% of fatal collisions occur on “dry” roads. This is relatively consistent with the previous five year (2008 to 2012) annual average where about two-thirds of fatal collisions (69%) occur on “dry” roads.

Icy road conditions account for 27% of all collisions in 2013, including 7% of fatal collisions, 27% of injury collisions and 27% of PDO collisions. This is similar to the previous five year (2008 to 2012) annual average where icy roads account for 19% of all collisions, 9% of fatal collisions, 17% of injury collisions and 19% of PDO collisions.

“Snow” covered and “wet” roads account for the next highest proportions of all collisions in 2013, at 13% and nearly 8% respectively. These proportions are similar to the previous five year (2008 to 2012) annual average (10% each).

Figure 4-5 Traffic Collisions by Road Surface Condition and Collision Severity

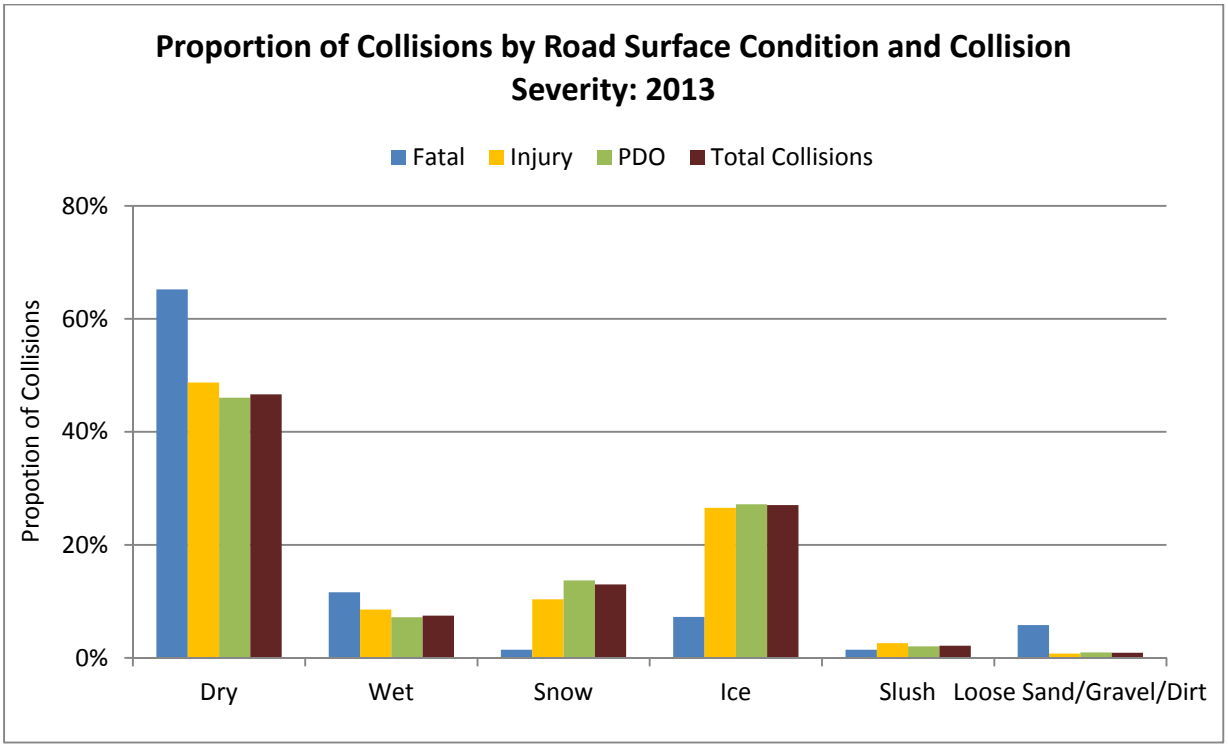


Table 4-8 Traffic Collisions by Weather Condition and Collision Severity

Table 4-8
Traffic Collisions by Weather Condition and Collision Severity: 2013, 2008-2012 Average

Weather Condition	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Clear	48	69.6%	6,034	69.1%	21,891	66.3%	**27,973**	66.9%	60	4,244	16,349	20,653	67.0%
Cloudy	8	11.6%	1,193	13.7%	4,612	14.0%	**5,813**	13.9%	9	960	3,580	4,549	14.8%
Raining	2	2.9%	288	3.3%	999	3.0%	**1,289**	3.1%	3	306	1,076	1,385	4.5%
Snowing	2	2.9%	659	7.5%	2,803	8.5%	**3,464**	8.3%	4	356	1,556	1,917	6.2%
Fog or Mist	0	-	54	0.6%	299	0.9%	**353**	0.8%	2	57	300	358	1.2%
Smoke or Dust	0	-	5	<0.1%	19	<0.1%	**24**	<0.1%	-	5	16	21	<0.1%
Freezing Rain/ Sleet/ Hail	0	-	26	0.3%	76	0.2%	**102**	0.2%	<1	43	147	191	0.6%
Drifting Snow	1	1.4%	136	1.6%	625	1.9%	**762**	1.8%	2	64	235	301	1.0%
Strong Winds	3	4.3%	66	0.8%	300	0.9%	**369**	0.9%	<1	45	140	186	0.6%
Other	0	-	11	0.1%	75	0.2%	**86**	0.2%	<1	3	28	32	0.1%
Not Applicable	0	-	120	1.4%	465	1.4%	**585**	1.4%	4	154	803	961	3.1%
Unknown	5	7.2%	137	1.6%	857	2.6%	**999**	2.4%	<1	33	237	271	0.9%
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.

Most collisions in Manitoba occur during “clear” weather conditions. Two-thirds of all collisions in 2013 and in the previous five year (2008 to 2012) annual average occur in “clear” weather (67% in both time periods). This holds for all collisions regardless of severity. In 2013:

- “Cloudy” conditions account for 14% of all collisions (12% fatal collisions; 14% injury collisions; 14% PDO collisions);
- “Snowing” conditions account for 8% of all collisions (3% fatal collisions; nearly 8% injury collisions; nearly 9% PDO collisions); and,
- “Raining” conditions account for 3% of all collisions (3% each fatal, injury and PDO collisions).

Figure 4-6 Traffic Collisions by Weather Condition and Collision Severity

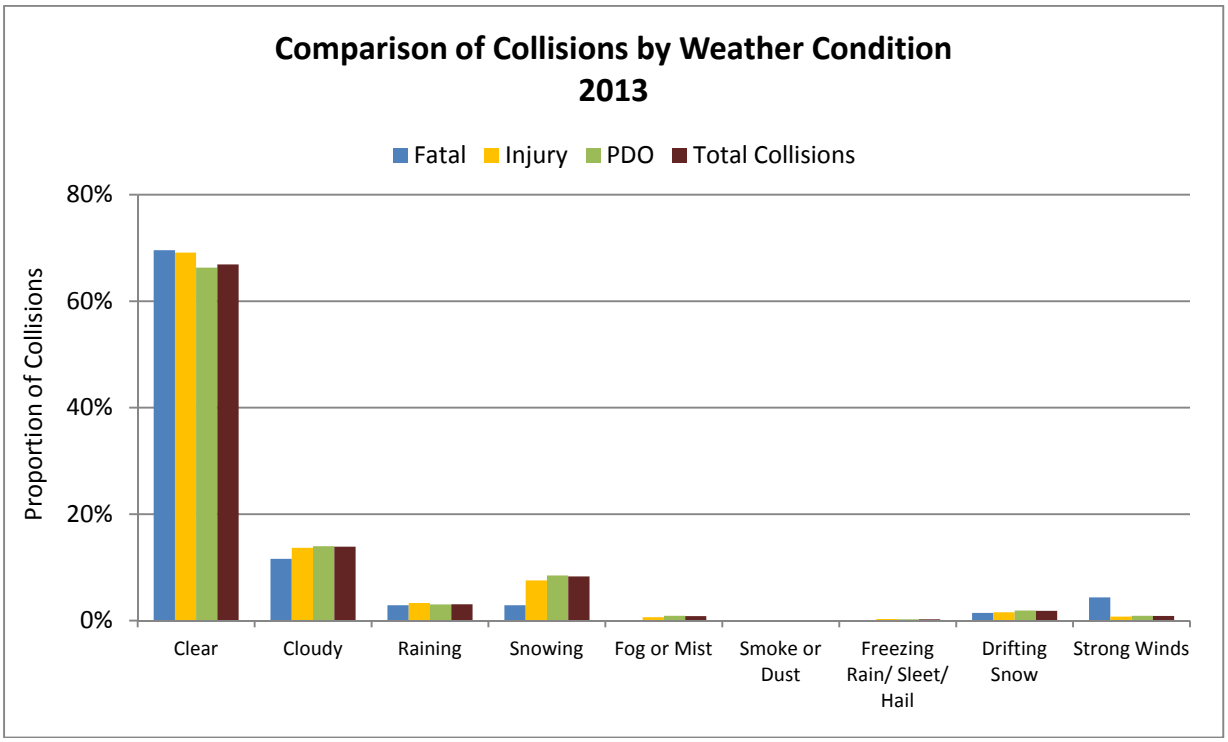


Table 4-9 Accident Configuration and Collision Severity

Table 4-9

Accident Configuration and Collision Severity: 2013, 2008-2012 Average

Accident Configuration	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Rear End	1	1.9%	3,705	48.9%	7,208	31.6%	**10,914**	35.8%	3	2,068	5,261	7,332	35.3%
Head On	13	24.5%	225	3.0%	1,324	5.8%	**1,562**	5.1%	11	126	736	873	4.2%
Side Swipe Opposing	2	3.8%	80	1.1%	356	1.6%	**438**	1.4%	1	50	263	314	1.5%
Side Swipe Same Direction	0	-	368	4.9%	2,936	12.9%	**3,304**	10.8%	<1	173	1,683	1,856	8.9%
Overtaking	3	5.7%	33	0.4%	220	1.0%	**256**	0.8%	1	57	373	431	2.1%
Right Turn - Same direction	0	-	22	0.3%	211	0.9%	**233**	0.8%	-	27	167	195	0.9%
Right Turn - Opposing	0	-	15	0.2%	64	0.3%	**79**	0.3%	-	16	76	92	0.4%
Left Turn - Opposing	1	1.9%	224	3.0%	475	2.1%	**700**	2.3%	<1	97	262	359	1.7%
Left Turn - Same direction	0	-	27	0.4%	216	0.9%	**243**	0.8%	-	39	200	239	1.2%
Left Turn - Across	0	-	113	1.5%	347	1.5%	**460**	1.5%	1	257	678	936	4.5%
Intersection 90°	8	15.1%	1,723	22.7%	3,598	15.8%	**5,329**	17.5%	11	1,026	2,495	3,532	17.0%
Off Road Right	8	15.1%	298	3.9%	1,018	4.5%	**1,324**	4.3%	11	288	752	1,051	5.1%
Off Road Left	6	11.3%	199	2.6%	771	3.4%	**976**	3.2%	10	224	491	725	3.5%
Fixed Object	3	5.7%	369	4.9%	3,291	14.4%	**3,663**	12.0%	2	194	1,502	1,698	8.2%
Parking	0	-	111	1.5%	747	3.3%	**858**	2.8%	<1	41	762	804	3.9%
Pedestrian	8	15.1%	67	0.9%	44	0.2%	**119**	0.4%	12	282	25	318	1.5%
Other	16	-	1,150	-	10,195	-	**11,361**	-	21	1,304	8,742	10,067	-
Total	69	100%	8,729	100%	33,021	100%	**41,819**	100%	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.
Note: 'Other' accident configurations consist primarily of collisions involving more than one configuration or sequence of events. Calculations in '% of Total' exclude the 'Other' category.

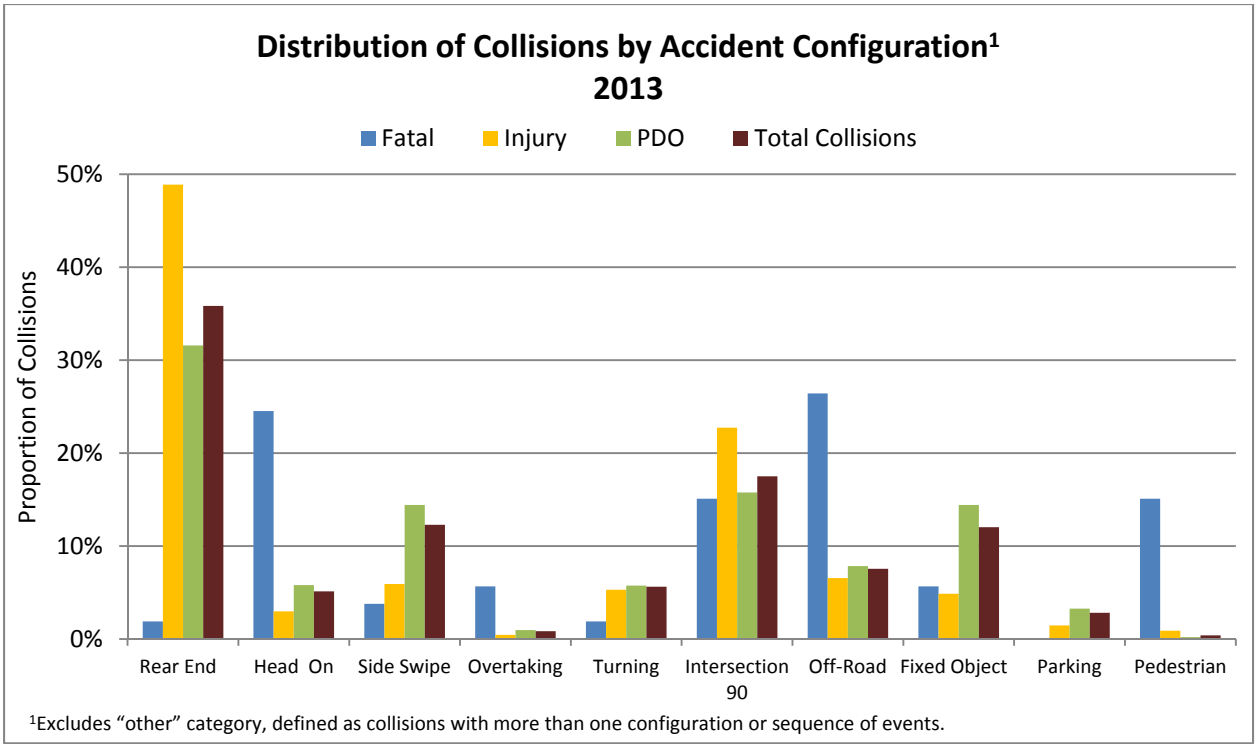
The most common accident configuration (or sequence of events immediately prior to or at the start of a collision) for collisions occurring in Manitoba (excluding "other") is a "rear end" type. "Rear end" crashes account for 36% of all collisions in 2013 (one fatal collision; 49% of injury collisions; 32% of PDO collisions) and 35% of all collisions in the previous five year (2008 to 2012) annual average.

Following "rear end" collisions, the next most common accident configurations in 2013 (excluding "other") are:

- Collisions occurring at "intersection 90°" – nearly 18% of all collisions, 15% of fatal collisions, 23% of injury collisions, and 16% of PDO collisions;
- "Side-swipe" collisions, including in the same or opposing direction – 12% of all collisions, two fatal collisions, 6% of injury collisions, and 14% of PDO collisions;
- "Fixed object" collisions – 12% of all collisions, three fatal collisions, 5% of injury collisions, and nearly 14% of PDO collisions;
- Collisions where the vehicle leaves the road (either "off road left" or "off road right") – 8% of all collisions, 26% of fatal collisions, 7% of injury collisions, and 8% of PDO collisions;
- Collisions where at least one vehicle is turning (both "left turn" or "right turn" and including in the "same direction" or "opposing" direction) – 6% of all collisions, one fatal collision, 5% of injury collisions, and 6% of PDO collisions; and,
- "Head on" collisions – 5% of all collisions, nearly 25% of fatal collisions, 3% of injury collisions, and 6% of PDO collisions;

A large proportion of collisions cannot be assigned a single accident configuration or sequence of events. That is, they involve more than one of the possible configuration types. These collisions fall into the "other" category. In 2013, 27% of all collisions (23% fatal; 13% injury; 31% PDO) are recorded as "other". In the previous five year (2008 to 2012) annual average, 33% of all collisions (25% fatal; 21% injury; 36% PDO) are recorded as "other".

Figure 4-7 Distribution of Collisions by Accident Configuration and Collision Severity



Collisions as a result of the vehicle leaving the road ("off-road left or right") are the highest proportion of fatal collisions in 2013 (26%), followed by "head on" collisions (nearly 25%), collisions occurring at intersections ("intersection 90°" – 15%), and "pedestrian" collisions (15%).

SECTION 5 – Collision Victims

Introduction

This section counts the number of people killed and injured in traffic collisions and examines the severity of the injury received by the victim. Month, time and day of occurrences are examined, as well as the age of the victim. Other characteristics of the collision are presented as well. Relative involvement of victims in traffic collisions per 100,000 people in the general population is also calculated.

Key Highlights

In 2013, there are 11,234 victims (or casualties) of traffic collisions. Of these:

- 85 are killed;
- 307 are seriously injured;
- 2,242 sustain minor injuries;
- 8,488 sustain minimal injuries; and,
- 112 sustain injuries that are undefined in terms of severity.

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2013 (871.3) has increased by 4% compared to 2012 (835.5) and by 30% compared to the previous five years (2008 to 2012) annual average (668.8). Victim involvement rates in traffic collisions in 2013 where the person:

- Is killed (6.6 in 2013) is 13% lower than in 2012 and 14% lower than in the previous five years; and,
- Is injured, including all levels of severity but excluding killed (864.8 in 2013), is 4% higher than in 2012 and 31% higher than in the previous five years.

People aged 25 to 44 have the highest victim involvement rates (per 100,000 people) overall in 2013.

- Children under age 15 – rate of 175.4
- People aged 15 to 24 – rate of 1,075.4
- People aged 25 to 34 – rate of 1,274.7
- People aged 35 to 44 – rate of 1,216.2
- People aged 45 to 54 – rate of 1,093.8
- People aged 55 and older – rate of 626.9

While women account for more than half of all casualties in traffic collisions (60%), men account for the highest proportion of people killed (60%). Men also account for more of the people seriously injured (55% compared to 45% women).

“Drivers” account for nearly 77% of all casualties and motor vehicle “Passengers” for nearly 21%. “Motorcyclists” and “Moped” riders combined account for just over 1% of all casualties while “Bicyclists” account for 1% and “Pedestrians” account for 1%. In 2013, “Pedestrians” account for 12% of people killed in traffic collisions.

In 2013, casualties in traffic collisions most frequently result from crashes occurring:

- In Winnipeg – 74% of all victims;
- In the late fall and winter months (including November through February) – 43% of all victims; 19% of people killed and 44% of people injured;
- On Tuesday (16% of all victims), Wednesday (16%), or Friday (17%); and,
- Between noon and 6 p.m. (12:00-14:59 – 20% of all victims; 15:00 to 17:59 – 29% of all victims).

Major Elements Examined

Counts of collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) generated by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance.

It is important to note that the number of victims involved in traffic collisions is not equal to the number of collisions that occurred as each collision can result in multiple victims while some collisions result in property damage only (PDO). PDO collisions are not included in this section.

The terms ‘crash’, ‘collision’ and ‘accident’ are used interchangeably in this report. As well, the terms ‘victim’ and ‘casualty’, and the terms ‘fatality’ and ‘killed’ are used interchangeably in this report.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Terms and Definitions

“Casualty Type”

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

“Killed”

- The casualty type “killed” indicates where the victim involved in the traffic collision died as a result of their injuries within thirty (30) days of the collision occurrence.

“Injured”

- The casualty type “injured” indicates where the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: ‘serious’ or ‘major’ (admitted to hospital); ‘minor’ (treated and released from hospital); and, ‘minimal’ (no hospital treatment required). ‘Other’ injury is noted when the severity of the victim’s injury is not known or recorded in the TAR.

“Road User Class”

- A classification based on how a person involved in a collision was using the road at the time of the collision. It includes: Drivers (of motor vehicles), Passengers (in motor vehicles), those Riding/Hanging On (to a motor vehicle), Motorcyclist (drivers and passengers), Moped (drivers and passengers), Bicyclist (drivers and passengers), and Pedestrians.

“Vehicle Occupant”

- All those in the “Road User Class” recorded as “Drivers” and “Passengers”. It excludes “Motorcyclist”, “Bicyclist”, “Moped”, those “Riding/Hanging On” to a vehicle, and “Pedestrians”.

“Victim Involvement Rate”

- A calculation of the number of victims or casualties involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: http://www.gov.mb.ca/health/annstats/index.html

“Collision Type”

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

“Accident Configuration”

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- “Other” in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

Table 5-1 Historical Summary of Victims in Traffic Collisions

Table 5-1

Historical Summary of Victims in Traffic Collisions: 2003 to 2013

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2003	102	-	499	-	3,829	-	4,719	-	672	-	9,719	-	9,821	-
2004	99	-2.9%	483	-3.2%	3,736	-2.4%	4,308	-8.7%	688	2.4%	9,215	-5.2%	9,314	-5.2%
2005	113	14.1%	421	-12.8%	3,345	-10.5%	3,924	-8.9%	950	38.1%	8,640	-6.2%	8,753	-6.0%
2006	119	5.3%	484	15.0%	3,458	3.4%	3,945	0.5%	819	-13.8%	8,706	0.8%	8,825	0.8%
2007	109	-8.4%	426	-12.0%	3,198	-7.5%	3,994	1.2%	905	10.5%	8,523	-2.1%	8,632	-2.2%
2008	92	-15.6%	396	-7.0%	2,968	-7.2%	3,678	-7.9%	790	-12.7%	7,832	-8.1%	7,924	-8.2%
2009	86	-6.5%	384	-3.0%	2,853	-3.9%	3,288	-10.6%	691	-12.5%	7,216	-7.9%	7,302	-7.8%
2010	87	1.2%	312	-18.8%	2,458	-13.8%	3,170	-3.6%	1,103	59.6%	7,043	-2.4%	7,130	-2.4%
2011	110	26.4%	337	8.0%	2,465	0.3%	4,306	35.8%	1,119	1.5%	8,227	16.8%	8,337	16.9%
2012	96	-12.7%	339	0.6%	2,237	-9.2%	7,864	82.6%	87	-92.2%	10,527	28.0%	10,623	27.4%
2013	**85**	**-11.5%**	**307**	**-9.4%**	**2,242**	**0.2%**	**8,488**	**7.9%**	**112**	**28.7%**	**11,149**	**5.9%**	**11,234**	**5.8%**
2008-2012 Average*	94	-1.4%	354	-4.0%	2,596	-6.8%	4,461	19.3%	758	-11.3%	8,169	5.3%	8,263	5.2%

*The "% change to previous year" for "2008-2012 Average" is an average rate of change for the time period 2008 to 2012.

In 2013, there are 11,234 victims (or casualties) of traffic collisions. Of these:

- 85 are killed;
- 307 are seriously injured;
- 2,242 sustain minor injuries;
- 8,488 sustain minimal injuries; and,
- 112 sustain injuries that are undefined in terms of severity.

Overall, the total number of casualties in 2013 (11,234) is 6% higher than in 2012 (10,623). This increase is primarily due to increases in the number of minimal injuries. In 2013, there are 11 fewer people killed than in 2012, 32 fewer people seriously injured, 5 more people with minor injuries, 624 more people with minimal injuries and 25 more people with other injuries.

Compared to the previous five year (2008 to 2012) annual average, in 2013:

- The number of people killed is down 10%;
- The number of people seriously injured is down 13%;
- The number of people sustaining minor injuries is down 14%;
- The number of people sustaining minimal injuries is up 90%; and,
- The number of people sustaining “other” injuries is down 85%.

Recognizing that counts of victims of collisions could be impacted either positively or negatively by changing population statistics, involvement rates per 100,000 people in the general population in Manitoba is examined (see Table 5-2) to provide a standardized rate comparison. This accounts for changing population size instead of simply a raw count of the number of victims involved overall.

Table 5-2 Historical Summary of Victim Involvement Rate (per 100,000 People) in Traffic Collisions

Table 5-2

Historical Summary of Victim Involvement Rate (per 100,000 People) in Traffic Collisions: 2003 to 2013

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2003	8.8	-	43.0	-	330.1	-	406.9	-	57.9	-	838.0	-	846.8	-
2004	8.5	-3.8%	41.3	-4.0%	319.4	-3.3%	368.3	-9.5%	58.8	1.5%	787.8	-6.0%	796.3	-6.0%
2005	9.6	13.7%	35.9	-13.1%	285.0	-10.8%	334.3	-9.2%	80.9	37.6%	736.1	-6.6%	745.7	-6.4%
2006	10.1	4.9%	41.1	14.5%	293.4	3.0%	334.8	0.1%	69.5	-14.1%	738.8	0.4%	748.9	0.4%
2007	9.2	-9.0%	35.9	-12.6%	269.6	-8.1%	336.7	0.6%	76.3	9.8%	718.4	-2.8%	727.6	-2.8%
2008	7.7	-16.5%	33.0	-8.0%	247.5	-8.2%	306.8	-8.9%	65.9	-13.6%	653.2	-9.1%	660.9	-9.2%
2009	7.1	-7.7%	31.6	-4.3%	234.9	-5.1%	270.8	-11.7%	56.9	-13.6%	594.2	-9.0%	601.3	-9.0%
2010	7.1	-0.1%	25.4	-19.8%	199.8	-15.0%	257.7	-4.8%	89.7	57.6%	572.5	-3.7%	579.5	-3.6%
2011	8.8	24.4%	26.9	6.3%	197.1	-1.3%	344.3	33.6%	89.5	-0.2%	657.9	14.9%	666.7	15.0%
2012	7.6	-14.2%	26.7	-1.1%	175.9	-10.7%	618.5	79.6%	6.8	-92.4%	828.0	25.9%	835.5	25.3%
2013	**6.6**	**-12.7%**	**23.8**	**-10.7%**	**173.9**	**-1.2%**	**658.4**	**6.4%**	**8.7**	**27.0%**	**864.8**	**4.4%**	**871.3**	**4.3%**
2008-2012 Average*	7.6	-2.8%	28.7	-5.4%	211.1	-8.1%	359.6	17.6%	61.8	-12.4%	661.2	3.8%	668.8	3.7%

*The "% change to previous year" for "2008-2012 Average" is an average rate of change for the time period 2008 to 2012.

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2013 (871.3) has increased by 4% compared to 2012 (835.5) and by 30% compared to the previous five years (2008 to 2012 – 668.8) on average.

Casualty involvement rates in traffic collisions in 2013 where a person:

- Is killed (6.6 in 2013) decreased by 13% compared to 2012 and by 14% compared to the previous five years;
- Is injured, including all levels of severity but excluding killed (864.8 in 2013), increased by 4% compared to 2012 and by 31% compared to the previous five years;
- Is seriously injured (23.8 in 2013) decreased by 11% compared to 2012 and by 17% compared to the previous five years;
- Sustains minor injuries (173.9 in 2013) decreased by 1% compared to 2012 and by 18% compared to the previous five years;
- Sustains minimal injuries (658.4 in 2013) increased by 6% compared to 2012 and by 83% compared to the previous five years; and,
- Sustains injuries that are unspecified in severity ("other injury" – 8.7 in 2013) increased by 27% compared to 2012, but decreased by 86% compared to the previous five years.

Figure 5-1 Historical Summary of Victim Involvement Rate in Traffic Collisions

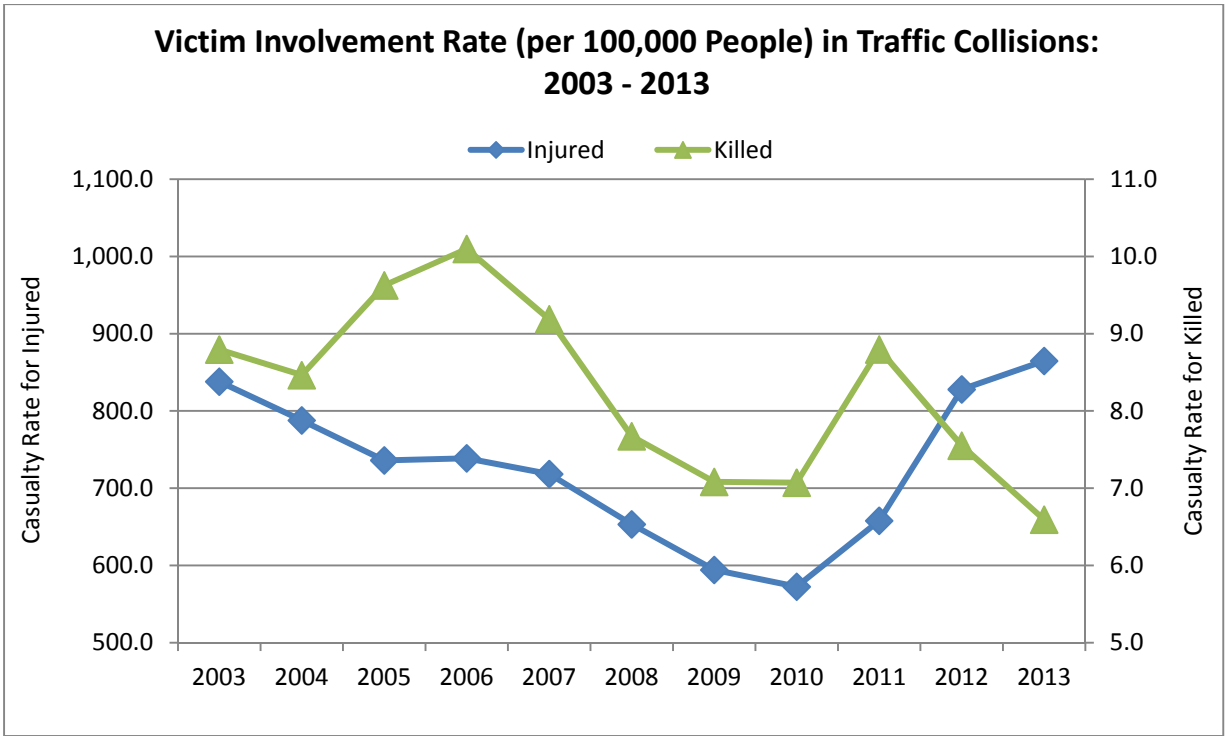


Table 5-3 Collision Victims by Month of Occurrence and Casualty Type

Table 5-3

Collision Victims by Month of Occurrence and Casualty Type: 2013

Month of Occurrence	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
January	2	2.4%	24	7.8%	192	8.6%	1,039	12.2%	7	6.3%	1,262	11.3%	**1,264**	11.3%
February	3	3.5%	12	3.9%	163	7.3%	660	7.8%	7	6.3%	842	7.6%	**845**	7.5%
March	1	1.2%	20	6.5%	196	8.7%	722	8.5%	9	8.0%	947	8.5%	**948**	8.4%
April	2	2.4%	17	5.5%	146	6.5%	464	5.5%	4	3.6%	631	5.7%	**633**	5.6%
May	8	9.4%	26	8.5%	165	7.4%	491	5.8%	16	14.3%	698	6.3%	**706**	6.3%
June	10	11.8%	29	9.4%	171	7.6%	498	5.9%	19	17.0%	717	6.4%	**727**	6.5%
July	15	17.6%	30	9.8%	206	9.2%	549	6.5%	16	14.3%	801	7.2%	**816**	7.3%
August	15	17.6%	41	13.4%	204	9.1%	510	6.0%	14	12.5%	769	6.9%	**784**	7.0%
September	11	12.9%	43	14.0%	186	8.3%	595	7.0%	7	6.3%	831	7.5%	**842**	7.5%
October	7	8.2%	31	10.1%	197	8.8%	657	7.7%	6	5.4%	891	8.0%	**898**	8.0%
November	6	7.1%	21	6.8%	211	9.4%	1,026	12.1%	4	3.6%	1,262	11.3%	**1,268**	11.3%
December	5	5.9%	13	4.2%	205	9.1%	1,277	15.0%	3	2.7%	1,498	13.4%	**1,503**	13.4%
Total	85	100%	307	100%	2,242	100%	8,488	100%	112	100%	11,149	100%	**11,234**	100%

Table 5-3a Collision Victims by Month of Occurrence and Casualty Type for Previous Five Years

Table 5-3a

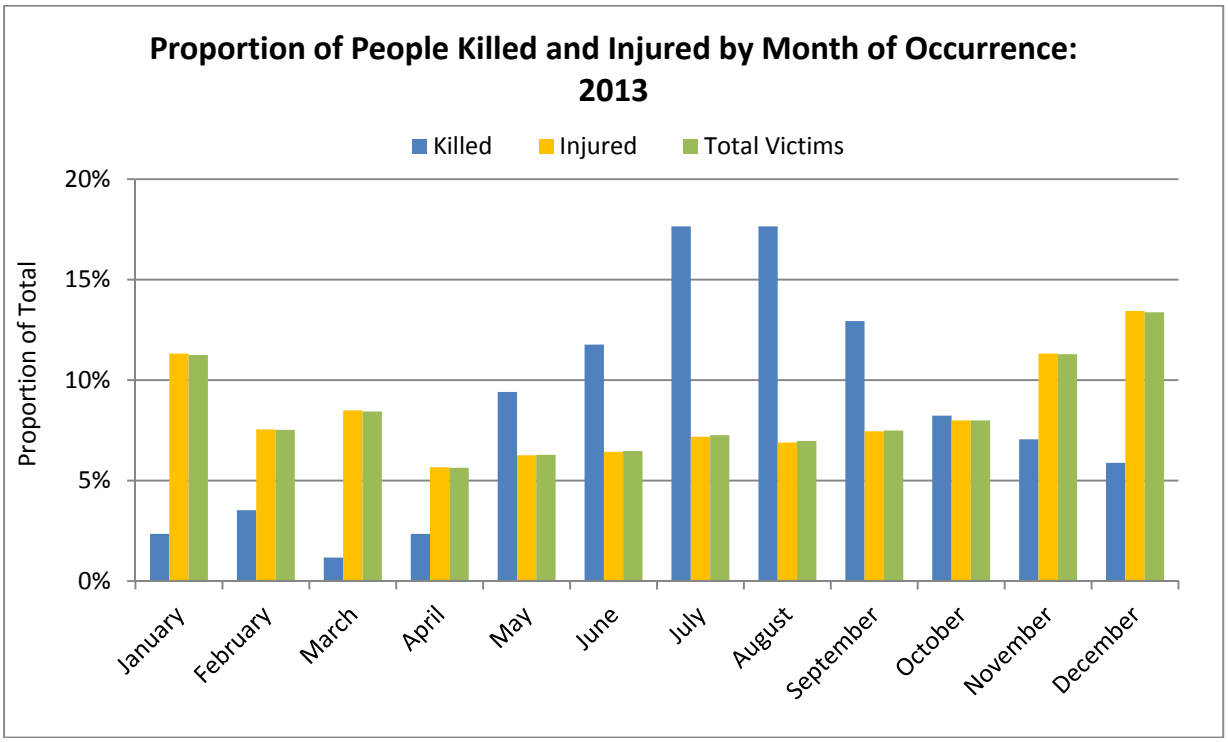
Collision Victims by Month of Occurrence and Casualty Type: 2008-2012 Average

Month of Occurrence	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
January	6	32	255	501	90	877	884	10.7%
February	6	21	215	402	79	717	723	8.7%
March	4	26	216	392	66	700	704	8.5%
April	7	24	176	260	55	516	523	6.3%
May	8	29	180	302	62	572	580	7.0%
June	11	33	220	303	59	614	625	7.6%
July	9	31	213	278	58	579	588	7.1%
August	8	36	217	299	52	603	611	7.4%
September	9	35	217	325	62	638	648	7.8%
October	10	32	233	397	51	712	723	8.7%
November	8	33	225	510	55	823	831	10.1%
December	7	23	231	492	70	816	824	10.0%
Total	94	354	2,596	4,461	758	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

Injuries in 2013 appear to follow a fairly typical distribution compared to past years in terms of month of occurrence. December stands out as a month accounting for a disproportionate number of traffic collision victims overall, both in 2013 (13% of all victims) and in the previous five year (2008 to 2012) annual average (10%). In 2013 (and very similar to the previous five years), the count of victims is lowest in the late spring and summer months (ranging from 6% to nearly 8% of all victims in each month from April to September) and is highest in late fall, winter and early spring (ranging from 8% to 13% of all victims in each month from October to March).

Figure 5-2 Proportion of People Killed and Injured by Month of Occurrence



In 2013, June, July, August and September account for the highest proportions of people killed (12%, 18%, 18% and 13% of people killed, respectively) by month. This is relatively consistent with the previous five year (2008 to 2012) annual average, where the months of June through October account for the highest proportions of deaths.

Table 5-4 Collision Victims by Day of Occurrence and Casualty Type

Table 5-4

Collision Victims by Day of Occurrence and Casualty Type: 2013

Day of the Week	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Sunday	11	12.9%	35	11.4%	242	10.8%	786	9.3%	14	12.5%	1,077	9.7%	**1,088**	9.7%
Monday	9	10.6%	54	17.6%	326	14.5%	1,321	15.6%	9	8.0%	1,710	15.3%	**1,719**	15.3%
Tuesday	6	7.1%	37	12.1%	353	15.7%	1,335	15.7%	21	18.8%	1,746	15.7%	**1,752**	15.6%
Wednesday	11	12.9%	38	12.4%	310	13.8%	1,417	16.7%	14	12.5%	1,779	16.0%	**1,790**	15.9%
Thursday	8	9.4%	40	13.0%	321	14.3%	1,237	14.6%	12	10.7%	1,610	14.4%	**1,618**	14.4%
Friday	15	17.6%	54	17.6%	400	17.8%	1,450	17.1%	26	23.2%	1,930	17.3%	**1,945**	17.3%
Saturday	25	29.4%	49	16.0%	290	12.9%	942	11.1%	16	14.3%	1,297	11.6%	**1,322**	11.8%
Total	85	100%	307	100%	2,242	100%	8,488	100%	112	100%	11,149	100%	**11,234**	100%

Table 5-4a Collision Victims by Day of Occurrence and Casualty Type for Previous Five Years

Table 5-4a
Collision Victims by Day of Occurrence and Casualty Type: 2008-2012 Average

Day of the Week	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Sunday	15	51	289	422	76	837	853	10.3%
Monday	9	40	369	607	101	1,118	1,128	13.6%
Tuesday	8	47	356	683	116	1,203	1,211	14.7%
Wednesday	14	45	371	702	118	1,236	1,249	15.1%
Thursday	16	50	388	701	127	1,265	1,281	15.5%
Friday	16	59	440	754	124	1,378	1,394	16.9%
Saturday	16	62	382	592	95	1,132	1,148	13.9%
Total	94	354	2,596	4,461	758	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

In 2013, most victims are involved in traffic collisions in the latter half of the work week, with Wednesday, Thursday and Friday (16%, 14% and 17% of all victims, respectively) accounting for 48% of all casualties. This is very similar to the previous five year (2008 to 2012) annual average, where Wednesday, Thursday and Friday account for nearly 48% of all casualties.

The weekend (Friday, Saturday and Sunday) is when most people are killed in traffic collisions. In 2013, Friday (18%), Saturday (29%) and Sunday (13%) cumulatively account for 60% of all people killed in traffic collisions. This is an increase from the previous five year (2008 to 2012) annual average (51%).

Figure 5-3 Proportion of People Killed and Injured by Day of Occurrence

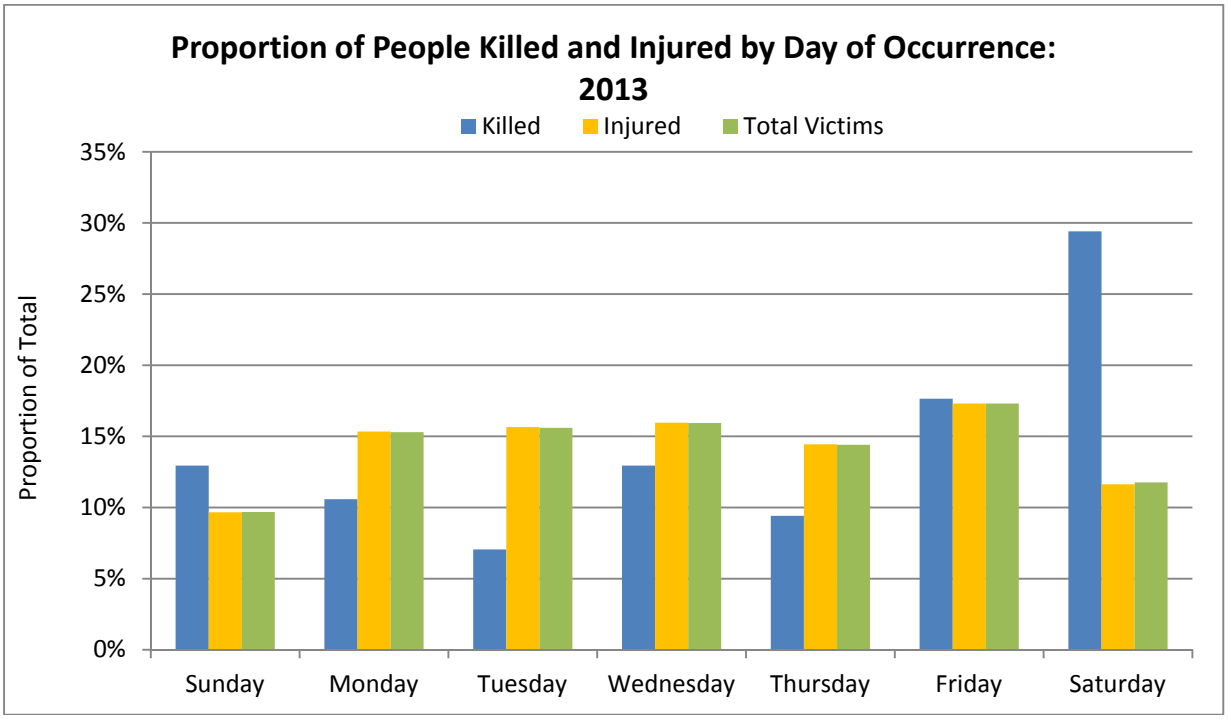


Table 5-5 Collision Victims by Time of Occurrence and Casualty Type

Table 5-5
Collision Victims by Time of Occurrence and Casualty Type: 2013

Time of the Day	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
00:00 - 02:59	2	2.4%	13	4.2%	87	3.9%	171	2.0%	7	6.3%	278	2.5%	**280**	2.5%
03:00 - 05:59	10	11.8%	15	4.9%	46	2.1%	90	1.1%	1	0.9%	152	1.4%	**162**	1.4%
06:00 - 08:59	6	7.1%	42	13.7%	268	12.0%	1,102	13.0%	21	18.8%	1,433	12.9%	**1,439**	12.8%
09:00 - 11:59	6	7.1%	32	10.4%	306	13.6%	1,197	14.1%	9	8.0%	1,544	13.8%	**1,550**	13.8%
12:00 - 14:59	17	20.0%	46	15.0%	416	18.6%	1,783	21.0%	28	25.0%	2,273	20.4%	**2,290**	20.4%
15:00 - 17:59	20	23.5%	74	24.1%	585	26.1%	2,541	29.9%	26	23.2%	3,226	28.9%	**3,246**	28.9%
18:00 - 20:59	10	11.8%	43	14.0%	305	13.6%	1,100	13.0%	9	8.0%	1,457	13.1%	**1,467**	13.1%
21:00 - 23:59	12	14.1%	33	10.7%	213	9.5%	492	5.8%	9	8.0%	747	6.7%	**759**	6.8%
Not Stated	2	2.4%	9	2.9%	16	0.7%	12	0.1%	2	1.8%	39	0.3%	**41**	0.4%
Total	85	100%	307	100%	2,242	100%	8,488	100%	112	100%	11,149	100%	**11,234**	100%

Table 5-5a Collision Victims by Time of Occurrence and Casualty Type for Previous Five Years

Table 5-5a

Collision Victims by Time of Occurrence and Casualty: 2008-2012 Average

Time of the Day	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
00:00 - 02:59	7	22	96	106	22	246	253	3.1%
03:00 - 05:59	11	19	75	78	14	184	196	2.4%
06:00 - 08:59	5	35	309	537	88	970	975	11.8%
09:00 - 11:59	9	33	348	572	90	1,043	1,052	12.7%
12:00 - 14:59	14	55	460	890	139	1,545	1,559	18.9%
15:00 - 17:59	13	75	600	1,262	205	2,142	2,155	26.1%
18:00 - 20:59	15	49	367	588	94	1,098	1,113	13.5%
21:00 - 23:59	11	46	223	321	53	643	654	7.9%
Not Stated	8	19	118	107	53	297	306	3.7%
Total	94	354	2,596	4,461	758	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

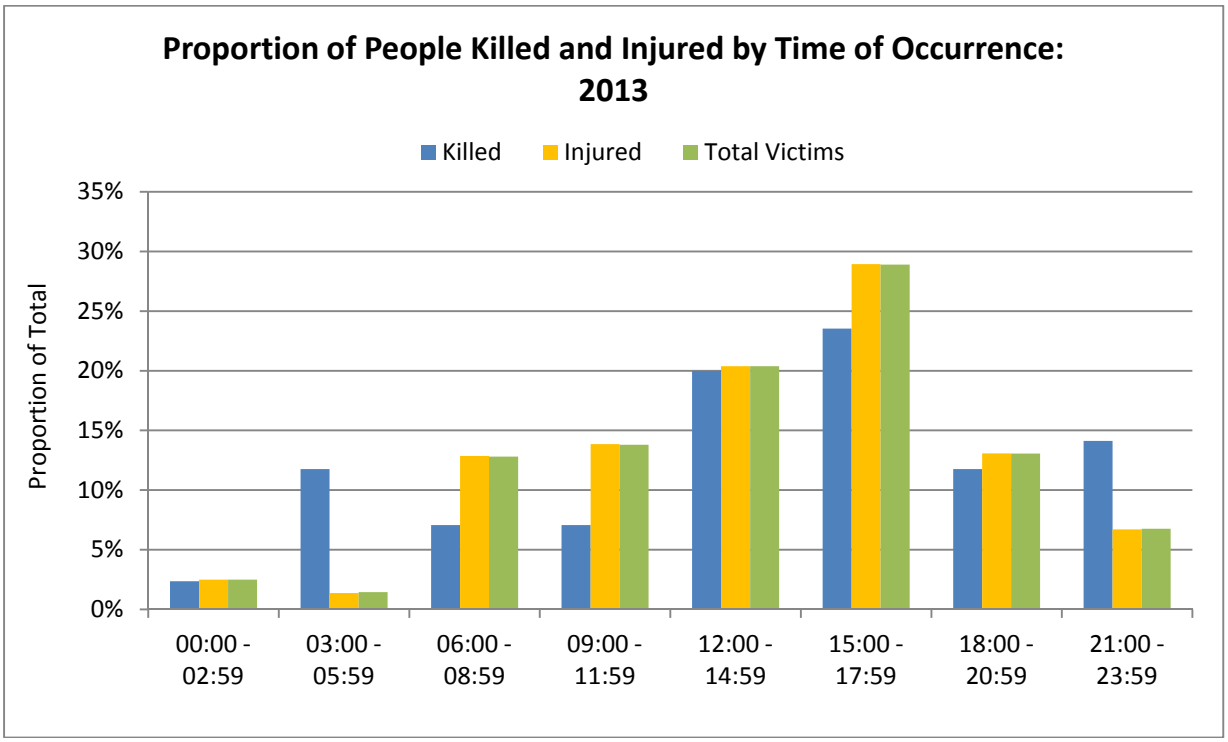
People are most often killed and injured in traffic collisions between noon and 6 p.m. In 2013, 49% of all victims are involved in traffic collisions between 12:00 and 14:59 (20%) and between 15:00 to 17:59 (29%). This is relatively consistent with the previous five year (2008 to 2012) annual average (12:00-14:59 – 19% of all victims; 15:00 to 17:59 – 26% of all victims).

In 2013, more people are killed from noon to midnight than at any other time of the day (12:00-17:59 – nearly 44% of people killed, 18:00 – 23:59 – 26% killed). This is similar to the previous five year (2008 to 2012) annual average where nearly 29% of people are killed between noon and 6 p.m. and 28% are killed in collisions between 6 p.m. and midnight.

Comparing 2013 to the previous five year (2008 to 2012) annual average, there are small differences in the proportional distribution of people killed by time of the day. In 2013:

- 14% of people are killed between 6 a.m. and noon (06:00-08:59 – 7%; 09:00-11:59 – 7%), compared to 16% in the previous five years;
- Nearly 44% of people are killed between noon and 6 p.m. (12:00-14:59 – 20%; 15:00 to 17:59 – nearly 24%), compared to nearly 29% in the previous five years;
- 26% of people are killed between 6 p.m. and midnight (18:00-20:59 – 12%; 21:00 to 23:59 – 14%), compared to 28% in the previous five years; and,
- 14% of people are killed between midnight to 6 a.m. (00:00-02:59 – 2%; 03:00-05:59 – 12%), compared to nearly 20% in the previous five years.

Figure 5-4 Proportion of People Killed and Injured by Time of Occurrence



In 2013, it appears that the frequency with which people are injured in traffic collisions is fairly low between midnight and 6 a.m., and then builds through the day, beginning at approximately 6 a.m. and reaching a peak between 3 p.m. and 6 p.m., before falling off abruptly until midnight. The smallest number of people injured in traffic collisions is between midnight and 6 a.m. This pattern can also be seen in the previous five year (2008 to 2012) annual average. This pattern does not hold, however, when it comes to people killed in traffic collisions.

Table 5-6 Collision Victims by Gender and Casualty Type

Table 5-6

Collision Victims by Gender and Casualty Type: 2013

Gender	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Female	34	40.0%	139	45.4%	1,222	57.5%	4,999	61.1%	51	50.0%	6,411	59.8%	**6,445**	59.7%
Male	51	60.0%	167	54.6%	902	42.5%	3,183	38.9%	51	50.0%	4,303	40.2%	**4,354**	40.3%
Total	85	100%	306	100%	2,124	100%	8,182	100%	102	100%	10,714	100%	**10,799**	100%

Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-6a Collision Victims by Gender and Casualty Type for Previous Five Years

Table 5-6a

Collision Victims by Gender and Casualty Type: 2008-2012 Average

Gender	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Female	29	156	1,434	2,501	392	4,484	4,513	55.4%
Male	65	191	1,123	1,886	363	3,563	3,628	44.6%
Total	94	347	2,557	4,388	755	8,047	8,141	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

In 2013, women account for 60% of all casualties in traffic collisions, slightly increased from the previous five year (2008 to 2012) annual average (55%). In 2013:

- Men account for a higher proportion of people killed (60%) than women, similar to the previous five years when men accounted for 69% of victims killed;
- Women account for the majority of people injured (but not killed) overall (60%), similar to the previous five years (56%);
- Men account for just over half of people seriously injured (55% compared to 45% women), similar to the previous five years; and,
- Women account for more people sustaining minor injuries (nearly 58%) and minimal injuries (61%) than men, similar to the previous five years (minor injuries – 56%; minimal injuries – 57%).

Figure 5-5 Proportion of People Killed and Injured by Gender and Casualty Type

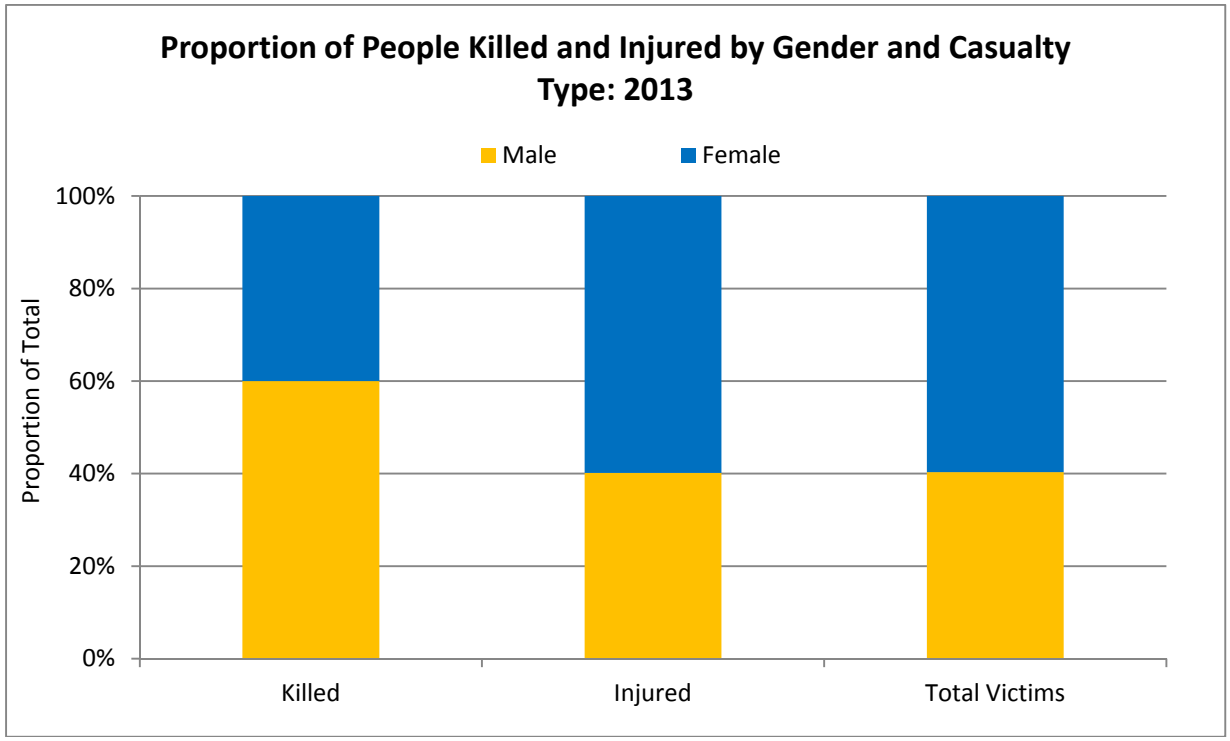


Table 5-7 Collision Victims by Age Group and Casualty Type

Table 5-7

Collision Victims by Age Group and Casualty Type: 2013

Age Group	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
0-4	2	2.4%	2	0.7%	35	1.7%	102	1.3%	1	1.0%	140	1.3%	**142**	1.3%
5-9	1	1.2%	4	1.3%	44	2.1%	90	1.1%	0	-	138	1.3%	**139**	1.3%
10-14	3	3.5%	2	0.7%	35	1.7%	103	1.3%	1	1.0%	141	1.3%	**144**	1.3%
15-19	12	14.1%	36	11.9%	261	12.4%	491	6.0%	10	10.1%	798	7.5%	**810**	7.6%
20-24	13	15.3%	40	13.2%	243	11.6%	847	10.4%	13	13.1%	1,143	10.8%	**1,156**	10.8%
25-34	11	12.9%	50	16.6%	421	20.0%	1,723	21.2%	20	20.2%	2,214	20.8%	**2,225**	20.8%
35-44	9	10.6%	44	14.6%	314	14.9%	1,632	20.1%	15	15.2%	2,005	18.9%	**2,014**	18.8%
45-54	12	14.1%	45	14.9%	325	15.5%	1,591	19.6%	17	17.2%	1,978	18.6%	**1,990**	18.6%
55-64	4	4.7%	31	10.3%	236	11.2%	977	12.0%	17	17.2%	1,261	11.9%	**1,265**	11.8%
65+	18	21.2%	48	15.9%	189	9.0%	569	7.0%	5	5.1%	811	7.6%	**829**	7.7%
Not Stated	0	-	4	-	21	-	57	-	3	-	85	-	**85**	-
Total	85	100%	306	100%	2,124	100%	8,182	100%	102	100%	10,714	100%	**10,799**	100%

*Percentage of the total does not include the "not stated" category.

Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-7a Collision Victims by Age Group and Casualty Type for Previous Five Years

Table 5-7a

Collision Victims by Age Group and Casualty Type: 2008-2012 Average

Age Group	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
0-4	<1	3	40	34	3	80	80	1.2%
5-9	1	3	59	53	3	118	119	1.8%
10-14	1	9	80	72	5	165	166	2.5%
15-19	13	45	350	317	21	733	745	11.0%
20-24	14	47	319	428	19	813	827	12.2%
25-34	12	50	434	739	29	1,251	1,263	18.7%
35-44	12	49	372	699	26	1,145	1,158	17.1%
45-54	13	47	352	700	23	1,123	1,135	16.8%
55-64	7	39	218	441	16	714	721	10.7%
65+	18	44	194	274	12	523	541	8.0%
Not Stated	2	12	141	631	599	1,383	1,385	-
Total	94	347	2,557	4,388	755	8,047	8,141	100%

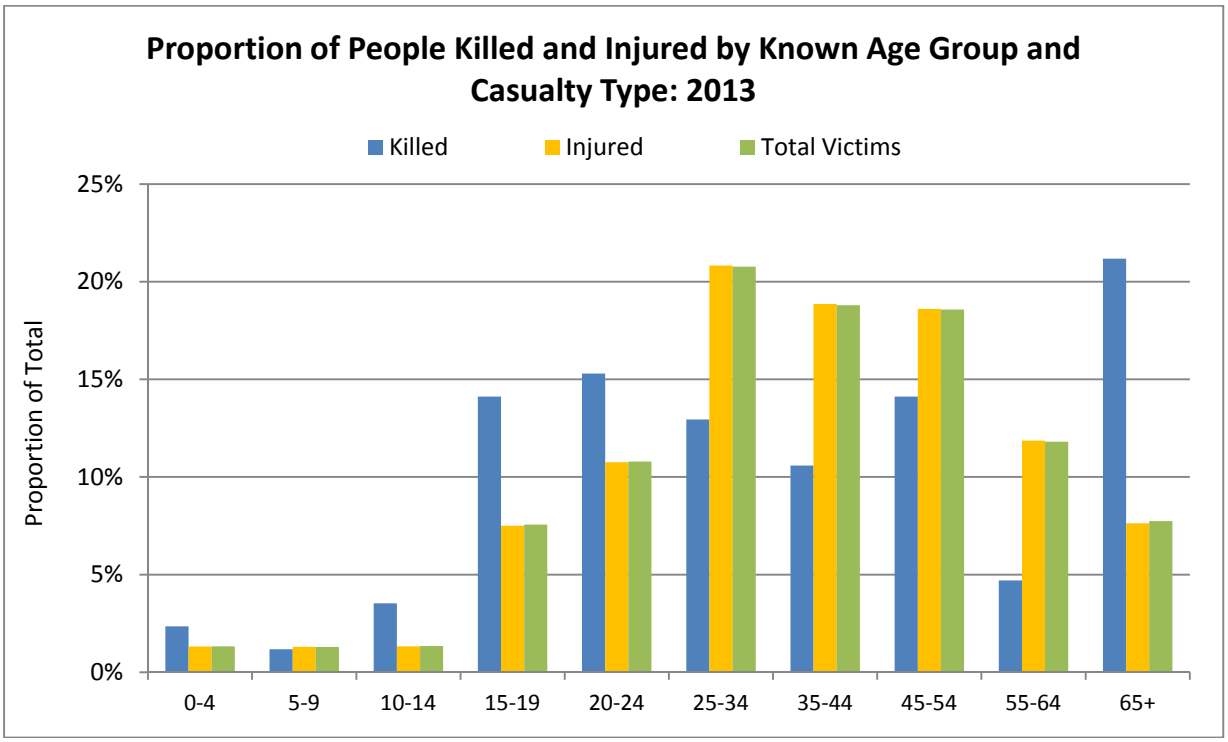
*Percentage of the total does not include the "not stated" category.
Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Victims aged 25 to 34 account for the highest proportion of casualties in 2013 (21% of all casualties; 13% of people killed; 17% of people seriously injured), followed by those aged 35 to 44 (19% of all casualties) and those age 45 to 54 (19% of all casualties). Victims aged 15 to 19 account for 8% of all casualties and those aged 20 to 24 account for 11%.

The proportion of victims by age group in 2013 is very similar to what it has been in the previous five year (2008 to 2012) annual average. In the previous five years, victims aged 25 to 34 (19% of all victims) and those aged 35 to 44 (17% of all victims) account for the two largest groups, followed by victims aged 45 to 54 (17% of all victims). Victims aged 15 to 19 and 20 to 24 account for 11% and 12% of all victims in the five year period 2008 to 2012, respectively.

In 2013, 42% of all people killed are aged 15 to 34 (14% aged 15-19; 15% aged 20-24; 13% aged 25-34), 25% are aged 35 to 54, and 26% are aged 55 and older. Similarly, in the previous five year (2008 to 2012) annual average, 43% of people killed are aged 15 to 34, 27% are aged 35 to 54, and 27% are aged 55 and older.

Figure 5-6 Proportion of People Killed and Injured by Age Group and Casualty Type



In 2013, people aged 65 and older make up the largest group of people killed in traffic collisions (21%), followed by those aged 20 to 24 (15%), 15 to 19 (14%) and 45 to 54 (14%). There are 6 children under the age of 15 killed in traffic collisions in 2013.

NOTE: For a detailed count of collision victims for 2013 and the previous five year (2008 to 2012) annual average by age and gender combined, please refer to "*Table 5-8 Collision Victims by Age Group, Casualty Type, and Gender*" and "*Table 5-8a Collision Victims by Age Group, Casualty Type, and Gender for Previous Five Years*" on the following pages.

Table 5-8 Collision Victims by Age Group, Casualty Type, and Gender

Table 5-8
Collision Victims by Gender and Age Group and Casualty Type: 2013

Age Group		2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Female	0-4	2	5.9%	1	0.7%	23	1.9%	57	1.1%	0	-	81	1.3%	**83**	1.3%
	5-9	0	-	1	0.7%	19	1.6%	53	1.1%	0	-	73	1.1%	**73**	1.1%
	10-14	1	2.9%	0	-	18	1.5%	53	1.1%	1	2.0%	72	1.1%	**73**	1.1%
	15-19	6	17.6%	18	13.1%	158	13.1%	302	6.1%	6	12.2%	484	7.6%	**490**	7.7%
	20-24	6	17.6%	21	15.3%	145	12.0%	524	10.6%	8	16.3%	698	11.0%	**704**	11.0%
	25-34	3	8.8%	21	15.3%	272	22.5%	1,052	21.2%	11	22.4%	1,356	21.3%	**1,359**	21.3%
	35-44	2	5.9%	18	13.1%	182	15.1%	1,000	20.2%	7	14.3%	1,207	19.0%	**1,209**	18.9%
	45-54	5	14.7%	19	13.9%	161	13.3%	993	20.0%	5	10.2%	1,178	18.5%	**1,183**	18.5%
	55-64	2	5.9%	15	10.9%	122	10.1%	601	12.1%	10	20.4%	748	11.8%	**750**	11.7%
	65+	7	20.6%	23	16.8%	109	9.0%	326	6.6%	1	2.0%	459	7.2%	**466**	7.3%
	Not Stated	0	-	2	-	13	-	38	-	2	-	55	-	**55**	-
	Total Female	**34**	**100%**	**139**	**100%**	**1,222**	**100%**	**4,999**	**100%**	**51**	**100%**	**6,411**	**100%**	**6,445**	100%
Male	0-4	0	-	1	0.6%	12	1.3%	45	1.4%	1	2.0%	59	1.4%	**59**	1.4%
	5-9	1	2.0%	3	1.8%	25	2.8%	37	1.2%	0	-	65	1.5%	**66**	1.5%
	10-14	2	3.9%	2	1.2%	17	1.9%	50	1.6%	0	-	69	1.6%	**71**	1.6%
	15-19	6	11.8%	18	10.9%	103	11.5%	189	6.0%	4	8.0%	314	7.3%	**320**	7.4%
	20-24	7	13.7%	19	11.5%	98	11.0%	323	10.2%	5	10.0%	445	10.4%	**452**	10.5%
	25-34	8	15.7%	29	17.6%	149	16.7%	671	21.2%	9	18.0%	858	20.1%	**866**	20.0%
	35-44	7	13.7%	26	15.8%	132	14.8%	632	20.0%	8	16.0%	798	18.7%	**805**	18.6%
	45-54	7	13.7%	26	15.8%	164	18.3%	598	18.9%	12	24.0%	800	18.7%	**807**	18.7%
	55-64	2	3.9%	16	9.7%	114	12.8%	376	11.9%	7	14.0%	513	12.0%	**515**	11.9%
	65+	11	21.6%	25	15.2%	80	8.9%	243	7.7%	4	8.0%	352	8.2%	**363**	8.4%
	Not Stated	0	-	2	-	8	-	19	-	1	-	30	-	**30**	-
	Total Male	**51**	**100%**	**167**	**100%**	**902**	**100%**	**3,183**	**100%**	**51**	**100%**	**4,303**	**100%**	**4,354**	100%

*Percentage of the total does not include the "not stated" category.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-8a Collision Victims by Age Group, Casualty Type, and Gender for Previous Five Years

Table 5-8a

Collision Victims by Gender and Age Group and Casualty Type: 2008-2012 Average

Age Group		2008-2012 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Female	0-4	<1	2	21	17	<1	40	41	1.1%
	5-9	<1	2	30	28	1	61	61	1.6%
	10-14	<1	4	41	36	2	83	83	2.2%
	15-19	4	24	200	181	9	413	417	11.0%
	20-24	5	21	184	250	10	466	470	12.5%
	25-34	2	22	245	433	15	715	717	19.0%
	35-44	3	17	213	403	14	647	650	17.2%
	45-54	4	21	189	409	12	631	635	16.8%
	55-64	1	16	123	256	8	404	405	10.7%
	65+	6	22	113	151	6	291	297	7.9%
	Not Stated	1	5	77	338	314	735	736	-
	Total Female	29	156	1,434	2,501	392	4,484	4,513	100%
Male	0-4	-	1	19	18	2	40	40	1.3%
	5-9	<1	1	29	25	2	57	58	1.9%
	10-14	1	5	39	36	2	82	83	2.8%
	15-19	8	22	151	136	12	320	328	11.0%
	20-24	10	26	135	178	9	347	357	12.0%
	25-34	10	28	189	306	14	536	546	18.3%
	35-44	9	32	159	296	12	499	507	17.0%
	45-54	8	25	163	292	12	492	500	16.8%
	55-64	6	23	94	185	8	310	316	10.6%
	65+	12	22	82	122	6	232	244	8.2%
	Not Stated	<1	7	64	293	284	648	649	-
	Total Male	65	191	1,123	1,886	363	3,563	3,628	100%

*Percentage of the total does not include the "not stated" category.

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-9 Victim Involvement Rate (per 100,000 people) by Gender and Age Group and Casualty Type

Table 5-9

Victim Involvement Rate (per 100,000 people) by Gender and Age Group and Casualty Type: 2013, 2008-2012 Average

Age Group		2013 Casualty Type						2013 Total Victims	2008-2012 Average Victim Involvement Rate						
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims
Female	0-4	5.0	2.5	57.0	141.1	-	200.6	**205.5**	1.5	4.1	54.2	43.4	1.5	103.2	104.8
	5-9	-	2.5	48.4	135.1	-	186.0	**186.0**	1.1	5.3	80.7	73.8	2.7	162.6	163.6
	10-14	2.6	-	46.5	136.8	2.6	185.9	**188.5**	0.5	9.0	102.5	90.5	5.5	207.6	208.1
	15-19	14.0	42.1	369.6	706.4	14.0	1,132.1	**1,146.2**	9.6	54.2	458.4	415.7	19.8	948.1	957.7
	20-24	12.9	45.2	312.3	1,128.5	17.2	1,503.2	**1,516.1**	10.7	49.2	427.4	580.1	24.1	1080.8	1091.5
	25-34	3.4	24.0	310.9	1,202.6	12.6	1,550.1	**1,553.5**	3.0	27.2	302.4	535.1	19.0	883.8	886.8
	35-44	2.4	21.7	219.4	1,205.3	8.4	1,454.8	**1,457.2**	4.2	21.2	261.7	495.7	17.0	795.5	799.7
	45-54	5.5	21.0	177.6	1,095.4	5.5	1,299.5	**1,305.0**	4.6	23.4	206.6	447.4	12.7	690.2	694.8
	55-64	2.5	19.0	154.2	759.5	12.6	945.3	**947.8**	1.9	22.2	168.8	350.8	11.5	553.4	555.3
	65+	6.8	22.4	106.3	317.9	1.0	447.7	**454.5**	3.0	11.7	166.3	734.1	682.4	1594.5	1597.5
	Total Female	**5.2**	**21.4**	**187.9**	**768.7**	**7.8**	**985.8**	**991.1**	4.6	25.1	230.9	402.6	63.2	721.8	726.4
Male	0-4	-	2.4	28.5	106.7	2.4	139.9	**139.9**	-	3.0	47.8	44.3	5.0	100.2	100.2
	5-9	2.4	7.3	60.9	90.1	-	158.2	**160.6**	2.1	3.6	74.1	65.3	5.2	148.3	150.3
	10-14	4.8	4.8	41.1	121.0	-	166.9	**171.8**	2.4	12.1	94.7	86.4	5.8	199.1	201.5
	15-19	13.2	39.7	227.4	417.3	8.8	693.2	**706.5**	18.8	48.4	337.5	303.9	26.9	716.6	735.4
	20-24	14.4	39.2	202.2	666.6	10.3	918.3	**932.8**	22.1	59.9	309.9	409.8	19.8	799.4	821.5
	25-34	9.2	33.4	171.4	771.7	10.4	986.7	**995.9**	12.4	34.3	234.8	379.9	17.1	666.1	678.5
	35-44	8.5	31.5	159.9	765.5	9.7	966.6	**975.1**	10.8	38.9	195.7	364.8	15.0	614.5	625.3
	45-54	7.7	28.4	179.4	654.0	13.1	874.9	**882.5**	9.1	27.4	177.9	317.5	12.9	535.8	544.9
	55-64	2.6	20.6	146.6	483.5	9.0	659.6	**662.2**	8.1	31.4	131.2	257.5	10.8	431.0	439.0
	65+	13.4	30.5	97.7	296.7	4.9	429.7	**443.2**	29.9	55.7	206.8	310.2	14.7	587.4	617.3
	Total Male	**8.0**	**26.1**	**141.2**	**498.2**	**8.0**	**673.4**	**681.4**	10.7	31.2	183.5	308.3	59.3	582.3	593.0

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Overall, women have higher victim involvement rates than men. The involvement rate for females in all traffic collisions in 2013 is 991.1 while for males it is 681.4 (per 100,000 people). Similarly, in the previous five year (2008-2012) annual average, women have a higher involvement rate than men (women 726.4; men 593.0). However, men have higher involvement rates than women when it comes to being killed and sustaining serious injuries. Victim involvement by gender overall (per 100,000 people):

- People killed – Males 8.0 in 2013 (10.7 in previous 5-year average), Females 5.2 in 2013 (4.6 in previous 5-year average);
- People seriously injured – Males 26.1 in 2013 (31.2 in previous 5-year average), Females 21.4 in 2013 (25.1 in previous 5-year average);
- People sustaining minor injuries – Males 141.2 in 2013 (183.5 in previous 5-year average), Females 187.9 in 2013 (230.9 in previous 5-year average);
- People sustaining minimal injuries – Males 498.2 in 2013 (308.3 in previous 5-year average), Females 768.7 in 2013 (402.6 in previous 5-year average); and,
- People sustaining "other" injuries – Males 8.0 in 2013 (59.3 in previous 5-year average), Females 7.8 in 2013 (63.2 in previous 5-year average).

People aged 25 to 44 have the highest victim involvement rates (per 100,000 people) overall in 2013.

- Children under age 15 – rate of 175.4
- People aged 15 to 24 – rate of 1,075.4
- People aged 25 to 34 – rate of 1,274.7
- People aged 35 to 44 – rate of 1,216.2
- People aged 45 to 54 – rate of 1,093.8
- People aged 55 and older – rate of 626.9

In 2013, women aged 25 to 34 have the highest victim involvement rate of any age-gender group (1,553.5 per 100,000 people) followed by women aged 20 to 24 (1,516.1) and women aged 35 to 44 (1,457.2). While the victim involvement rates for young men is lower than young women in 2013, men aged 25 to 34 have the highest rate among male age groups (995.9 per 100,000 people) followed by men aged 35 to 44 (975.1) and men aged 20 to 24 (932.8).

The overall victim involvement rates in 2013 are mostly below the rates in the previous five year (2008 to 2012) annual average, with the obvious exception of rates for minimal injuries.

- Compared to the previous five years, victim involvement rates for women increased by 13% for people killed, decreased by 15% for people seriously injured and decreased by 19% for people with minor injuries. Meanwhile, the rate for women with minimal injuries is 91% higher in 2013 compared to 2008 to 2012.
- Compared to the previous five years, victim involvement rates for men decreased by 25% for people killed, by 16% for people seriously injured, and by 23% for people with minor injuries. Meanwhile, the rate for men with minimal injuries increased by 62% in 2013 compared to 2008 to 2012.

Table 5-10 Collision Victims by Road User Class and Age Group

Table 5-10

Collision Victims by Road User Class and Age Group and Casualty Type: 2013

	Age Group	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Driver	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	10-14	0	-	0	-	0	-	1	<0.1%	0	-	1	<0.1%	**1**	<0.1%
	15-19	4	9.8%	16	9.0%	171	11.2%	349	5.2%	7	10.3%	543	6.4%	**547**	6.4%
	20-24	9	22.0%	22	12.4%	175	11.5%	735	10.9%	4	5.9%	936	11.0%	**945**	11.1%
	25-34	6	14.6%	30	16.9%	322	21.2%	1,467	21.8%	17	25.0%	1,836	21.6%	**1,842**	21.6%
	35-44	3	7.3%	31	17.5%	257	16.9%	1,457	21.6%	13	19.1%	1,758	20.7%	**1,761**	20.6%
	45-54	7	17.1%	24	13.6%	266	17.5%	1,410	20.9%	10	14.7%	1,710	20.1%	**1,717**	20.1%
	55-64	1	2.4%	18	10.2%	185	12.2%	832	12.4%	13	19.1%	1,048	12.3%	**1,049**	12.3%
	65+	11	26.8%	36	20.3%	145	9.5%	484	7.2%	4	5.9%	669	7.9%	**680**	8.0%
	Not Stated	0	-	0	-	2	-	4	-	0	-	6	-	**6**	-
	Total Drivers*	**41**	**100%**	**177**	**100%**	**1,523**	**100%**	**6,739**	**100%**	**68**	**100%**	**8,507**	**100%**	**8,548**	100%
Passenger	0-4	2	8.0%	1	1.4%	36	7.1%	118	8.2%	2	12.5%	157	7.7%	**159**	7.7%
	5-9	1	4.0%	3	4.1%	50	9.9%	104	7.2%	0	-	157	7.7%	**158**	7.7%
	10-14	1	4.0%	1	1.4%	35	6.9%	124	8.6%	1	6.3%	161	7.9%	**162**	7.8%
	15-19	5	20.0%	17	23.0%	89	17.6%	155	10.7%	2	12.5%	263	12.9%	**268**	13.0%
	20-24	4	16.0%	13	17.6%	62	12.3%	109	7.5%	5	31.3%	189	9.3%	**193**	9.3%
	25-34	2	8.0%	9	12.2%	70	13.8%	232	16.1%	1	6.3%	312	15.3%	**314**	15.2%
	35-44	4	16.0%	9	12.2%	43	8.5%	186	12.9%	1	6.3%	239	11.7%	**243**	11.8%
	45-54	2	8.0%	6	8.1%	40	7.9%	178	12.3%	2	12.5%	226	11.1%	**228**	11.0%
	55-64	1	4.0%	8	10.8%	41	8.1%	150	10.4%	1	6.3%	200	9.8%	**201**	9.7%
	65+	3	12.0%	7	9.5%	40	7.9%	88	6.1%	1	6.3%	136	6.7%	**139**	6.7%
	Not Stated	0	-	2	-	59	-	167	-	4	-	232	-	**232**	-
	Total Passengers*	**25**	**100%**	**76**	**100%**	**565**	**100%**	**1,611**	**100%**	**20**	**100%**	**2,272**	**100%**	**2,297**	100%

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Age Group		2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Motorcyclist	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	10-14	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	15-19	0	-	0	-	1	2.1%	2	5.3%	0	-	3	2.8%	**3**	2.7%
	20-24	0	-	1	4.8%	6	12.5%	5	13.2%	0	-	12	11.2%	**12**	10.7%
	25-34	2	40.0%	3	14.3%	8	16.7%	12	31.6%	0	-	23	21.5%	**25**	22.3%
	35-44	1	20.0%	3	14.3%	9	18.8%	5	13.2%	0	-	17	15.9%	**18**	16.1%
	45-54	0	-	9	42.9%	14	29.2%	8	21.1%	0	-	31	29.0%	**31**	27.7%
	55-64	1	20.0%	4	19.0%	10	20.8%	6	15.8%	0	-	20	18.7%	**21**	18.8%
	65+	1	20.0%	1	4.8%	0	-	0	-	0	-	1	0.9%	**2**	1.8%
	Not Stated	0	-	0	-	0	-	1	-	0	-	1	-	**1**	-
	Total Motorcyclists*	**5**	**100%**	**21**	**100%**	**48**	**100%**	**39**	**100%**	**0**	**0%**	**108**	**100%**	**113**	100%
Moped	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	10-14	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	15-19	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	20-24	0	-	0	-	0	-	1	8.3%	0	-	1	5.3%	**1**	5.3%
	25-34	0	-	0	-	0	-	6	50.0%	0	-	6	31.6%	**6**	31.6%
	35-44	0	-	0	-	2	40.0%	1	8.3%	0	-	3	15.8%	**3**	15.8%
	45-54	0	-	1	100.0%	1	20.0%	3	25.0%	1	100.0%	6	31.6%	**6**	31.6%
	55-64	0	-	0	-	2	40.0%	1	8.3%	0	-	3	15.8%	**3**	15.8%
	65+	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	Not Stated	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	Total Moped*	**0**	**0%**	**1**	**100%**	**5**	**100%**	**12**	**100%**	**1**	**100%**	**19**	**100%**	**19**	100%

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Age Group		2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Bicyclist	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	2	6.9%	1	4.2%	0	-	3	4.3%	**3**	4.1%
	10-14	1	25.0%	0	-	0	-	0	-	0	-	0	-	**1**	1.4%
	15-19	0	-	1	12.5%	4	13.8%	2	8.3%	0	-	7	10.1%	**7**	9.6%
	20-24	0	-	1	12.5%	1	3.4%	7	29.2%	3	37.5%	12	17.4%	**12**	16.4%
	25-34	1	25.0%	2	25.0%	12	41.4%	4	16.7%	1	12.5%	19	27.5%	**20**	27.4%
	35-44	0	-	1	12.5%	4	13.8%	2	8.3%	1	12.5%	8	11.6%	**8**	11.0%
	45-54	1	25.0%	3	37.5%	4	13.8%	5	20.8%	3	37.5%	15	21.7%	**16**	21.9%
	55-64	0	-	0	-	0	-	1	4.2%	0	-	1	1.4%	**1**	1.4%
	65+	1	25.0%	0	-	2	6.9%	2	8.3%	0	-	4	5.8%	**5**	6.8%
	Not Stated	0	-	1	-	1	-	4	-	3	-	9	-	**9**	-
	Total Bicyclists*	**4**	**100%**	**9**	**100%**	**30**	**100%**	**28**	**100%**	**11**	**100%**	**78**	**100%**	**82**	100%
Pedestrian	0-4	0	-	1	4.8%	3	6.4%	0	-	0	-	4	4.0%	**4**	3.6%
	5-9	0	-	2	9.5%	2	4.3%	1	4.2%	0	-	5	5.0%	**5**	4.5%
	10-14	1	10.0%	1	4.8%	4	8.5%	3	12.5%	0	-	8	7.9%	**9**	8.1%
	15-19	3	30.0%	2	9.5%	5	10.6%	2	8.3%	1	11.1%	10	9.9%	**13**	11.7%
	20-24	0	-	3	14.3%	6	12.8%	2	8.3%	1	11.1%	12	11.9%	**12**	10.8%
	25-34	0	-	5	23.8%	12	25.5%	6	25.0%	1	11.1%	24	23.8%	**24**	21.6%
	35-44	1	10.0%	0	-	3	6.4%	6	25.0%	0	-	9	8.9%	**10**	9.0%
	45-54	2	20.0%	2	9.5%	5	10.6%	1	4.2%	2	22.2%	10	9.9%	**12**	10.8%
	55-64	1	10.0%	1	4.8%	3	6.4%	2	8.3%	3	33.3%	9	8.9%	**10**	9.0%
	65+	2	20.0%	4	19.0%	4	8.5%	1	4.2%	1	11.1%	10	9.9%	**12**	10.8%
	Not Stated	0	-	1	-	2	-	1	-	1	-	5	-	**5**	-
	Total Pedestrians*	**10**	**100%**	**22**	**100%**	**49**	**100%**	**25**	**100%**	**10**	**100%**	**106**	**100%**	**116**	100%

*Percentage of the total does not include the "not stated" category.

Note: Counts for “Motorcyclist”, “Bicyclist” and “Moped” include passengers on those vehicle types.

Note: In 2013, there are 6 victims in the class "Riding/hanging on" (i.e., not in the passenger compartment) who are not included in Table 5-10. This includes 1 person with a serious injury, 1 person with a minor injury and 4 people with minimal injuries.

Note: Some victims do not have their position in the vehicle recorded and are therefore missing from the table above. This includes 53 injured people (21 minor, 30 minimal, 2 other injured).

Table 5-10a Victims by Road User Class and Age Group and Casualty Type for Previous Five Years

Table 5-10a

Collision Victims by Road User Class and Age Group and Casualty Type: 2008-2012 Average

Age Group		2008-2012 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Driver	0-4	-	<1	<1	1	<1	2	2	<0.1%
	5-9	-	<1	2	2	-	4	4	<0.1%
	10-14	<1	<1	2	1	<1	4	4	<0.1%
	15-19	6	22	192	214	11	438	444	9.2%
	20-24	8	25	220	338	10	593	600	12.5%
	25-34	7	31	306	618	19	974	981	20.3%
	35-44	7	31	274	599	20	924	931	19.3%
	45-54	7	28	256	600	16	900	907	18.8%
	55-64	5	26	156	365	11	558	562	11.7%
	65+	11	28	126	213	6	373	384	8.0%
	Not Stated	1	4	75	398	382	860	861	-
	Total Drivers*	50	195	1,610	3,348	477	5,630	5,680	100%
Passenger	0-4	<1	2	36	35	2	75	75	4.8%
	5-9	<1	2	47	52	2	102	103	6.5%
	10-14	<1	5	60	68	2	135	135	8.6%
	15-19	5	18	134	99	6	257	262	16.6%
	20-24	4	15	74	82	7	177	181	11.5%
	25-34	4	12	95	109	6	222	226	14.3%
	35-44	3	9	70	88	3	170	173	10.9%
	45-54	3	11	65	88	5	169	172	10.9%
	55-64	<1	6	42	70	3	120	121	7.6%
	65+	3	10	56	58	4	128	131	8.3%
	Not Stated	<1	7	57	163	91	318	318	-
	Total Passengers*	24	94	736	912	131	1,873	1,897	100%
Motorcyclist	0-4	-	-	-	-	-	-	-	-
	5-9	-	-	<1	-	-	<1	<1	0.4%
	10-14	<1	<1	<1	<1	<1	1	2	1.7%
	15-19	<1	<1	2	<1	-	3	4	3.8%
	20-24	<1	3	8	3	-	14	14	15.2%
	25-34	<1	3	6	5	<1	14	15	16.0%
	35-44	1	3	7	6	<1	17	18	19.2%
	45-54	<1	5	11	6	1	24	24	25.9%
	55-64	<1	4	8	2	<1	14	15	15.8%
	65+	-	<1	<1	<1	-	2	2	1.9%
	Not Stated	-	1	2	12	11	26	26	-
	Total Motorcyclists*	4	20	47	35	13	115	120	100%

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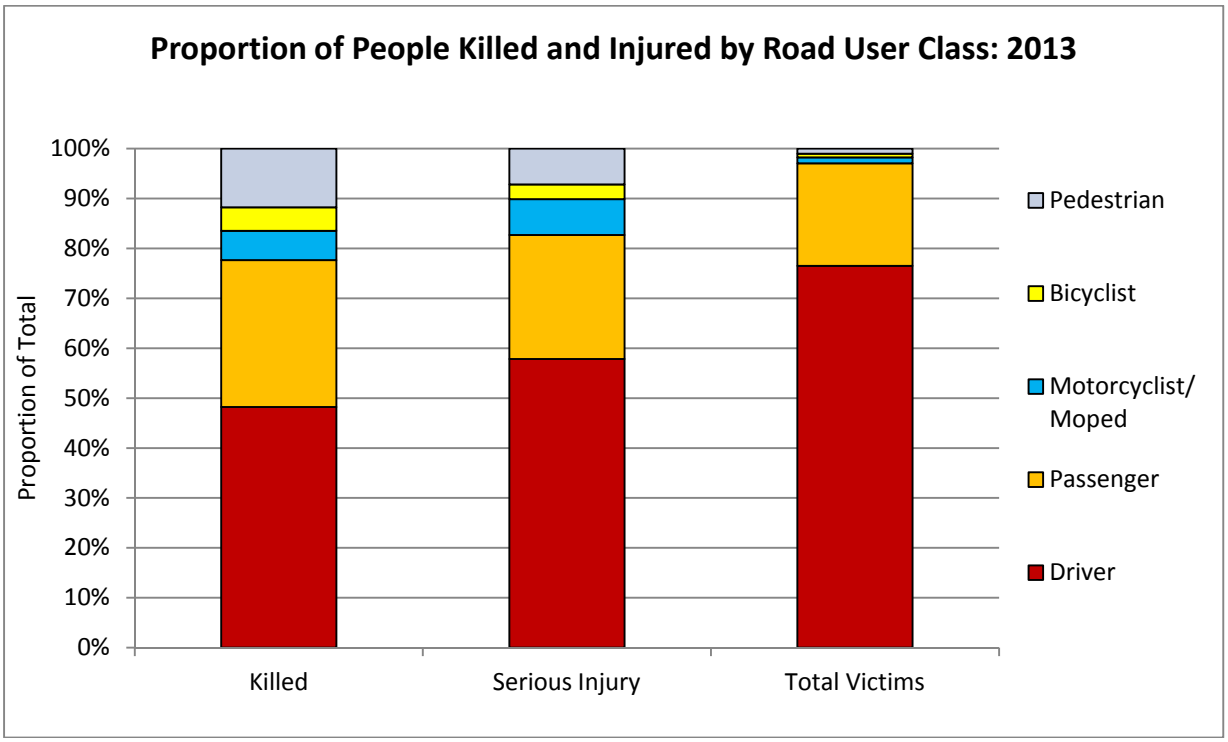
Age Group		2008-2012 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Moped	0-4	-	-	-	-	-	-	-	-
	5-9	-	-	-	-	-	-	-	-
	10-14	-	-	<1	-	-	<1	<1	3.4%
	15-19	-	-	-	-	-	-	-	-
	20-24	-	-	<1	-	-	<1	<1	6.9%
	25-34	-	<1	<1	<1	-	1	1	24.1%
	35-44	-	<1	<1	<1	-	1	1	24.1%
	45-54	<1	-	<1	<1	-	1	1	20.7%
	55-64	-	<1	<1	-	-	<1	<1	10.3%
	65+	-	<1	<1	-	-	<1	<1	10.3%
	Not Stated	-	-	<1	<1	2	3	3	-
	Total Moped*	<1	1	3	3	2	9	9	100%
Bicyclist	0-4	-	-	-	<1	-	<1	<1	0.2%
	5-9	<1	<1	4	1	<1	6	6	5.5%
	10-14	-	<1	9	4	<1	14	14	13.1%
	15-19	<1	2	9	4	<1	16	16	15.0%
	20-24	<1	<1	6	6	<1	13	13	12.0%
	25-34	-	1	12	5	2	20	20	18.3%
	35-44	<1	2	8	4	<1	14	15	13.7%
	45-54	<1	1	7	3	<1	12	12	11.5%
	55-64	-	<1	5	3	-	8	8	7.8%
	65+	<1	<1	1	<1	-	2	3	3.0%
	Not Stated	<1	<1	8	39	43	90	90	-
	Total Bicyclists*	3	9	70	70	47	195	199	100%
Pedestrian	0-4	-	<1	4	<1	<1	5	5	2.5%
	5-9	<1	1	6	<1	<1	9	9	4.5%
	10-14	<1	2	10	2	1	15	16	7.8%
	15-19	1	4	15	5	2	26	27	13.2%
	20-24	2	5	12	4	1	22	24	11.6%
	25-34	<1	2	16	6	2	26	27	13.4%
	35-44	<1	4	12	6	3	24	25	12.4%
	45-54	2	2	15	6	1	25	26	12.9%
	55-64	1	3	10	4	2	18	20	9.6%
	65+	4	5	10	4	2	21	25	12.2%
	Not Stated	<1	2	17	51	70	140	141	-
	Total Pedestrians*	12	33	127	87	85	332	344	100%

*Percentage of the total does not include the "not stated" category.
Note: Counts for “Motorcyclist”, “Bicyclist” and “Moped” include passengers on those vehicle types.
Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: In 2008-2012, there is an average of 4 victims in the class “Riding/Hanging On”. There is also an average of 11 victims whose Road User Class cannot be determined. None of these people were killed in the five year period. These victims are not included in Table 5-10a.

In 2013, “Drivers” account for nearly 77% of all casualties and motor vehicle “Passengers” for nearly 21%. “Motorcyclists” and “Moped” riders combined account for just over 1% of all casualties while “Bicyclists” account for 1% and “Pedestrians” account for 1%. In 2013, “Pedestrians” account for 12% of people killed in traffic collisions.

Figure 5-7 Proportion of People Killed and Injured by Road User Class



Among people killed in traffic collisions in 2013:

- "Drivers" account for the largest proportion at 48%;
- "Passengers" account for 29%;
- "Pedestrians" account for 12%;
- "Motorcyclist/ Mopeds" account for 6%; and,
- "Bicyclists" account for 5%.

Vulnerable road users (pedestrians, motorcyclists/moped riders and bicyclists) account for a much higher proportion of people killed and seriously injured than they do for other types of injuries.

- Pedestrians account for 12% of people killed, but only 1% of all victims in 2013.
- Motorcyclists and moped riders account 6% of people killed but only 1% of all victims in 2013.
- Bicyclists account for 5% of people killed, but less than 1% of all victims in 2013.

Table 5-11 Collision Victims by Collision Type and Casualty Type

Table 5-11
Collision Victims by Collision Type and Casualty Type: 2013

Collision Type	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Collision with pedestrian	4	4.7%	7	2.3%	16	0.7%	1	<0.1%	3	2.7%	27	0.2%	**31**	0.3%
Collision with other motor vehicle	47	55.3%	157	51.1%	1,521	67.8%	7,106	83.7%	78	69.6%	8,862	79.5%	**8,909**	79.3%
Collisions with train	0	-	1	0.3%	0	-	0	-	0	-	1	<0.1%	**1**	<0.1%
Collision with motorcycle	2	2.4%	1	0.3%	2	<0.1%	3	<0.1%	0	-	6	<0.1%	**8**	<0.1%
Collision with animal drawn vehicle	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Collision with bicycle	0	-	3	1.0%	8	0.4%	5	<0.1%	2	1.8%	18	0.2%	**18**	0.2%
Collision with animal	0	-	8	2.6%	32	1.4%	200	2.4%	1	0.9%	241	2.2%	**241**	2.1%
Collision with fixed object	14	16.5%	51	16.6%	329	14.7%	546	6.4%	10	8.9%	936	8.4%	**950**	8.5%
Collision with other object	2	2.4%	21	6.8%	187	8.3%	474	5.6%	10	8.9%	692	6.2%	**694**	6.2%
Overturned in roadway	4	4.7%	4	1.3%	10	0.4%	8	<0.1%	0	-	22	0.2%	**26**	0.2%
Ran off roadway	12	14.1%	43	14.0%	93	4.1%	30	0.4%	6	5.4%	172	1.5%	**184**	1.6%
Collision with moped	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Other non-collision	0	-	11	3.6%	44	2.0%	115	1.4%	2	1.8%	172	1.5%	**172**	1.5%
Total	85	100%	307	100%	2,242	100%	8,488	100%	112	100%	11,149	100%	**11,234**	100%

Table 5-11a Collision Victims by Collision Type and Casualty Type for Previous Five Years

Table 5-11a

Collision Victims by Collision Type and Casualty Type: 2008-2012 Average

Collision Type	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Collision with pedestrian	11	28	112	83	86	309	320	3.9%
Collision with other motor vehicle	36	155	1,625	3,537	519	5,837	5,873	71.1%
Collisions with train	2	2	2	<1	-	4	6	<0.1%
Collision with motorcycle	3	15	36	29	14	94	97	1.2%
Collision with animal drawn vehicle	-	-	-	-	-	-	-	-
Collision with bicycle	3	7	64	71	48	190	193	2.3%
Collision with animal	<1	6	61	160	11	238	239	2.9%
Collision with fixed object	8	32	171	219	29	451	459	5.5%
Collision with other object	7	19	72	146	9	245	252	3.1%
Overturned in roadway	5	24	125	48	3	199	205	2.5%
Ran off roadway	20	64	311	147	39	560	580	7.0%
Collision with moped	-	-	<1	-	-	<1	<1	<0.1%
Other non-collision	<1	2	16	21	-	40	40	0.5%
Total	94	354	2,596	4,461	758	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

Motor vehicles colliding with other motor vehicles account for the majority of casualties in Manitoba, both in 2013 and in the previous five year (2008 to 2012) annual average. In 2013, “collision with other motor vehicle” accounts for:

- 79% of all casualties (71% in the previous five years);
- 55% of people killed (38% in the previous five years); and,
- 51% of people seriously injured (44% in the previous five years).

“Collision with a pedestrian”, “collision with motorcycle”, “collision with fixed object”, “collision with other object”, “overturned in roadway” and “ran off roadway” each account for a higher proportion of people killed than of people injured in traffic collisions.

Table 5-12 Collision Victims by Accident Configuration and Casualty Type

Table 5-12
Collision Victims by Accident Configuration and Casualty Type: 2013

Accident Configuration	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Rear End	2	3.0%	22	9.1%	471	24.8%	4,112	54.7%	31	35.6%	4,636	47.6%	**4,638**	47.3%
Head On	21	31.8%	34	14.0%	84	4.4%	193	2.6%	7	8.0%	318	3.3%	**339**	3.5%
Side Swipe Opposing	2	3.0%	6	2.5%	27	1.4%	83	1.1%	0	-	116	1.2%	**118**	1.2%
Side Swipe Same Direction	0	-	6	2.5%	63	3.3%	383	5.1%	3	3.4%	455	4.7%	**455**	4.6%
Overtaking	3	4.5%	3	1.2%	6	0.3%	37	0.5%	1	1.1%	47	0.5%	**50**	0.5%
Right Turn - Same direction	0	-	0	-	3	0.2%	19	0.3%	1	1.1%	23	0.2%	**23**	0.2%
Right Turn - Opposing	0	-	0	-	2	0.1%	17	0.2%	0	-	19	0.2%	**19**	0.2%
Left Turn - Opposing	1	1.5%	5	2.1%	81	4.3%	221	2.9%	1	1.1%	308	3.2%	**309**	3.1%
Left Turn - Same direction	0	-	0	-	8	0.4%	23	0.3%	1	1.1%	32	0.3%	**32**	0.3%
Left Turn - Across	0	-	3	1.2%	39	2.1%	109	1.5%	1	1.1%	152	1.6%	**152**	1.5%
Intersection 90°	10	15.2%	67	27.7%	663	34.9%	1,611	21.4%	16	18.4%	2,357	24.2%	**2,367**	24.1%
Off Road Right	9	13.6%	29	12.0%	181	9.5%	176	2.3%	4	4.6%	390	4.0%	**399**	4.1%
Off Road Left	7	10.6%	24	9.9%	119	6.3%	111	1.5%	2	2.3%	256	2.6%	**263**	2.7%
Fixed Object	3	4.5%	26	10.7%	114	6.0%	279	3.7%	9	10.3%	428	4.4%	**431**	4.4%
Parking	0	-	0	-	15	0.8%	112	1.5%	1	1.1%	128	1.3%	**128**	1.3%
Pedestrian	8	12.1%	17	7.0%	26	1.4%	27	0.4%	9	10.3%	79	0.8%	**87**	0.9%
Other	19	-	65	-	340	-	975	-	25	-	1,405	-	**1,424**	-
Total	85	100%	307	100%	2,242	100%	8,488	100%	112	100%	11,149	100%	**11,234**	100%

Note: “Other” accident configurations consist primarily of collisions involving more than one configuration or sequence of events. Calculations in "% of Total" exclude the "Other" category.

Table 5-12a Collision Victims by Accident Configuration and Casualty Type for Previous Five Years

Table 5-12a

Collision Victims by Accident Configuration and Casualty Type: 2008-2012 Average

Accident Configuration	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Rear End	4	27	509	1,922	188	2,647	2,651	40.4%
Head On	13	26	79	91	11	206	219	3.3%
Side Swipe Opposing	1	5	29	40	3	77	78	1.2%
Side Swipe Same Direction	<1	4	43	148	12	207	208	3.2%
Overtaking	1	3	20	39	9	72	73	1.1%
Right Turn - Same direction	-	<1	9	21	3	33	33	0.5%
Right Turn - Opposing	-	<1	6	9	3	19	19	0.3%
Left Turn - Opposing	<1	5	47	75	8	134	135	2.1%
Left Turn - Same direction	-	<1	18	27	4	50	50	0.8%
Left Turn - Across	2	11	132	181	29	353	354	5.4%
Intersection 90°	12	67	547	713	104	1,432	1,444	22.0%
Off Road Right	12	38	211	125	10	383	395	6.0%
Off Road Left	10	34	168	94	13	309	319	4.9%
Fixed Object	2	15	73	123	17	227	230	3.5%
Parking	<1	<1	5	38	2	45	45	0.7%
Pedestrian	12	26	108	81	81	296	308	4.7%
Other	24	90	594	735	261	1,680	1,704	-
Total	94	354	2,596	4,461	758	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: “Other” accident configurations consist primarily of collisions involving more than one configuration or sequence of events. Calculations in "% of Total" exclude the "Other" category.

“Rear end” collisions and those occurring at “intersections 90°” account for the highest proportions of casualties, followed by collisions where the vehicle leaves the road (either in the right or left) and left turns. In 2013:

- “Rear end” collisions account for 47% of all victims, 3% of people killed and 9% of people seriously injured;
- “Intersection 90°” collisions account for 24% of all victims, 15% of people killed and 28% of people seriously injured;
- “Off road” (either right or left) collisions account for 7% of all victims, 24% of people killed and 22% of people seriously injured; and,
- “Left turn” (including across, in the same direction, and opposing) collisions account for 5% of all victims, 1 person killed and 3% of people seriously injured.

People are most often killed in traffic collisions where the vehicle leaves the road, meets another vehicle head on or at 90° intersections, or hits a pedestrian. In 2013:

- “Head on” collisions account for 32% of people killed;
- A vehicle going “Off road” (either right or left) accounts for 24% of people killed;
- Collisions at 90° intersections account for 15% of people killed; and,
- “Pedestrian” collisions account for 12% of people killed.

Table 5-13 Collision Victims by Provincial Location and Casualty Type

Table 5-13
Collision Victims by Provincial Location and Casualty Type: 2013

Location	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Winnipeg	11	12.9%	114	37.1%	1,181	52.7%	6,923	81.6%	64	57.1%	8,282	74.3%	**8,293**	73.8%
Brandon	0	-	6	2.0%	81	3.6%	182	2.1%	1	0.9%	270	2.4%	**270**	2.4%
Portage	0	-	1	0.3%	20	0.9%	51	0.6%	0	-	72	0.6%	**72**	0.6%
Flin Flon	0	-	0	-	2	<0.1%	1	<0.1%	0	-	3	<0.1%	**3**	<0.1%
Dauphin	3	3.5%	1	0.3%	11	0.5%	30	0.4%	1	0.9%	43	0.4%	**46**	0.4%
Thompson	1	1.2%	3	1.0%	7	0.3%	18	0.2%	1	0.9%	29	0.3%	**30**	0.3%
The Pas	0	-	0	-	10	0.4%	11	0.1%	2	1.8%	23	0.2%	**23**	0.2%
Selkirk	0	-	2	0.7%	29	1.3%	53	0.6%	1	0.9%	85	0.8%	**85**	0.8%
Other Urban	8	9.4%	35	11.4%	270	12.0%	470	5.5%	13	11.6%	788	7.1%	**796**	7.1%
All Rural	62	72.9%	145	47.2%	631	28.1%	749	8.8%	29	25.9%	1,554	13.9%	**1,616**	14.4%
Total	85	100%	307	100%	2,242	100%	8,488	100%	112	100%	11,149	100%	**11,234**	100%

Table 5-13a Collision Victims by Provincial Location and Casualty Type for Previous Five Years

Table 5-13a

Collision Victims by Provincial Location and Casualty: 2008-2012 Average

Location	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Winnipeg	17	105	1,244	3,411	627	5,387	5,405	65.4%
Brandon	1	8	127	112	13	261	262	3.2%
Portage	<1	3	30	18	4	55	55	0.7%
Flin Flon	<1	<1	7	6	<1	14	15	0.2%
Dauphin	<1	2	25	13	1	41	41	0.5%
Thompson	<1	1	16	18	3	38	38	0.5%
The Pas	<1	1	8	7	2	18	18	0.2%
Selkirk	<1	2	26	31	4	63	64	0.8%
Other Urban	11	40	225	261	25	551	562	6.8%
All Rural	63	191	888	584	77	1,740	1,803	21.8%
Total	94	354	2,596	4,461	758	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

While traffic collisions occurring in urban locations account for the majority of casualties overall, traffic collisions in rural locations account for the majority of people killed and seriously injured. In 2013, 86% of all casualties resulted from traffic collisions in urban areas. Traffic collisions in rural locations, however, account for 73% of people killed and 47% of people seriously injured. In the previous five year (2008 to 2012) annual average, 78% of all victims are from traffic collisions in urban locations while 67% of people killed and 54% of people seriously injured are from traffic collisions in rural locations.

Table 5-14 Collision Victims by Safety Equipment Use and Casualty Type

Table 5-14
Collision Victims by Safety Equipment Use and Casualty Type: 2013

Safety Equipment	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Lap belt only installed - In use	3	4.2%	1	0.4%	22	1.0%	68	0.8%	1	1.1%	92	0.8%	**95**	0.9%
Lap belt only installed - Not in use	0	-	0	-	8	0.4%	13	0.2%	0	-	21	0.2%	**21**	0.2%
Shoulder belt only installed - In use	1	1.4%	0	-	5	0.2%	34	0.4%	0	-	39	0.4%	**40**	0.4%
Shoulder belt only installed - Not in use	2	2.8%	2	0.7%	7	0.3%	19	0.2%	0	-	28	0.3%	**30**	0.3%
Lap and shoulder belt assembly - In use	21	29.6%	155	56.4%	1,501	70.1%	7,495	89.2%	64	71.9%	9,215	84.5%	**9,236**	84.1%
Combined belt installed - Not in use	17	23.9%	9	3.3%	23	1.1%	20	0.2%	1	1.1%	53	0.5%	**70**	0.6%
Only lap part of full assembly in use	0	-	1	0.4%	7	0.3%	15	0.2%	0	-	23	0.2%	**23**	0.2%
Air bag deployed - Safety belt in use	5	7.0%	55	20.0%	399	18.6%	435	5.2%	6	6.7%	895	8.2%	**900**	8.2%
Air bar deployed - Safety belt not use	0	-	2	0.7%	13	0.6%	7	<0.1%	0	-	22	0.2%	**22**	0.2%
Safety seat properly installed - In use	2	2.8%	2	0.7%	57	2.7%	159	1.9%	2	2.2%	220	2.0%	**222**	2.0%
Safety seat improperly installed - In use	2	2.8%	0	-	4	0.2%	13	0.2%	0	-	17	0.2%	**19**	0.2%
Safety seat installed - Not in use	0	-	2	0.7%	2	<0.1%	5	<0.1%	0	-	9	<0.1%	**9**	<0.1%
Safety helmet worn	3	4.2%	19	6.9%	49	2.3%	48	0.6%	1	1.1%	117	1.1%	**120**	1.1%
Safety helmet not worn	0	-	2	0.7%	1	<0.1%	0	-	0	-	3	<0.1%	**3**	<0.1%
No safety device available	1	1.4%	1	0.4%	4	0.2%	8	<0.1%	0	-	13	0.1%	**14**	0.1%
Other	2	2.8%	5	1.8%	13	0.6%	32	0.4%	1	1.1%	51	0.5%	**53**	0.5%
Not Applicable	1	1.4%	2	0.7%	7	0.3%	13	0.2%	1	1.1%	23	0.2%	**24**	0.2%
Unknown	11	15.5%	17	6.2%	19	0.9%	17	0.2%	12	13.5%	65	0.6%	**76**	0.7%
Total	71	100%	275	100%	2,141	100%	8,401	100%	89	100%	10,906	100%	**10,977**	100%

Note: Vehicle occupants (Road User Class = Driver, Passenger) plus Motorcyclists and Moped riders and their passengers

Table 5-14a Collision Victims by Safety Equipment Use and Casualty Type for Previous Five Years

Table 5-14a

Collision Victims by Safety Equipment Use and Casualty Type: 2008-2012 Average

Safety Equipment	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Lap belt only installed - In use	2	9	110	123	8	249	251	3.3%
Lap belt only installed - Not in use	<1	3	10	6	1	20	21	0.3%
Shoulder belt only installed - In use	1	4	42	36	5	87	88	1.1%
Shoulder belt only installed - Not in use	3	2	10	9	<1	22	24	0.3%
Lap and shoulder belt assembly - In use	21	171	1,746	3,548	155	5,620	5,641	73.2%
Combined belt installed - Not in use	19	24	58	23	1	106	125	1.6%
Only lap part of full assembly in use	-	1	4	8	-	12	12	0.2%
Air bag deployed - Safety belt in use	5	36	193	135	7	372	377	4.9%
Air bar deployed - Safety belt not use	4	4	8	6	<1	19	23	0.3%
Safety seat properly installed - In use	<1	2	42	59	2	104	105	1.4%
Safety seat improperly installed - In use	<1	<1	3	2	-	5	5	<0.1%
Safety seat installed - Not in use	<1	-	1	<1	-	2	2	<0.1%
Safety helmet worn	3	18	43	23	2	86	89	1.2%
Safety helmet not worn	2	3	2	2	-	6	8	0.1%
No safety device available	<1	1	3	2	-	6	7	<0.1%
Other	<1	<1	2	8	<1	10	11	0.1%
Not Applicable	<1	2	6	8	3	19	20	0.3%
Unknown	16	29	114	299	437	880	896	11.6%
Total	78	310	2,395	4,297	623	7,625	7,704	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: Vehicle occupants (Road User Class = Driver, Passenger) plus Motorcyclists and Moped riders and their passengers

In 2013, most victims in traffic collisions were using safety equipment at the time of the collision (98% of all victims where safety equipment use is known, i.e., excluding “other”, “not applicable” and “unknown”).

In 2013, 35% of the people killed in traffic collisions and 7% of the people seriously injured in traffic collisions are recorded as not wearing or using the available safety equipment at the time of the collision.

Table 5-15 Safety Equipment Effectiveness

Table 5-15

Safety Equipment Effectiveness - Ratio of Victims Killed and Injured While "Not Using Safety Equipment" to "Using Safety Equipment": 2013

Safety Equipment Use	Total Casualties	Killed	% of Total Casualties	Serious Injury	% of Total Casualties	Minor/ Minimal Injury	% of Total Casualties	Other Injury	% of Total Casualties
Equipment not in use	169	20	11.8%	18	10.7%	130	76.9%	1	0.6%
Equipment in use	10,655	37	0.3%	233	2.2%	10,311	96.8%	74	0.7%
Safety Equipment Effectiveness*			**34.08**		**4.87**		**0.79**		**0.85**

*Ratio of % not using equipment over the % using equipment.

As a large majority of vehicle occupants use safety equipment (such as seatbelts, child restraints and helmets), the number of victims in traffic collisions who use safety equipment exceeds the number of victims who did not use safety equipment. Considering this, one might erroneously conclude that using safety equipment contributes to more victims.

When considering the effectiveness of safety equipment in a traffic collision, the proportion of victims by casualty type who use safety equipment is compared to the proportion of victims by casualty type not using safety equipment. In this manner, it is possible to determine the effectiveness of the equipment by examining how much more likely the victim is to sustain injuries of a specific severity when using or not using safety equipment.

As shown in Table 5-15, in 2013, victims not using safety equipment are thirty-four times more likely to be killed and nearly five times more likely to be seriously injured in a traffic collision than those who used the equipment. Over the previous five years (2008 to 2012), people not using the available safety equipment are nearly thirty times more likely to be killed and nearly five times more likely to be seriously injured in a collision than people using the equipment.

Figure 5-8 Safety Equipment Effectiveness: Ratio of "Not Using Equipment" to "Using Equipment"

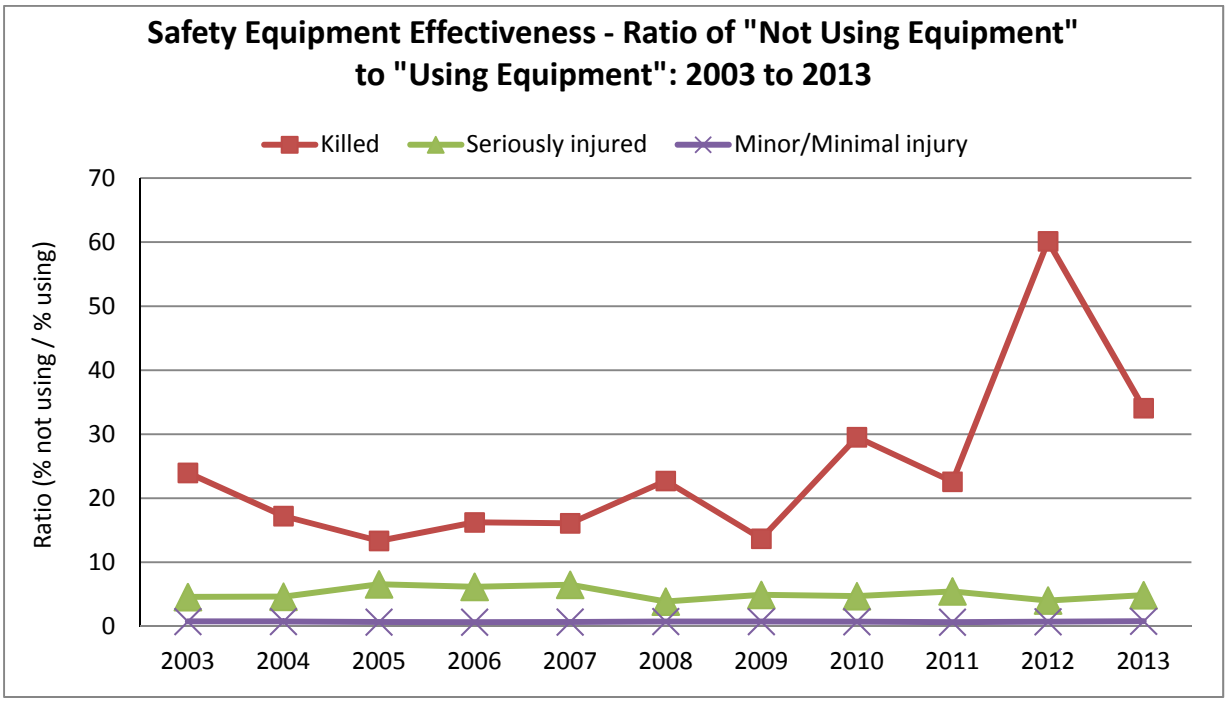


Table 5-16 Vehicle Occupant Victim Ejections in Traffic Collision

Table 5-16

Vehicle Occupant Victims by Ejection From Vehicle and Casualty Type: 2013

Ejection	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Not Ejected	53	80.3%	237	93.7%	2,053	98.3%	8,277	99.1%	86	97.7%	10,653	98.8%	**10,706**	98.7%
Fully Ejected	12	18.2%	13	5.1%	27	1.3%	62	0.7%	1	1.1%	103	1.0%	**115**	1.1%
Partially Ejected	1	1.5%	3	1.2%	8	0.4%	11	0.1%	1	1.1%	23	0.2%	**24**	0.2%
Total	66	100%	253	100%	2,088	100%	8,350	100%	88	100%	10,779	100%	**10,845**	100%

NOTE: Vehicle occupants (Drivers and Passengers; excluding Motorcyclist, Moped riders and passengers)

Table 5-16a Vehicle Occupant Victim Ejections in Traffic Collision for Previous Five Years

Table 5-16a

Vehicle Occupant Victims by Ejection From Vehicle and Casualty: 2008-2012 Average

Ejection	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Not Ejected	51	256	2,309	4,228	606	7,399	7,450	98.3%
Fully Ejected	19	28	33	28	2	91	110	1.4%
Partially Ejected	4	4	5	4	1	14	17	0.2%
Total	74	289	2,346	4,259	608	7,503	7,577	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
Note: Vehicle occupants (Drivers and Passengers; excluding Motorcyclist, Moped riders and passengers)

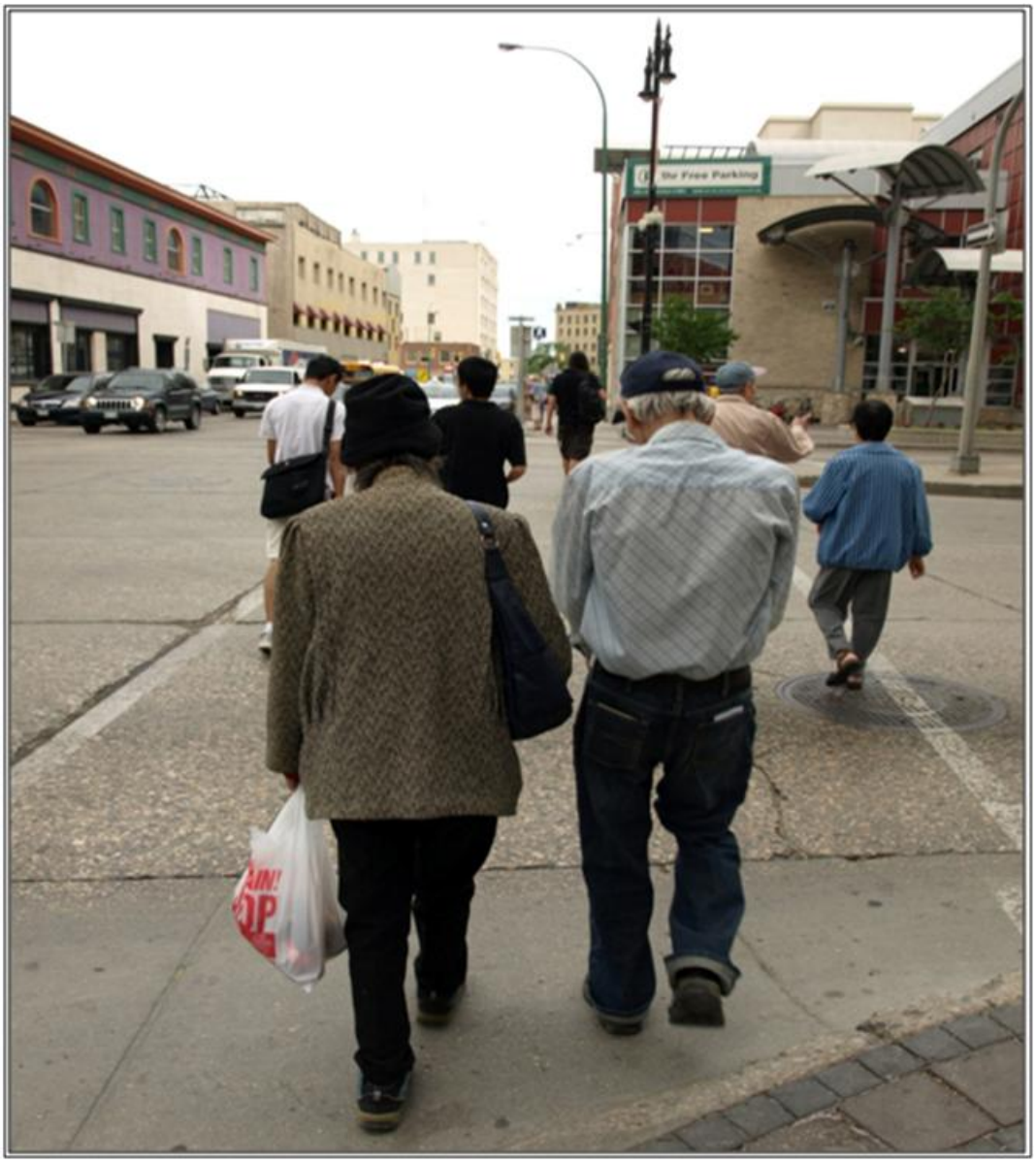
In 2013, people fully or partially ejected from a vehicle and killed during a traffic collision account for 9% of all victims ejected from the vehicle. People killed but not ejected account for 0.5% of all victims not ejected during the collision. This makes people ejected during a collision nearly nineteen times more likely to be killed than people not ejected. Similarly, people ejected and seriously injured during a collision account for nearly 12% of all victims ejected while people seriously injured but not ejected account for only 2% of victims not ejected. This makes people ejected during a collision more than five times more likely to be seriously injured than people not ejected.

It is not common for a victim to be ejected from a vehicle during a collision while using the available safety equipment. In 2013, nearly 98% of vehicle occupant casualties were using the available safety equipment (seatbelts and child safety seats) and were not ejected from the vehicle.

Even though the proportion of casualties ejected from the vehicle is very small, people ejected from a vehicle are much more likely to be killed or seriously injured when they are not using seatbelts and child safety seats. In 2013, nearly 85% of people ejected and killed were not using the available safety equipment. This compares to 8% of people ejected and killed who were known to be using the available safety equipment.

Put another way, in 2013, people ejected from a vehicle while not using the seatbelts and child safety seats are eleven times more likely to be killed than people ejected from a vehicle while using seatbelts and child safety seats. In the previous five year (2008 to 2012) annual average, people ejected from a vehicle while not using the seatbelts and child safety seats are five times more likely to be killed than people ejected from a vehicle while using seatbelts and child safety seats.

SECTION 6 – Pedestrian Victims



Introduction

This section counts the number of pedestrians killed and injured in traffic collisions and examines the severity of the injury received by the pedestrian. Month, time and day of occurrence are examined and breaks are provided for the age of the pedestrian. The specific pedestrian actions taken immediately prior to the collision are also presented. Involvement rate of pedestrians in traffic collisions per 100,000 people in the general population is also calculated.

Key Highlights

In 2013, there are 116 pedestrians killed or injured in traffic collisions. Of these:

- 10 are killed;
- 22 are seriously injured;
- 49 sustain minor injuries;
- 25 sustain minimal injuries; and
- 10 sustain injuries that are undefined in terms of severity.

The involvement rate (per 100,000 people in the general population) of pedestrians in traffic collisions in 2013 (9.0) has decreased by 35% compared to 2012 (13.8) and by 68% compared to the previous five year (2008 to 2012) annual average (28.1).

Pedestrian involvement rate in fatal and injury collisions has decreased compared to the five year (2008 to 2012) annual average. Pedestrian involvement rate in traffic collisions in 2013 where a pedestrian:

- Is killed (0.8) has decreased by 24% compared to 2012 and by 22% compared to the previous five year average; and
- Is injured (8.2) has decreased by 36% compared to 2012 (12.8) and by 70% compared to the previous five year average (27.1).

In 2013, collisions involving pedestrians most frequently occur:

- In January, May, June and August (13% of pedestrian casualties each); 6 of 10 pedestrians are killed between June and October;
- On Wednesday, Thursday and Friday (19, 23% and 20% of pedestrian casualties, respectively); and,
- Between noon and 6 p.m. (12:00-14:59 – 23% of pedestrian casualties; 15:00 to 17:59 – 26% of pedestrian casualties); 4 of 10 pedestrians are killed between noon and 6 p.m., 3 are killed from midnight to 6 a.m., and 3 are killed between 6 p.m. and midnight.

Manitobans aged 15 to 19 have the highest involvement rate (per 100,000 people) in traffic collisions at 14.8 in 2013 (30.4 in the previous five years), followed by those aged 25 to 34 at 13.8 (16.9 in the previous five years).

Where the actions of the pedestrian immediately prior to the collision are known, most pedestrian casualties in 2013 occur when the pedestrian is:

- At an intersection, crossing with the right of way (43% of pedestrian casualties);
- Walking on roadway (9% of pedestrian casualties); and
- Running into roadway (9% of pedestrian casualties).

For the 10 pedestrians killed in traffic collisions in 2013, 4 are killed at an intersection while crossing with the right of way, 1 while walking on the roadway and 1 while lying on the roadway. No pedestrian action was recorded for 4 of the 10 pedestrians killed.

Major Elements Examined

Counts of collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of pedestrian victims in traffic collisions is not equal to the number of collisions that occurred involving pedestrians as each collision can result in multiple victims. It is also possible that a collision could involve a pedestrian who is not killed or injured.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. The terms 'victims' and 'casualties' are used interchangeably in this report. The terms 'fatality' and 'killed' are used interchangeably in this report.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding pedestrian collisions of differing injury severity.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percent. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Terms and Definitions

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

"Killed"

- The casualty type "killed" indicates the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Pedestrian Involvement Rate"

- A calculation of the number of pedestrians involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: http://www.gov.mb.ca/health/annstats/index.html

"Pedestrian Action"

- Refers to the actions taken by a pedestrian immediately prior to a collision (including: crossing at an intersection with or without the right-of-way, crossing between intersections, running into the roadway, walking on the roadway, lying on the roadway, playing on the roadway, etc.).

Table 6-1 Historical Summary of Pedestrians Killed and Injured in Traffic Collisions

Table 6-1
Historical Summary of Pedestrians Killed and Injured in Traffic Collisions: 2003 to 2013

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2003	13	-	51	-	207	-	192	-	59	-	509	-	522	-
2004	15	15.4%	57	11.8%	201	-2.9%	143	-25.5%	55	-6.8%	456	-10.4%	471	-9.8%
2005	11	-26.7%	36	-36.8%	173	-13.9%	152	6.3%	68	23.6%	429	-5.9%	440	-6.6%
2006	14	27.3%	71	97.2%	207	19.7%	141	-7.2%	83	22.1%	502	17.0%	516	17.3%
2007	16	14.3%	52	-26.8%	161	-22.2%	107	-24.1%	109	31.3%	429	-14.5%	445	-13.8%
2008	15	-6.3%	49	-5.8%	153	-5.0%	133	24.3%	88	-19.3%	423	-1.4%	438	-1.6%
2009	9	-40.0%	37	-24.5%	137	-10.5%	90	-32.3%	95	8.0%	359	-15.1%	368	-16.0%
2010	14	55.6%	32	-13.5%	126	-8.0%	111	23.3%	116	22.1%	385	7.2%	399	8.4%
2011	10	-28.6%	24	-25.0%	130	3.2%	62	-44.1%	114	-1.7%	330	-14.3%	340	-14.8%
2012	13	30.0%	21	-12.5%	90	-30.8%	40	-35.5%	12	-89.5%	163	-50.6%	176	-48.2%
2013	**10**	**-23.1%**	**22**	**4.8%**	**49**	**-45.6%**	**25**	**-37.5%**	**10**	**-16.7%**	**106**	**-35.0%**	**116**	**-34.1%**
2008-2012 Average*	12	2.1%	33	-16.3%	127	-10.2%	87	-12.9%	85	-16.1%	332	-14.8%	344	-14.4%

*The "% change to previous year" for "2008-2012 Average" is an average rate of change for the time period 2008-2012.

In 2013, there are 116 pedestrians killed or injured in traffic collisions. Of these:

- 10 are killed;
- 22 are seriously injured;
- 49 sustain minor injuries;
- 25 sustain minimal injuries; and
- 10 sustain injuries that are undefined in terms of severity.

The total number of pedestrians killed and injured in traffic collisions in 2013 has decreased by 34% compared to 2012 and by 66% compared to the previous five year (2008 to 2012) annual average. In 2013, the number of pedestrians:

- Killed has decreased by a count of three compared to 2012 and by 18% compared to the previous five years;
- Sustaining serious injuries has increased by a count of one compared to 2012 and decreased by nearly 33% compared to the previous five years;
- Sustaining minor injuries has decreased by 46% compared to 2012 and by nearly 62% compared to the previous five years;
- Sustaining minimal injuries has decreased by nearly 38% compared to 2012 and by 71% compared to the previous five years; and,
- Sustaining an unspecified injury has decreased by 17% compared to 2012 and by 88% compared to the previous five years.

The number of pedestrians killed in traffic collisions over the past ten years has fluctuated, ranging from a high of 16 in 2007 to a low of 9 in 2009. The number of pedestrians killed in 2013 is down compared to 2012 (10 from 13) and the previous five year (2008 to 2012) annual average (10 from 12).

Recognizing that counts of pedestrians involved in collisions could be impacted either positively or negatively by changing population statistics, involvement rates per 100,000 people in the general population in Manitoba is examined (see Table 6-2) to provide a standardized rate comparison. This accounts for changing population size instead of simply a raw count of the number of pedestrians involved overall.

Table 6-2 Historical Summary of Pedestrian Involvement Rate (per 100,000 people) in Traffic Collisions

Table 6-2

Historical Summary of Pedestrian Involvement Rates (per 100,000 people) in Traffic Collisions: 2003 to 2013

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2003	1.1	-	4.4	-	17.8	-	16.6	-	5.1	-	43.9	-	45.0	-
2004	1.3	14.4%	4.9	10.8%	17.2	-3.7%	12.2	-26.2%	4.7	-7.6%	39.0	-11.2%	40.3	-10.5%
2005	0.9	-26.9%	3.1	-37.1%	14.7	-14.2%	12.9	5.9%	5.8	23.2%	36.5	-6.3%	37.5	-6.9%
2006	1.2	26.8%	6.0	96.4%	17.6	19.2%	12.0	-7.6%	7.0	21.6%	42.6	16.6%	43.8	16.8%
2007	1.3	13.5%	4.4	-27.3%	13.6	-22.7%	9.0	-24.6%	9.2	30.4%	36.2	-15.1%	37.5	-14.3%
2008	1.3	-7.2%	4.1	-6.8%	12.8	-6.0%	11.1	23.0%	7.3	-20.1%	35.3	-2.4%	36.5	-2.6%
2009	0.7	-40.8%	3.0	-25.4%	11.3	-11.6%	7.4	-33.2%	7.8	6.6%	29.6	-16.2%	30.3	-17.0%
2010	1.1	53.5%	2.6	-14.6%	10.2	-9.2%	9.0	21.7%	9.4	20.5%	31.3	5.9%	32.4	7.0%
2011	0.8	-29.7%	1.9	-26.2%	10.4	1.5%	5.0	-45.0%	9.1	-3.3%	26.4	-15.7%	27.2	-16.2%
2012	1.0	27.9%	1.7	-13.9%	7.1	-31.9%	3.1	-36.5%	0.9	-89.6%	12.8	-51.4%	13.8	-49.1%
2013	**0.8**	**-24.1%**	**1.7**	**3.3%**	**3.8**	**-46.3%**	**1.9**	**-38.4%**	**0.8**	**-17.8%**	**8.2**	**-35.9%**	**9.0**	**-35.0%**
2008-2012 Average*	1.0	0.7%	2.7	-17.4%	10.4	-11.4%	7.1	-14.0%	6.9	-17.2%	27.1	-16.0%	28.1	-15.6%

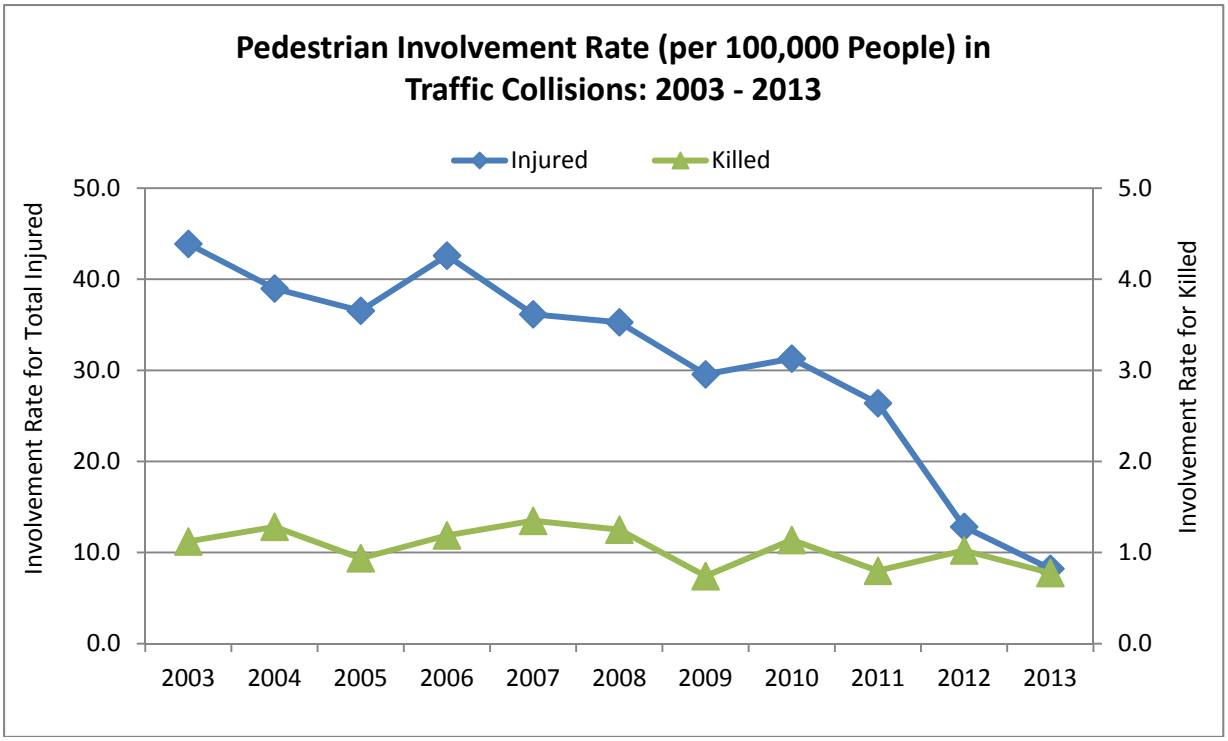
*The "% change to previous year" for "2008-2012 Average" is an average rate of change for the time period 2008-2012.

The involvement rate (per 100,000 people in the general population) of pedestrians in traffic collisions in 2013 (9.0) has decreased by 35% compared to 2012 (13.8) and by 68% compared to the previous five year (2008 to 2012) annual average (28.1).

Pedestrian involvement rate in fatal and injury collisions has decreased compared to the five year (2008 to 2012) annual average. Pedestrian involvement rate in traffic collisions in 2013 where a pedestrian:

- Is killed (0.8) has decreased by 24% compared to 2012 and by 22% compared to the previous five year average;
- Sustains serious injuries (1.7) is consistent with 2012 and has decreased by 36% compared to the previous five years;
- Sustains minor injuries (3.8) has decreased by 46% compared to 2012 and by 63% compared to the previous five years;
- Sustains minimal injuries (1.9) has decreased by 38% compared to 2012 and by 73% compared to the previous five years; and,
- Sustains an unspecified injury (0.8) has decreased by 18% compared to 2012 and by 89% compared to the previous five years.

Figure 6-1 Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions



Over the last eleven years (2003 to 2013), pedestrian injuries resulting from traffic collisions have generally declined. With the exception of 2006 and 2010, each year in the past eleven has seen a decrease in the pedestrian injury involvement rate.

Over this same time frame, the involvement rate for pedestrians killed in traffic collisions has fluctuated somewhat, but has consistently been between 0.7 and 1.3. The involvement rate in 2013 is in line with the pedestrian involvement rate for deaths recorded in the past eleven years, although it is one of the lower rates in that time period.

Table 6-3 Pedestrians Killed and Injured by Month of Occurrence and Casualty Type

Table 6-3
Total Pedestrians Killed and Injured by Month of Occurrence and Casualty Type: 2013

Month of Occurrence	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
January	2	20.0%	3	13.6%	5	10.2%	3	12.0%	2	20.0%	13	12.3%	**15**	12.9%
February	1	10.0%	2	9.1%	2	4.1%	0	-	0	-	4	3.8%	**5**	4.3%
March	0	-	1	4.5%	3	6.1%	0	-	1	10.0%	5	4.7%	**5**	4.3%
April	0	-	1	4.5%	5	10.2%	4	16.0%	0	-	10	9.4%	**10**	8.6%
May	0	-	3	13.6%	7	14.3%	5	20.0%	0	-	15	14.2%	**15**	12.9%
June	1	10.0%	1	4.5%	6	12.2%	4	16.0%	3	30.0%	14	13.2%	**15**	12.9%
July	1	10.0%	0	-	2	4.1%	0	-	1	10.0%	3	2.8%	**4**	3.4%
August	1	10.0%	5	22.7%	5	10.2%	4	16.0%	0	-	14	13.2%	**15**	12.9%
September	2	20.0%	2	9.1%	7	14.3%	1	4.0%	1	10.0%	11	10.4%	**13**	11.2%
October	1	10.0%	2	9.1%	1	2.0%	2	8.0%	1	10.0%	6	5.7%	**7**	6.0%
November	0	-	2	9.1%	2	4.1%	1	4.0%	1	10.0%	6	5.7%	**6**	5.2%
December	1	10.0%	0	-	4	8.2%	1	4.0%	0	-	5	4.7%	**6**	5.2%
Total	10	100%	22	100%	49	100%	25	100%	10	100%	106	100%	**116**	100%

Table 6-3a Pedestrians Killed and Injured by Month of Occurrence and Casualty Type for Previous Five Years

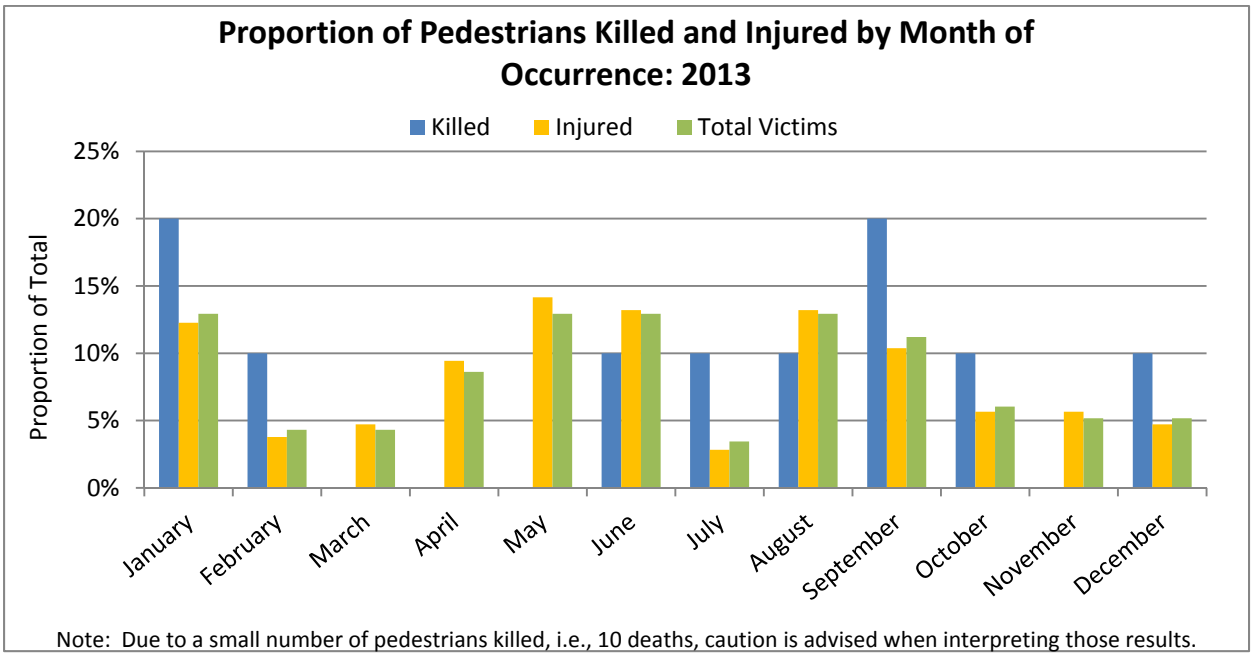
Table 6-3a
Pedestrians Killed and Injured by Month of Occurrence and Casualty Type: 2008-2012 Average

Month of Occurrence	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
January	-	4	14	6	9	32	32	9.2%
February	1	4	9	7	8	28	29	8.4%
March	<1	3	13	10	11	38	38	11.0%
April	2	2	9	7	6	25	27	7.8%
May	<1	2	9	7	6	24	24	7.0%
June	1	2	8	5	8	24	25	7.4%
July	1	2	10	6	5	23	24	7.0%
August	2	2	7	7	7	24	25	7.3%
September	1	2	12	8	7	28	30	8.6%
October	<1	4	12	9	6	31	32	9.2%
November	1	3	15	9	5	31	32	9.2%
December	1	2	10	6	8	26	27	7.8%
Total	12	33	127	87	85	332	344	100%

Note: Counts of pedestrians in the 2008-2012 average may not add to the total due to rounding.

In 2013, 6 of 10 pedestrians killed in collisions on Manitoba roadways are killed between June and October. Pedestrians are most likely to be injured in January (12%), May (14%), June (13%) and August (13%). During the previous five year (2008 to 2012) annual average, January, March, October and November stand out as the months with the highest involvement of pedestrian casualties in collisions.

Figure 6-2 Proportion of Pedestrians Killed and Injured by Month of Occurrence



Note: Due to a small number of pedestrians killed, i.e., 10 deaths, caution is advised when interpreting those results.

Table 6-4 Total Pedestrians Killed and Injured by Day of Occurrence and Casualty Type

Table 6-4
Total Pedestrians Killed and Injured by Day of Occurrence and Casualty Type: 2013

Day of the Week	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Sunday	1	10.0%	3	13.6%	1	2.0%	1	4.0%	2	20.0%	7	6.6%	**8**	6.9%
Monday	0	-	4	18.2%	4	8.2%	2	8.0%	0	-	10	9.4%	**10**	8.6%
Tuesday	1	10.0%	1	4.5%	11	22.4%	2	8.0%	0	-	14	13.2%	**15**	12.9%
Wednesday	2	20.0%	3	13.6%	7	14.3%	8	32.0%	2	20.0%	20	18.9%	**22**	19.0%
Thursday	3	30.0%	6	27.3%	13	26.5%	4	16.0%	1	10.0%	24	22.6%	**27**	23.3%
Friday	2	20.0%	4	18.2%	8	16.3%	5	20.0%	4	40.0%	21	19.8%	**23**	19.8%
Saturday	1	10.0%	1	4.5%	5	10.2%	3	12.0%	1	10.0%	10	9.4%	**11**	9.5%
Total	10	100%	22	100%	49	100%	25	100%	10	100%	106	100%	**116**	100%

Table 6-4a Pedestrians Killed and Injured by Day of Occurrence and Casualty Type for Previous Five Years

Table 6-4a
Pedestrians Killed and Injured by Day of Occurrence and Casualty Type: 2008-2012 Average

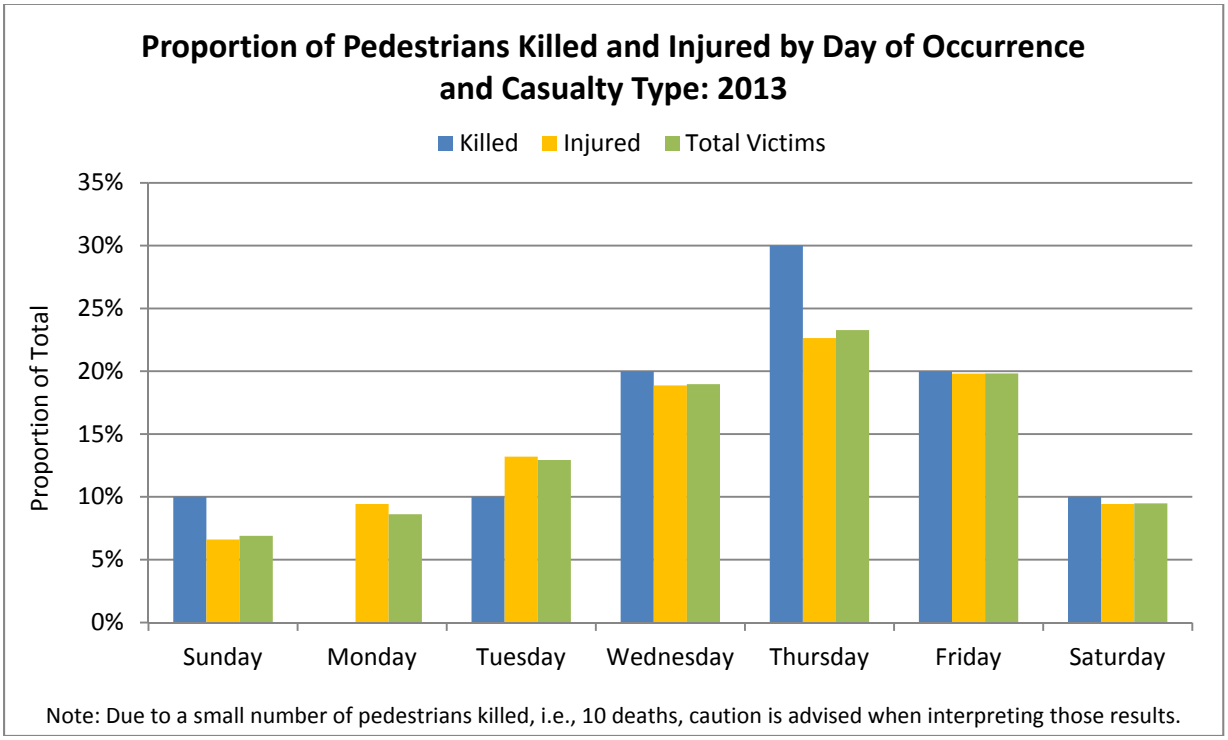
Day of the Week	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Sunday	2	4	9	6	6	26	28	8.0%
Monday	2	4	18	12	9	43	44	12.9%
Tuesday	1	4	23	13	15	56	57	16.6%
Wednesday	2	5	20	14	15	54	57	16.4%
Thursday	1	6	23	17	16	62	64	18.5%
Friday	2	5	21	17	16	59	61	17.8%
Saturday	2	5	12	8	7	32	34	9.8%
Total	12	33	127	87	85	332	344	100%

Note: Counts of pedestrians in the 2008-2012 average may not add to the total due to rounding.

In 2013, more pedestrians are involved in traffic collisions on Wednesday (19% of all pedestrian casualties), Thursday (23%), and Friday (20%) than on other days of the week. This is very similar to the distribution of pedestrian casualties by day of the week in the previous five years.

In 2013, 4 of 10 pedestrians are killed in traffic collisions on weekends (including Friday, Saturday and Sunday). In the previous five year (2008 to 2012) annual average, weekend collisions account for half of pedestrians killed (51%).

Figure 6-3 Proportion of Pedestrians Killed and Injured by Day of Occurrence



Note: Due to a small number of pedestrians killed, i.e., 10 deaths, caution is advised when interpreting those results.

Table 6-5 Total Pedestrians Killed and Injured by Time of Occurrence and Casualty Type

Table 6-5
Total Pedestrians Killed and Injured by Time of Occurrence and Casualty Type: 2013

Time of the Day	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims*
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
00:00 - 02:59	0	-	1	4.8%	1	2.0%	1	4.2%	1	11.1%	4	3.9%	**4**	3.5%
03:00 - 05:59	3	30.0%	0	-	0	-	0	-	0	-	0	-	**3**	2.7%
06:00 - 08:59	0	-	3	14.3%	4	8.2%	5	20.8%	1	11.1%	13	12.6%	**13**	11.5%
09:00 - 11:59	0	-	2	9.5%	5	10.2%	3	12.5%	1	11.1%	11	10.7%	**11**	9.7%
12:00 - 14:59	2	20.0%	5	23.8%	12	24.5%	6	25.0%	1	11.1%	24	23.3%	**26**	23.0%
15:00 - 17:59	2	20.0%	5	23.8%	13	26.5%	6	25.0%	3	33.3%	27	26.2%	**29**	25.7%
18:00 - 20:59	0	-	3	14.3%	7	14.3%	1	4.2%	1	11.1%	12	11.7%	**12**	10.6%
21:00 - 23:59	3	30.0%	2	9.5%	7	14.3%	2	8.3%	1	11.1%	12	11.7%	**15**	13.3%
Not Stated	0	-	1	-	0	-	1	-	1	-	3	-	**3**	-
Total	10	100%	22	100%	49	100%	25	100%	10	100%	106	100%	**116**	100%

*Percentage of the total does not include the "not stated" category.

Table 6-5a Pedestrian Victims by Time of Occurrence and Casualty Type for the Previous Five Years

Table 6-5a
Pedestrians Killed and Injured by Time of Occurrence and Casualty: 2008-2012 Average

Time of the Day	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
00:00 - 02:59	1	2	3	2	2	9	11	3.4%
03:00 - 05:59	1	1	3	1	1	7	8	2.5%
06:00 - 08:59	<1	3	17	10	12	41	41	13.2%
09:00 - 11:59	<1	2	12	14	8	36	37	11.6%
12:00 - 14:59	2	6	24	17	15	61	63	19.9%
15:00 - 17:59	2	8	30	20	23	81	83	26.3%
18:00 - 20:59	2	4	19	10	10	42	44	13.9%
21:00 - 23:59	2	4	9	7	6	27	29	9.1%
Not Stated	<1	3	10	7	8	29	30	-
Total	12	33	127	87	85	332	344	100%

Note: Counts of pedestrians in the 2008-2012 average may not add to the total due to rounding.
*Percentage of the total does not include the "not stated" category.

In 2013, 23% of all pedestrian victims are involved in traffic collisions between noon and 3 p.m. (12:00-14:59) while another 26% are involved in traffic collisions between 3 p.m. and 6 p.m. (15:00 to 17:59). This is very similar to the previous five year (2008 to 2012) annual average (12:00-14:59 – 20% of all pedestrian victims; 15:00 to 17:59 – 26%).

In 2013, 7 of 10 pedestrians are killed between noon and midnight. Another 3 are killed between midnight and 6 a.m. This is fairly consistent with the previous five year (2008 to 2012) annual average, where 7 of 12 pedestrians killed are involved in collisions between noon and midnight.

Figure 6-4 Proportion of Pedestrians Killed and Injured by Time of Occurrence

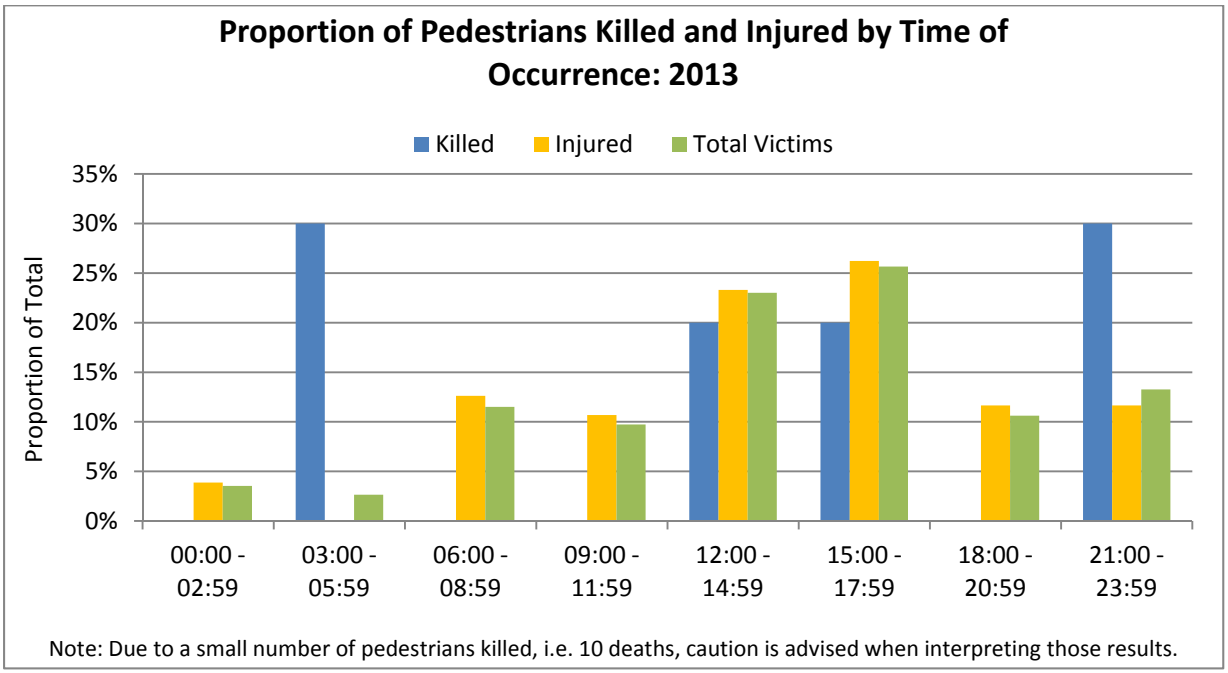


Table 6-6 Total Pedestrians Killed and Injured by Age Group and Casualty Type

Table 6-6
Total Pedestrians Killed and Injured by Age Group and Casualty Type: 2013

Age Group	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims*
	Killed	% of Total Killed*	Serious Injury	% of Total Serious Injury*	Minor Injury	% of Total Minor Injury*	Minimal Injury	% of Total Minimal Injury*	Other Injury	% of Total Other Injury*	Total Injured	% of Total Injured*		
0-4	0	-	1	4.8%	3	6.4%	0	-	0	-	4	4.0%	**4**	3.6%
5-9	0	-	2	9.5%	2	4.3%	1	4.2%	0	-	5	5.0%	**5**	4.5%
10-14	1	10.0%	1	4.8%	4	8.5%	3	12.5%	0	-	8	7.9%	**9**	8.1%
15-19	3	30.0%	2	9.5%	5	10.6%	2	8.3%	1	11.1%	10	9.9%	**13**	11.7%
20-24	0	-	3	14.3%	6	12.8%	2	8.3%	1	11.1%	12	11.9%	**12**	10.8%
25-34	0	-	5	23.8%	12	25.5%	6	25.0%	1	11.1%	24	23.8%	**24**	21.6%
35-44	1	10.0%	0	-	3	6.4%	6	25.0%	0	-	9	8.9%	**10**	9.0%
45-54	2	20.0%	2	9.5%	5	10.6%	1	4.2%	2	22.2%	10	9.9%	**12**	10.8%
55-64	1	10.0%	1	4.8%	3	6.4%	2	8.3%	3	33.3%	9	8.9%	**10**	9.0%
65+	2	20.0%	4	19.0%	4	8.5%	1	4.2%	1	11.1%	10	9.9%	**12**	10.8%
Not Stated	0	-	1	-	2	-	1	-	1	-	5	-	**5**	-
Total	10	100%	22	100%	49	100%	25	100%	10	100%	106	100%	**116**	100%

*Percentage of the total does not include the "Not Stated" category.
Note: The reader is cautioned that age is missing ("Not Stated") in several collisions in the minor, minimal, and other injury categories - interpret with caution.

Table 6-6a Pedestrians Killed and Injured by Age and Casualty Type for Previous Five Years

Table 6-6a
Pedestrians Killed and Injured by Age Group and Casualty Type: 2008-2012 Average

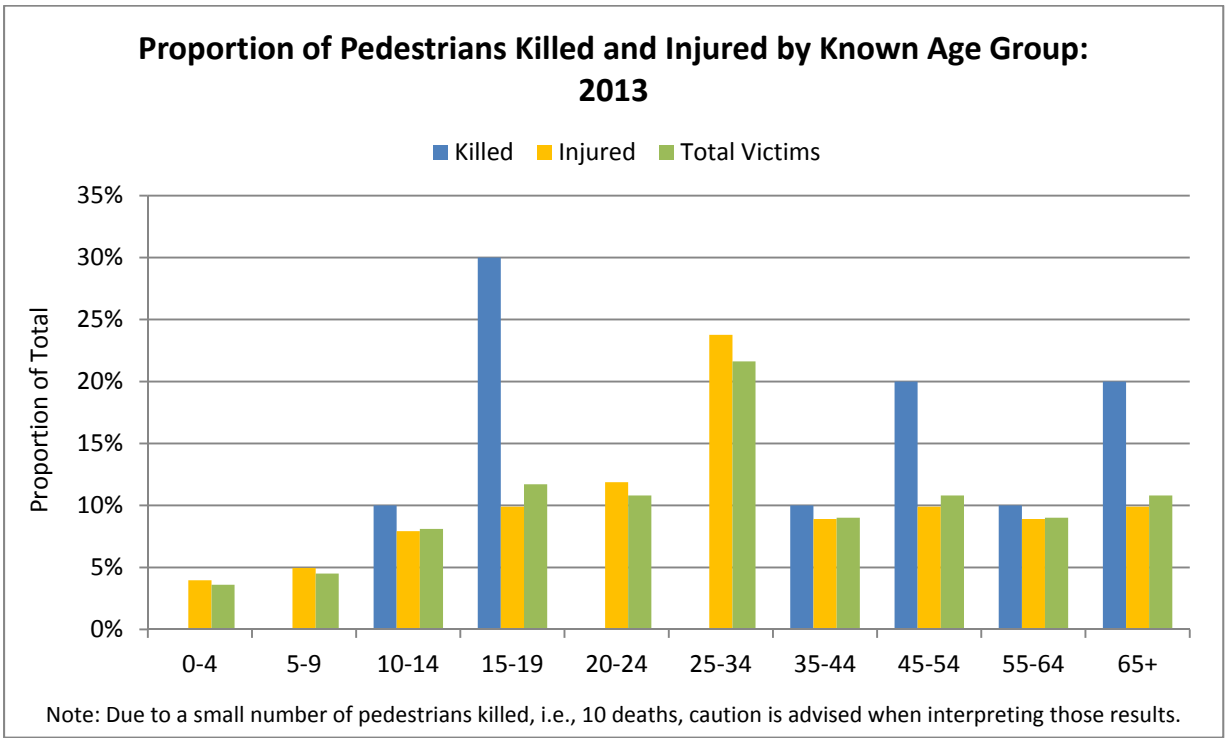
Age Group	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
0-4	-	<1	4	<1	<1	5	5	2.5%
5-9	<1	1	6	<1	<1	9	9	4.5%
10-14	<1	2	10	2	1	15	16	7.8%
15-19	1	4	15	5	2	26	27	13.2%
20-24	2	5	12	4	1	22	24	11.6%
25-34	<1	2	16	6	2	26	27	13.4%
35-44	<1	4	12	6	3	24	25	12.4%
45-54	2	2	15	6	1	25	26	12.9%
55-64	1	3	10	4	2	18	20	9.6%
65+	4	5	10	4	2	21	25	12.2%
Not Stated	<1	2	17	51	70	140	141	-
Total	12	33	127	87	85	332	344	100%

Note: Counts of pedestrians in the 2008-2012 average may not add to the total due to rounding.
*Percentage of the total does not include the "Not Stated" category.
Note: The reader is cautioned that age is missing ("Not Stated") in several collisions in the minor, minimal, and other injury categories - interpret with caution.

In 2013, 28% of pedestrians killed and injured are under the age of 20 (8% under age 10; 20% age 10 to 19) while 32% are between the ages of 20 and 34 and 20% are between the ages of 35 and 54. Adults aged 55 and older account for 20% of pedestrian victims. This distribution of pedestrian casualties by age is somewhat different to what it is in the previous five years. In the five year (2008 to 2012) annual average, 28% of pedestrian victims are under the age of 20, 25% were age 20 to 34, 25% were age 35 to 54 and 22% were age 55 and older.

Young people aged 15 to 19 represent the largest proportion of pedestrians killed in 2013 (3 of 10 killed, 30%), followed by adults aged 45 to 54 and those aged 65 and older (20% in each group). This is different from the previous five year (2008 to 2012) annual average, where 8% of pedestrians killed are aged 15 to 19, 13% are aged 45 to 54 and 31% are aged 65 and older.

Figure 6-5 Proportion of Pedestrians Killed and Injured by Age Group



Note: The minor, minimal, and other injury categories have several casualties with missing age information ("Not stated" on the Traffic Accident Report) affecting the proportion by age group for the "Injured" and "Total Victims" categories in Figure 6-5. Please interpret with caution.

Table 6-7 Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions by Age Group

Table 6-7
Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions by Age Group: 2013, 2008-2012 Average

Year	2013 Casualty Type						**2013 Total Victims**	2008-2012 Average Involvement Rate		
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured		Killed	Injured	Total Victims
0-4	-	1.2	3.6	-	-	4.8	**4.8**	-	6.4	6.4
5-9	-	2.5	2.5	1.2	-	6.2	**6.2**	0.3	11.8	12.1
10-14	1.2	1.2	5.0	3.7	-	10.0	**11.2**	0.5	19.0	19.5
15-19	3.4	2.3	5.7	2.3	1.1	11.4	**14.8**	1.1	29.3	30.4
20-24	-	3.2	6.3	2.1	1.1	12.6	**12.6**	1.8	25.4	27.3
25-34	-	2.9	6.9	3.4	0.6	13.8	**13.8**	0.5	16.4	16.9
35-44	0.6	-	1.8	3.6	-	5.4	**6.0**	0.5	15.0	15.5
45-54	1.1	1.1	2.7	0.5	1.1	5.5	**6.6**	0.9	13.4	14.3
55-64	0.6	0.6	1.9	1.3	1.9	5.7	**6.4**	0.8	12.7	13.5
65+	1.1	2.2	2.2	0.5	0.5	5.4	**6.5**	2.2	12.3	14.5
Total	0.8	1.7	3.8	1.9	0.8	8.2	**9.0**	1.0	26.9	27.9

Younger pedestrians tend to have higher rates of involvement in traffic collisions. Manitobans aged 15 to 19 have the highest pedestrian involvement rate (per 100,000 people) in traffic collisions at 14.8 in 2013 (30.4 in the previous five years), followed by those aged 25 to 34 at 13.8 (16.9 in the previous five years). This is nearly two-and-a-half times the involvement rate of Manitobans aged 55 and older in 2013.

Pedestrian involvement rates in traffic collisions have decreased significantly in 2013 compared to the previous five year (2008 to 2012) annual average, down 68% for all pedestrian casualties. The involvement rates in 2013 for Manitobans:

- Under age 10 is 5.5 – down 40% from the previous five years (9.2);
- Aged 10 to 14 is 11.2 – down 42% from the previous five years (19.5);
- Aged 15 to 19 is 14.8 – down 51% from the previous five years (30.4);
- Aged 20 to 24 is 12.6 – down 54% from the previous five years (27.3);
- Aged 25 to 34 is 13.8 – down 18% from the previous five years (16.9);
- Aged 35 to 44 is 6.0 – down 61% from the previous five years (15.5);
- Aged 45 to 54 is 6.6 – down 54% from the previous five years (14.3);
- Aged 55 to 64 is 6.4 – down 53% from the previous five years (13.5); and,
- Aged 65 and older is 6.5 – down 55% from the previous five years (14.5).

Decreases in pedestrian involvement rates for 2013 compared to the previous five years are a direct result of fewer pedestrian victims being captured in the Traffic Collision Statistics Database under the new reporting structure implemented in 2011.

Table 6-8 Pedestrian Action and Casualty Type

Table 6-8
Pedestrian Action and Casualty Type: 2013

Pedestrian Action	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims*
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
At intersection, with right of way	4	66.7%	1	8.3%	17	47.2%	9	56.3%	2	33.3%	29	41.4%	**33**	43.4%
At intersection, without right of way	0	-	0	-	0	-	0	-	1	16.7%	1	1.4%	**1**	1.3%
At intersection, no traffic control	0	-	1	8.3%	2	5.6%	1	6.3%	0	-	4	5.7%	**4**	5.3%
Between intersections	0	-	2	16.7%	1	2.8%	1	6.3%	0	-	4	5.7%	**4**	5.3%
Walking along roadway against traffic	0	-	0	-	1	2.8%	0	-	0	-	1	1.4%	**1**	1.3%
Walking along roadway with traffic	0	-	1	8.3%	1	2.8%	1	6.3%	1	16.7%	4	5.7%	**4**	5.3%
On sidewalk/median/safety zone	0	-	1	8.3%	2	5.6%	1	6.3%	0	-	4	5.7%	**4**	5.3%
Walking on roadway (travelled portion)	1	16.7%	2	16.7%	4	11.1%	0	-	0	-	6	8.6%	**7**	9.2%
From behind vehicle/object on roadside	0	-	0	-	3	8.3%	1	6.3%	0	-	4	5.7%	**4**	5.3%
Running into roadway	0	-	3	25.0%	2	5.6%	1	6.3%	1	16.7%	7	10.0%	**7**	9.2%
Getting on/off vehicle	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Pushing/working on vehicle	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Playing on roadway	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Working on roadway	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Lying on roadway	1	16.7%	0	-	0	-	0	-	0	-	0	-	**1**	1.3%
Other	0	-	1	8.3%	3	8.3%	1	6.3%	1	16.7%	6	8.6%	**6**	7.9%
Unknown	4	-	10	-	13	-	9	-	4	-	36	-	**40**	-
Total*	10	100%	22	100%	49	100%	25	100%	10	100%	106	100%	**116**	100%

Table 6-8a Pedestrian Action and Casualty Type for the Previous Five Years

Table 6-8a
Pedestrian Action and Casualty Type: 2008-2012 Average

Pedestrian Action	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
At intersection, with right of way	1	5	38	22	18	83	84	38.7%
At intersection, without right of way	<1	3	9	6	5	23	23	10.6%
At intersection, no traffic control	-	1	2	2	2	7	7	3.3%
Between intersections	<1	3	13	7	6	28	29	13.3%
Walking along roadway against traffic	<1	<1	2	<1	<1	4	4	1.8%
Walking along roadway with traffic	<1	1	3	1	1	6	7	3.1%
On sidewalk/median/safety zone	<1	-	3	3	1	7	7	3.2%
Walking on roadway (travelled portion)	1	2	3	3	2	9	10	4.7%
From behind vehicle/object on roadside	-	<1	3	1	2	6	6	2.9%
Running into roadway	<1	4	10	6	7	26	27	12.4%
Getting on/off vehicle	<1	<1	<1	<1	<1	2	2	1.0%
Pushing/working on vehicle	-	<1	<1	-	-	1	1	0.3%
Playing on roadway	-	-	<1	-	-	1	1	0.4%
Working on roadway	<1	<1	<1	1	<1	2	2	1.1%
Lying on roadway	2	1	<1	-	<1	2	3	1.5%
Other	-	<1	2	1	-	4	4	1.7%
Unknown	5	10	38	33	41	122	127	-
Total	12	33	127	87	85	332	344	100%

Note: Counts of pedestrians in the 2008-2012 average may not add to the total due to rounding.
*Percentage of the total has been rebased to exclude the "unknown" category.

Where the actions of the pedestrian immediately prior to the collision are known, most pedestrian casualties in 2013 occur when the pedestrian is:

- At an intersection, crossing with the right of way (43% of pedestrian casualties);
- Walking on roadway (9% of pedestrian casualties); and
- Running into roadway (9% of pedestrian casualties).

Pedestrian actions immediately prior to the traffic collision in 2013 are somewhat different than the actions recorded in the previous five year (2008 to 2012) annual average. These differences can at least partially be attributed to the changes in reporting that took effect in 2011 (discussed in detail in the 2012 Traffic Collision Statistics Report). Comparing pedestrian victims in 2013 to the previous five years, the proportion of collisions where the pedestrian:

- Was at an intersection without the right of way decreased by nearly 88%;
- Was between intersections decreased by nearly 61%;
- Was walking along roadway against traffic decreased by 28%; and,
- Ran onto the road decreased by 26%.

For the 10 pedestrians killed in traffic collisions in 2013, 4 are killed at an intersection while crossing with the right of way, 1 while walking on the roadway and 1 while lying on the roadway. No pedestrian action was recorded for 4 of the 10 pedestrians killed.

SECTION 7 – Vehicle Involvement

Introduction

This section counts the number of vehicles involved in traffic collisions. Vehicle involvement in a collision is calculated for each vehicle type (such as passenger vehicles, vans, pick-up trucks, types of emergency vehicles). Vehicles involved in collisions that were, or were not, transporting hazardous loads and the nature of these loads is also indicated.

Key Highlights

In 2013, there are 64,316 vehicles involved in traffic collisions. Of these:

- 111 are involved in fatal collisions;
- 15,663 are involved in injury collisions; and,
- 48,542 are involved in PDO collisions.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) has increased in 2013 compared to 2012 and to the previous five year (2008 to 2012) annual average. The vehicle involvement rate in collisions in 2013 for:

- Total collisions is 754.8; increased by 6% from 2012, and by 23% from the previous five years;
- Fatal collisions is 1.3; decreased by 13% from 2012, and by 19% from the previous five years;
- Injury collisions is 183.85; increased by 4% from 2012, and by nearly 36% from the previous five years; and,
- PDO collisions is 569.7; increased by 7% from 2012, and by 20% from the previous five years.

Light duty vehicles, including passenger vehicles, minivans, and light trucks, represent 97% of the vehicles involved in all traffic collisions in 2013, the same as 2012 and a slight increase compared to the previous five year (2008 to 2012) annual average (92%). Commercial vehicles represent 3%, and motorcycles, scooters, and mopeds 0.3%, of the vehicles involved; both decreased from the previous five years.

Major Elements Examined

Counts of vehicles involved in collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of vehicles involved in those collisions. All collisions reported involve at least one vehicle, but may involve more than one as well.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and vehicle involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Vehicles"

- The number of vehicles involved in collisions. It excludes pedestrians, but includes automobiles, trucks, vans, buses, mobility vehicles, motorcycles, scooters, mopeds, bicycles, off-road vehicles, farm and construction equipment, and trains.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Vehicle Involvement Rate"

- A calculation of the number of vehicles involved in traffic collisions for every 10,000 vehicles registered in Manitoba. The total number of vehicles registered is based on a point-in-time observation of the number of vehicles registered in specific vehicle classes. More detail regarding the methodology used to count registered vehicles can be found in "*Section 3 Vehicle Registrations*" of this report.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4,500 kg, and pick-up under 4,500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4,500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"PSV Vehicles"

- Also known as 'public service vehicles', a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Other school vehicle", and "Emergency vehicles", including ambulance, fire and police vehicles.

Table 7-1 Historical Summary of Vehicles Involved in Traffic Collisions

Table 7-1
Historical Summary of Vehicles Involved in Traffic Collisions: 2003 to 2013

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2003	142	-	12,750	-	44,388	-	57,280	-
2004	131	-7.7%	12,090	-5.2%	44,998	1.4%	57,219	-0.1%
2005	135	3.1%	11,489	-5.0%	42,719	-5.1%	54,343	-5.0%
2006	151	11.9%	11,312	-1.5%	40,157	-6.0%	51,620	-5.0%
2007	141	-6.6%	11,099	-1.9%	37,251	-7.2%	48,491	-6.1%
2008	141	0.0%	10,219	-7.9%	34,195	-8.2%	44,555	-8.1%
2009	126	-10.6%	9,268	-9.3%	34,216	0.1%	43,610	-2.1%
2010	110	-12.7%	9,358	1.0%	35,511	3.8%	44,979	3.1%
2011	141	28.2%	10,956	17.1%	42,419	19.5%	53,516	19.0%
2012	126	-10.6%	14,802	35.1%	44,628	5.2%	59,556	11.3%
2013	**111**	**-11.9%**	**15,663**	**5.8%**	**48,542**	**8.8%**	**64,316**	**8.0%**
2008-2012 Average*	129	-1.2%	10,921	7.2%	38,194	4.1%	49,243	4.6%

* The '% change to previous year' for '2008-2012 Average' is an average rate of change for the five year period.

In 2013, there are 64,316 vehicles involved in traffic collisions. Of these:

- 111 are involved in fatal collisions;
- 15,663 are involved in injury collisions; and,
- 48,542 are involved in PDO collisions.

Overall, there are more vehicles involved in traffic collisions in 2013 than in any of the previous five years, 2008 through 2012. Overall, there are 4,760 more vehicles involved in traffic collisions in Manitoba in 2013 than in 2012 (an 8% increase), and 15,073 more vehicles involved than in the previous five year (2008 to 2012) annual average (a 31% increase). In 2013, there are:

- 15 fewer vehicles involved in fatal collisions than in 2012 (a 12% decrease), 18 fewer than in the previous five years (a 14% decrease);
- 861 more vehicles involved in injury collisions compared to 2012 (a 6% increase), 4,742 more than in the previous five years (a 43% increase); and,
- 3,914 more vehicles involved in PDO collisions compared to 2012 (a 9% increase), 10,348 more than in the previous five years (a 27% increase).

Table 7-2 Historical Summary of Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Traffic Collisions

Table 7-2

Historical Summary of Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Traffic Collisions: 2003 to 2013

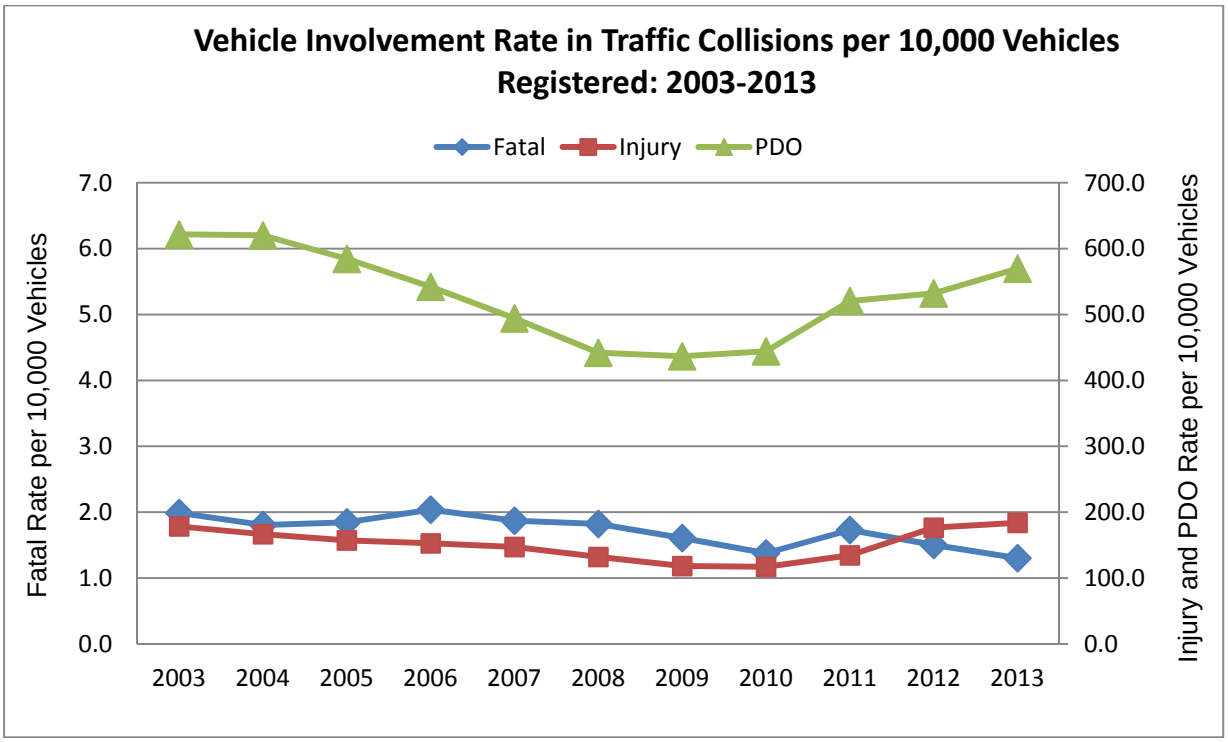
Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2003	2.0	-	178.5	-	621.5	-	802.0	-
2004	1.8	-9.2%	166.6	-6.7%	620.2	-0.2%	788.6	-1.7%
2005	1.8	2.3%	157.2	-5.7%	584.5	-5.7%	743.6	-5.7%
2006	2.0	10.4%	152.7	-2.8%	542.2	-7.2%	697.0	-6.3%
2007	1.9	-8.2%	147.3	-3.6%	494.2	-8.8%	643.4	-7.7%
2008	1.8	-2.6%	132.1	-10.3%	442.0	-10.6%	575.9	-10.5%
2009	1.6	-11.8%	118.3	-10.4%	436.7	-1.2%	556.7	-3.3%
2010	1.4	-14.4%	117.1	-1.0%	444.3	1.7%	562.7	1.1%
2011	1.7	25.7%	134.5	14.9%	520.6	17.2%	656.8	16.7%
2012	1.5	-13.2%	176.5	31.3%	532.2	2.2%	710.2	8.1%
2013	**1.3**	**-13.3%**	**183.8**	**4.1%**	**569.7**	**7.0%**	**754.8**	**6.3%**
2008-2012 Average*	1.6	-3.2%	135.7	4.9%	475.2	1.9%	612.5	2.4%

* The '% change to previous year' for '2008-2012 Average' is an average rate of change for the five year period.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) has increased in 2013 compared to 2012 and to the previous five year (2008 to 2012) annual average. The vehicle involvement rate in collisions in 2013 for:

- Total collisions is 754.8; increased by 6% from 2012, and by 23% from the previous five years;
- Fatal collisions is 1.3; decreased by 13% from 2012, and by 19% from the previous five years;
- Injury collisions is 183.85; increased by 4% from 2012, and by nearly 36% from the previous five years; and,
- PDO collisions is 569.7; increased by 7% from 2012, and by 20% from the previous five years.

Figure 7-1 Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Fatal, Injury and PDO Collisions



As shown in Figure 7-1, the downward trend in vehicle involvement rates in PDO collisions from 2004 to 2009 did not continue in 2010, when the rate increased slightly. With the involvement rates in fatal collisions decreasing compared to the previous five year (2008 to 2012) annual average (see Table 7-2), it becomes clear that the increases in overall involvement in 2011, 2012 and 2013 are due to the increased number of vehicles involved in injury and PDO collisions.

Table 7-3 Vehicle Types (as defined in TAR) Involved in Traffic Collisions and Collision Severity

Table 7-3

Vehicle Types (as defined in TAR) Involved in Traffic Collisions and Collision Severity: 2013, 2008-2012 Average

Vehicle Type	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Passenger vehicle (automobile)	55	49.5%	11,474	73.3%	33,818	69.7%	**45,347**	70.5%	56	7,107	24,366	31,529	64.0%
Mini/Multi-Purpose Van	4	3.6%	1,486	9.5%	4,358	9.0%	**5,848**	9.1%	10	1,184	4,101	5,296	10.8%
Van under 4500 kg	1	0.9%	152	1.0%	426	0.9%	**579**	0.9%	2	121	464	587	1.2%
Pick-up under 4500 kg	25	22.5%	1,928	12.3%	8,320	17.1%	**10,273**	16.0%	28	1,377	6,212	7,617	15.5%
Truck over 4500 kg (unit chassis)	6	5.4%	206	1.3%	885	1.8%	**1,097**	1.7%	3	119	518	641	1.3%
Power Unit for Semi-Trailer	8	7.2%	108	0.7%	355	0.7%	**471**	0.7%	8	103	372	482	1.0%
Truck/Camper	0	-	0	-	7	<0.1%	**7**	<0.1%	<1	6	20	26	<0.1%
Motor home	0	-	2	<0.1%	19	<0.1%	**21**	<0.1%	<1	3	12	15	<0.1%
Truck (other)	3	2.7%	20	0.1%	72	0.1%	**95**	0.1%	7	479	1,729	2,215	4.5%
School Bus	0	-	1	<0.1%	0	-	**1**	<0.1%	1	9	44	53	0.1%
Other School Vehicle	0	-	0	-	0	-	**0**	-	<1	<1	<1	1	<0.1%
Transit Bus – urban	1	0.9%	38	0.2%	63	0.1%	**102**	0.2%	<1	28	57	86	0.2%
Para-transit Bus	0	-	2	<0.1%	4	<0.1%	**6**	<0.1%	<1	2	3	5	<0.1%
Intercity Bus	0	-	2	<0.1%	5	<0.1%	**7**	<0.1%	<1	6	23	29	<0.1%
Bus (other)	0	-	30	0.2%	101	0.2%	**131**	0.2%	<1	8	39	47	<0.1%
Motorcycle/Scooter	4	3.6%	110	0.7%	43	<0.1%	**157**	0.2%	3	113	52	169	0.3%
Moped	0	-	19	0.1%	5	<0.1%	**24**	<0.1%	<1	9	3	12	<0.1%
Bicycle	4	3.6%	84	0.5%	60	0.1%	**148**	0.2%	4	199	35	238	0.5%
Ambulance	0	-	0	-	0	-	**0**	-	<1	3	17	21	<0.1%
Fire	0	-	0	-	0	-	**0**	-	<1	3	9	12	<0.1%
Police	0	-	0	-	0	-	**0**	-	<1	17	51	68	0.1%
Mobility Vehicle	0	-	0	-	0	-	**0**	-	<1	<1	<1	1	<0.1%
Motorised Snow Vehicle HTA	0	-	1	<0.1%	1	<0.1%	**2**	<0.1%	<1	<1	2	2	<0.1%
Farm Equipment	0	-	0	-	0	-	**0**	-	<1	4	14	19	<0.1%
Construction Equipment	0	-	0	-	0	-	**0**	-	<1	8	45	53	0.1%
Train/Other Rail Vehicle	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	<0.1%
Off-Road Vehicles	0	-	0	-	0	-	**0**	-	<1	5	3	22	<0.1%
Total	111	100%	15,663	100%	48,542	100%	**64,316**	100%	129	10,921	38,194	49,243	100%

Note: Counts of vehicles in the 2008-2012 average may not add to the total due to rounding.

Table 7-4 Combined Select Vehicle Categories Involved in Traffic Collisions by Collision Severity

Table 7-4

Vehicle Types (Combined Select Categories) Involved in Traffic Collisions and Collision Severity: 2013, 2008-2012 Average

Vehicle Type	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Light Duty Vehicles	85	79.4%	15,040	96.6%	46,922	96.8%	**62,047**	96.7%	97	9,789	35,143	45,029	92.1%
Passenger vehicles	60	56.1%	13,112	84.2%	38,602	79.7%	**51,774**	80.7%	68	8,412	28,931	37,411	76.5%
Light trucks	25	23.4%	1,928	12.4%	8,320	17.2%	**10,273**	16.0%	28	1,377	6,212	7,617	15.6%
NSC Commercial Vehicles	18	16.8%	407	2.6%	1,485	3.1%	**1,910**	3.0%	19	754	2,785	3,558	7.3%
PSV Vehicles	0	-	0	-	0	-	**0**	-	0	23	77	101	0.2%
Motorcycle/Moped/Scooter	4	3.7%	129	0.8%	48	<0.1%	**181**	0.3%	3	123	55	181	0.4%
Off-Road vehicles	0	-	0	-	0	-	**0**	-	<1	5	3	22	<0.1%

Note: Counts of vehicles in the 2008-2012 average may not add to the total due to rounding.
Note: The above categories are not an exhaustive list. Only primary vehicle types are included; vehicle types such as trains, bicycles, truck/camper units and motor homes are not.

Table 7-5 Vehicle Involvement (per 10,000 Registered Vehicles) in Traffic Collision by Combined Vehicle Types and Collision Severity

Table 7-5

Vehicle Involvement (per 10,000 Registered Vehicles) in Traffic Collisions by Combined Vehicle Types and Collision Severity: 2013, 2008-2012 Average

Vehicle Type	2013 Collision Severity				2008-2012 Average			
	Fatal	Injury	PDO	**2013 Total**	Fatal	Injury	PDO	Total
Light Duty Vehicles	1.2	216.4	675.1	**892.7**	1.5	149.0	534.8	685.2
Passenger vehicles	1.1	240.3	707.4	**948.7**	1.3	160.7	552.8	714.9
Light trucks	1.7	129.1	557.3	**688.1**	2.1	102.9	464.3	569.4
NSC Commercial Vehicles	2.2	49.3	180.0	**231.5**	2.6	103.3	381.7	487.7
PSV Vehicles	0.0	0.0	0.0	**0.0**	0.0	23.1	75.5	99.8
Motorcycle/Moped/Scooter	3.2	101.9	37.9	**143.0**	2.9	111.9	50.2	165.3

Light duty vehicles, including passenger vehicles, minivans, and light trucks, represent 97% of the vehicles involved in all traffic collisions in 2013, the same as in 2012 and an increase compared to the previous five year (2008 to 2012) annual average (92%). Commercial vehicles represent 3%, and motorcycles, scooters, and mopeds 0.3%, of the vehicles involved; both decreased from the previous five years.

Light duty vehicles have the highest vehicle involvement rate (per 10,000 registered vehicles) among all the vehicle types examined. Light duty vehicles (passenger vehicles and light trucks, combined) have an involvement rate of 892.7 in 2013 and 685.2 in the previous five year (2008 to 2012) annual average. NSC commercial vehicles have an involvement rate of 231.5 in 2013 and 487.7 in the previous five years.

Motorcycles (including scooters and mopeds) have the lowest rates of involvement in traffic collisions among all vehicle types examined. Motorcycles have a rate of involvement of 143.0 in 2013 and 165.3 for the previous five year (2008 to 2012) annual average. No PSV vehicles were recorded as being involved in traffic collisions in 2013; they had an involvement rate of 99.8 in the previous five years.

Motorcycles (including scooters and mopeds) are much more likely than light duty vehicles to be involved in a fatal collision. In 2013, motorcycles have an involvement rate of 3.2 in fatal collisions, more than two-and-a-half times the involvement rate of light duty vehicles in fatal collisions (1.2). In the previous five year (2008 to 2012) annual average, motorcycles had a vehicle involvement rate of 2.9 in fatal collisions, nearly double the rate of light duty vehicles (1.5).

NOTE: No vehicle involvement rate for off-road vehicles (ORV) is calculated due to difficulty in developing a reliable and accurate population count of these vehicles.

SECTION 8 – Driver Involvement

Introduction

This section counts the number of drivers involved in traffic collisions and breaks this down by age and gender of the driver. The rate of involvement (per 10,000 licensed drivers) in traffic collisions is also detailed.

Key Highlights

In 2013, there are 63,501 drivers involved in traffic collisions. Of these:

- 106 are involved in fatal collisions;
- 15,539 are involved in injury collisions; and,
- 47,856 are involved in PDO collisions.

Drivers aged 16 to 24 years old account for the largest proportion of drivers involved in traffic collisions in 2013, followed by drivers aged 25 to 34.

Young drivers have a much higher rate of involvement in traffic collisions than older drivers. In 2013, drivers aged 16 to 24 years old have an involvement rate (per 10,000 licensed drivers) in traffic collisions of 1,099.7. This is:

- 1.2 times that of drivers aged 25 to 34 (rate of 920.8);
- 1.4 times that of drivers aged 35 to 44 (rate of 811.3);
- 1.6 times that of drivers aged 45 to 54 (rate of 698.4);
- Twice that of drivers aged 55 to 64 (rate of 554.4); and,
- Two-and-a-half times that of drivers aged 65 and older (rate of 415.3).

The majority of drivers involved in traffic collisions are male. Among all drivers involved in traffic collisions in 2013 where the driver gender is known, nearly 60% are male and nearly 40% female.

- Fatal collisions: 71% involved male drivers, 29% female drivers.
- Injury collisions: nearly 53% involved male drivers, nearly 48% female drivers.
- PDO collisions: 63% involved male drivers, 37% female drivers.

The rate of involvement for men in traffic collisions in 2013 is 861.2, nearly one-and-a-half times that of females (612.2). Driver involvement rates in 2013:

- Fatal collisions: male rate – 1.7, female rate – 0.7
- Injury collisions: male rate – 184.0, female rate – 178.8
- PDO collisions: male rate – 675.5, female rate – 432.6

The reader should note that neither the count of drivers involved in collisions nor the calculated rate of involvement takes into account exposure to risk in terms of hours of driving, kilometres driven or driving situations.

Major Elements Examined

Counts of drivers involved in collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of drivers involved in those collisions; nor is the number of vehicles involved in collisions. Some collisions involve more than one driver while others involve a single driver; the number of drivers will not equal the number of collisions. Likewise, not every vehicle involved in a collision will have a driver. Some collisions involve parked vehicles while other may involve driverless vehicles, such as construction or farm equipment (a full definition of what constitutes a "driver" for this report is provided under the "*Terms and Definitions*" heading). As there are more drivers involved in collisions than collisions overall, involvement rates calculated based on the number of drivers will be higher than the involvement rates calculated based on the number of collisions.

When exploring the number of drivers in different age groups involved in traffic collisions, the reader is cautioned that the driver's age is missing in some collisions. Changes to the reporting structure have resulted in significant improvements; 0.1% of drivers are not identified by age in 2013 compared to 13% in the five year (2008 to 2012) annual average. Likewise, gender is not always captured for each driver involved in a traffic collision, although improvements have been made here as well. In 2013, 0.1% of the drivers involved in traffic collisions are not identified by gender compared with 10% for the previous five year (2008 to 2012) annual average.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding errors in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Drivers"

- The number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This involvement rate does not take into account the number of vehicle kilometres driven by each driver group. More detail regarding the methodology used to count licensed drivers can be found in "*Section 2 Licensed Drivers*" of this report.

Table 8-1 Historical Summary of Drivers Involved in Traffic Collisions

Table 8-1
Historical Summary of Drivers Involved in Traffic Collisions: 2003 to 2013

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2003	138	-	12,248	-	40,017	-	52,403	-
2004	127	-8.0%	11,647	-4.9%	40,239	0.6%	52,013	-0.7%
2005	126	-0.8%	11,044	-5.2%	37,728	-6.2%	48,898	-6.0%
2006	145	15.1%	10,827	-2.0%	35,408	-6.1%	46,380	-5.1%
2007	135	-6.9%	10,696	-1.2%	33,983	-4.0%	44,814	-3.4%
2008	121	-10.4%	9,854	-7.9%	32,145	-5.4%	42,120	-6.0%
2009	120	-0.8%	8,938	-9.3%	32,039	-0.3%	41,097	-2.4%
2010	105	-12.5%	8,969	0.3%	33,236	3.7%	42,310	3.0%
2011	130	23.8%	10,644	18.7%	40,505	21.9%	51,279	21.2%
2012	119	-8.5%	14,696	38.1%	44,062	8.8%	58,877	14.8%
2013	**106**	**-10.9%**	**15,539**	**5.7%**	**47,856**	**8.6%**	**63,501**	**7.9%**
2008-2012 Average*	119	-1.7%	10,620	8.0%	36,397	5.7%	47,137	6.1%

* The '% change to previous year' for '2008-2012 Average' is an average rate of change for the five year period.

In 2013, there are 63,501 drivers involved in traffic collisions. Of these:

- 106 are involved in fatal collisions;
- 15,539 are involved in injury collisions; and,
- 47,856 are involved in PDO collisions.

Overall, the number of drivers involved in traffic collisions in 2013 increased, up 8% from 2012 and by 35% from the previous five year (2008 to 2012) annual average. In 2013, there are:

- 13 fewer drivers involved in fatal collisions than in 2012 (an 11% decrease), 13 fewer than in the previous five years (an 11% decrease);
- 843 more drivers involved in injury collisions compared to 2012 (a 6% increase), 4,919 more than in the previous five years (a 46% increase); and,
- 3,794 more drivers involved in PDO collisions compared to 2012 (a 9% increase), 11,459 more than in the previous five years (a nearly 32% increase).

Table 8-2 Historical Summary of Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions

Table 8-2

Historical Summary of Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions: 2003 to 2013

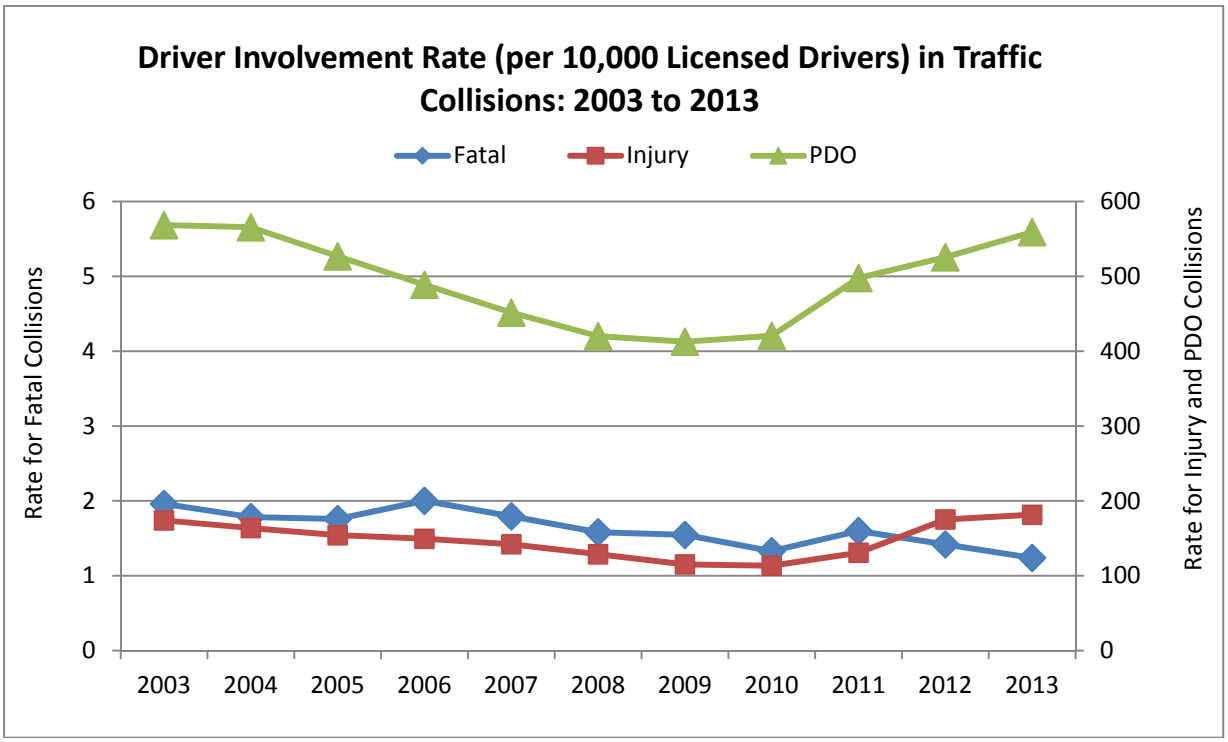
Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2003	2.0	-	174.0	-	568.5	-	744.5	-
2004	1.8	-9.0%	163.7	-5.9%	565.6	-0.5%	731.0	-1.8%
2005	1.8	-1.4%	154.2	-5.8%	526.8	-6.9%	682.8	-6.6%
2006	2.0	13.8%	149.5	-3.1%	488.8	-7.2%	640.3	-6.2%
2007	1.8	-10.4%	142.2	-4.9%	451.7	-7.6%	595.6	-7.0%
2008	1.6	-11.8%	128.8	-9.4%	420.2	-7.0%	550.6	-7.6%
2009	1.5	-2.3%	115.1	-10.6%	412.8	-1.8%	529.5	-3.8%
2010	1.3	-14.1%	113.5	-1.4%	420.5	1.9%	535.3	1.1%
2011	1.6	20.3%	130.8	15.3%	497.8	18.4%	630.2	17.7%
2012	1.4	-11.2%	175.3	34.0%	525.5	5.6%	702.2	11.4%
2013	**1.2**	**-12.7%**	**181.6**	**3.6%**	**559.2**	**6.4%**	**742.0**	**5.7%**
2008-2012 Average*	1.5	-3.8%	132.7	5.6%	455.4	3.4%	589.6	3.8%

* The '% change to previous year' for '2008-2012 Average' is an average rate of change for the five year period.

The rate of involvement for drivers in traffic collisions in 2013 is 742.0 per 10,000 licensed drivers, an increase of 6% compared to the rate in 2012 (702.2) and an increase of 26% from the previous five year (2008 to 2012) annual average. In 2013, the driver involvement in:

- Fatal collisions (1.2) decreased by 13% from 2012 and by 17% compared to the previous five years;
- Injury collisions (181.6) increased by 4% from 2012 and by 37% compared to the previous five years; and,
- PDO collisions (559.2) increased by 6% from 2012 and by 23% compared to the previous five years.

Figure 8-1 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Severity



The downward trend in the rate of involvement for drivers in PDO collisions had been fairly consistent between 2004 and 2008. Between 2009 and 2012, there were slight increases to the previous years, but the rate remained much lower than it was in 2003. In 2013, the rate has increased, reaching highs not seen since 2003. The increases in driver involvement in PDO collisions in 2012 and 2013 are at least partially attributable to changes in the reporting structure that took effect in 2011.

The driver involvement rate for fatal and injury collisions had been steadily decreasing between 2002 and 2010 (the exception being a jump in the fatal collision rate in 2006). The driver involvement rate for injury collisions increased in 2011, 2012 and 2013, while the rate for fatal collisions has fluctuated in these two years (increase in 2011, decrease in both 2012 and 2013). The increases in driver involvement in injury collisions in 2012 and 2013 are at least partially attributable to changes in the reporting structure that took effect in 2011. However, changes in driver involvement in fatal collisions cannot be attributed to this reporting structure change.

Table 8-3 Drivers Involved in Traffic Collisions by Age Group and Collision Severity

Table 8-3

Drivers Involved in Traffic Collisions by Age Group and Collision Severity: 2013, 2008-2012 Average

Age Group	2013 Collision Severity						**2013 Total Collisions**	% of 2013 Total Collisions	2008-2012 Average Count of Drivers				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total Collisions
<16	0	-	6	<0.1%	28	<0.1%	**34**	<0.1%	1	10	32	43	0.1%
16-19	11	10.5%	1,181	7.6%	4,076	8.5%	**5,268**	8.3%	13	896	3,166	4,074	9.9%
20-24	19	18.1%	1,881	12.1%	6,264	13.1%	**8,164**	12.9%	16	1,215	3,966	5,197	12.6%
25-34	23	21.9%	3,277	21.1%	10,072	21.1%	**13,372**	21.1%	20	1,890	5,900	7,810	19.0%
35-44	10	9.5%	3,039	19.6%	8,534	17.9%	**11,583**	18.3%	20	1,806	5,491	7,318	17.8%
45-54	15	14.3%	2,960	19.1%	8,260	17.3%	**11,235**	17.7%	21	1,763	5,830	7,613	18.5%
55-64	11	10.5%	1,835	11.8%	5,892	12.3%	**7,738**	12.2%	12	1,140	4,025	5,177	12.6%
65+	16	15.2%	1,351	8.7%	4,663	9.8%	**6,030**	9.5%	15	806	3,090	3,912	9.5%
Not Stated	1	-	9	-	67	-	**77**	-	1	1,095	4,897	5,993	-
Total*	**106**	**100%**	**15,539**	**100%**	**47,856**	**100%**	**63,501**	100%	119	10,620	36,397	47,137	100%

*Percentage of the total does not include the 'not stated' category.

Note: Counts of drivers in the 2008-2012 average may not add to the total due to rounding.

Drivers aged 16 to 24 years old account for the largest proportion of drivers involved in traffic collisions in 2013, followed by drivers aged 25 to 34.

- Total collisions: aged 16 to 24 – 21%; aged 25 to 34 – 21%; aged 35 to 44 – 18%; aged 45 to 54 – 18%; aged 55 to 64 – 12%; aged 65 and older – nearly 10%.
- Fatal collisions: aged 16 to 24 – 29%; aged 25 to 34 – 22%; aged 35 to 44 – nearly 10%; aged 45 to 54 – 14%; aged 55 to 64 – nearly 11%; aged 65 and older – 15%.
- Injury collisions: aged 16 to 24 – 20%; aged 25 to 34 – 21%; aged 35 to 44 – 20%; aged 45 to 54 – 19%; aged 55 to 64 – 12%; aged 65 and older – 9%.
- PDO collisions: aged 16 to 24 – 22%; aged 25 to 34 –21%; aged 35 to 44 – 18%; aged 45 to 54 – nearly 17%; aged 55 to 64 – 12%; aged 65 and older – 10%.

Figure 8-2 Proportion of Traffic Collisions by Driver Age and Collision Severity

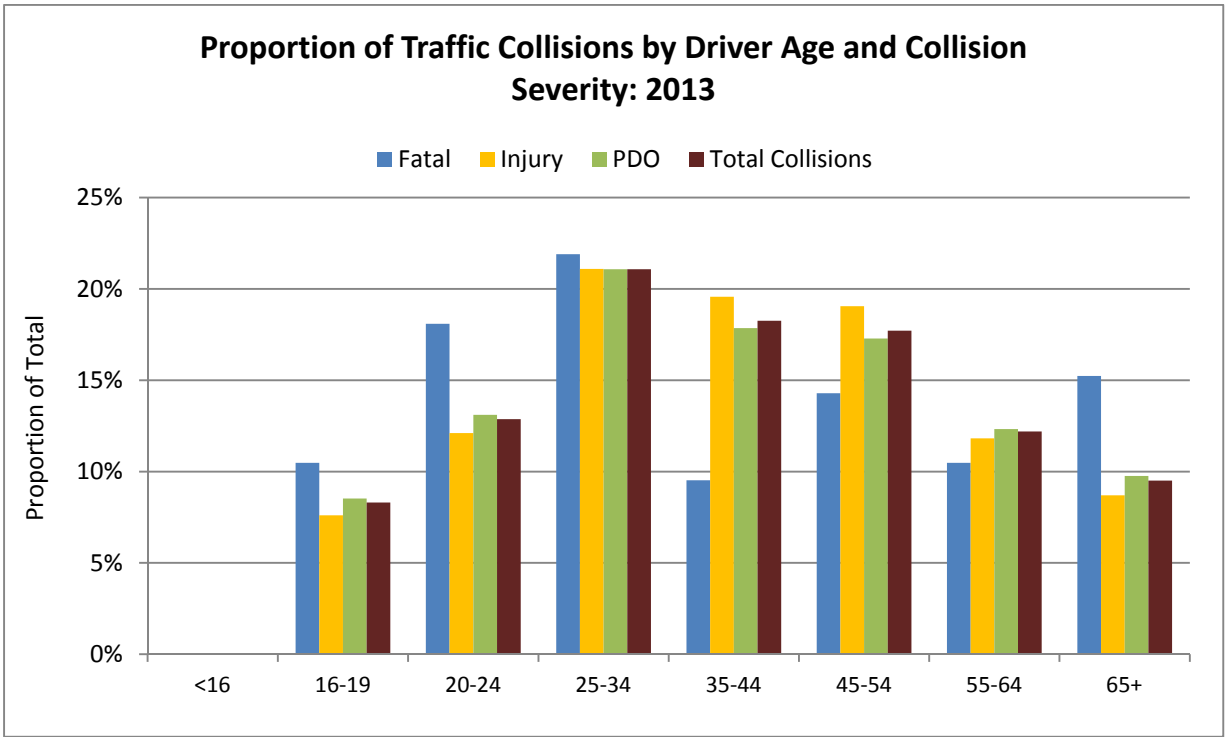


Table 8-4 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Age Group and Collision Severity

Table 8-4
Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Age Group and Collision Severity: 2013, 2008-2012 Average

Age Group	2013 Collision Severity			**2013 Total Collisions**	2008-2012 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
<16	-	-	-	**-**	-	-	-	-
16-19	2.2	239.5	826.6	**1,068.3**	2.7	187.6	662.7	853.0
20-24	2.6	258.3	860.1	**1,121.0**	2.4	185.2	604.6	792.2
25-34	1.6	225.6	693.5	**920.8**	1.5	144.7	451.8	598.1
35-44	0.7	212.9	597.7	**811.3**	1.5	131.3	399.3	532.1
45-54	0.9	184.0	513.4	**698.4**	1.3	109.5	362.1	472.9
55-64	0.8	131.5	422.2	**554.4**	0.9	89.3	315.4	405.7
65+	1.1	93.0	321.1	**415.3**	1.2	63.6	244.0	308.8

Recognizing that counts of drivers involved in collisions could be impacted either positively or negatively by changing population statistics, involvement rates per 10,000 licensed drivers are examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on how many drivers are involved in collisions instead of simply a raw count of drivers. Further, in the absence of the number of kilometres driven, the driver involvement rate acts as a proxy for exposure to collision risk.

Young drivers have a much higher rate of involvement in traffic collisions than older drivers. Drivers aged 20 to 24 have the highest rates of involvement in collisions of all severities, only slightly higher than drivers aged 16 to 19. In 2013, drivers aged 16 to 24 years old (combined) have an involvement rate (per 10,000 licensed drivers) in traffic collisions of 1,099.7. This is:

- 1.2 times that of drivers aged 25 to 34 (rate of 920.8);
- 1.4 times that of drivers aged 35 to 44 (rate of 811.3);
- 1.6 times that of drivers aged 45 to 54 (rate of 698.4);
- Twice that of drivers aged 55 to 64 (rate of 554.4); and,
- Two-and-a-half times that of drivers aged 65 and older (rate of 415.3).

Table 8-5 Drivers Involved in Traffic Collisions by Gender and Age Group and Collision Severity

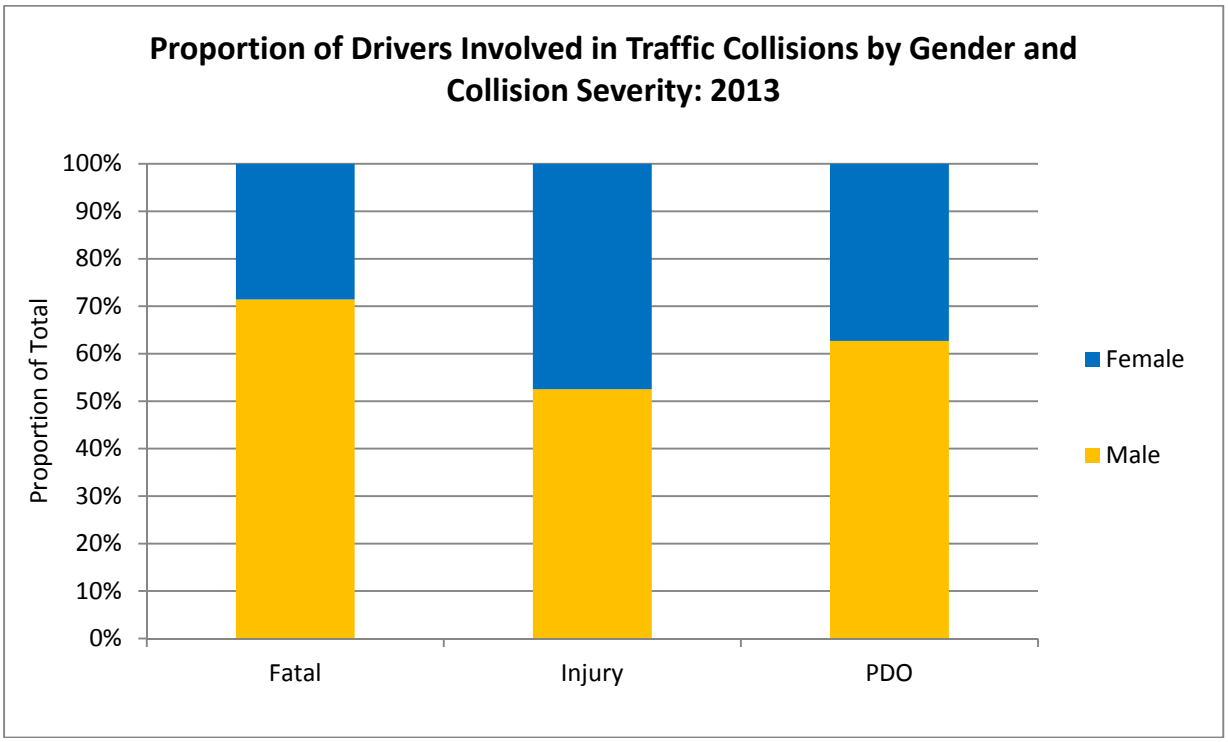
Table 8-5

Total Drivers Involved in Traffic Collisions by Gender and Age Group and Collision Severity: 2013, 2008-2012 Average

Gender - Age Group		2013 Collision Severity						2013 Total Collisions	% of 2013 Total Collisions*	2008-2012 Average Count of Drivers				
		Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
Female	<16	0	-	4	<0.1%	14	<0.1%	**18**	<0.1%	<1	3	15	19	0.1%
	16-19	3	10.0%	539	7.3%	1,591	8.9%	**2,133**	8.5%	4	411	1,212	1,627	10.2%
	20-24	10	33.3%	901	12.2%	2,361	13.2%	**3,272**	13.0%	4	575	1,519	2,098	13.1%
	25-34	4	13.3%	1,633	22.2%	3,795	21.3%	**5,432**	21.5%	5	891	2,222	3,118	19.5%
	35-44	2	6.7%	1,465	19.9%	3,330	18.7%	**4,797**	19.0%	5	830	2,121	2,957	18.5%
	45-54	4	13.3%	1,408	19.1%	3,016	16.9%	**4,428**	17.5%	6	791	2,126	2,922	18.2%
	55-64	0	-	850	11.5%	2,138	12.0%	**2,988**	11.8%	1	501	1,411	1,913	11.9%
	65+	7	23.3%	571	7.7%	1,586	8.9%	**2,164**	8.6%	4	320	1,038	1,362	8.5%
	Not Stated	0	-	2	-	6	-	**8**	-	<1	115	501	617	-
	Total Female*	**30**	**100%**	**7,373**	**100%**	**17,837**	**100%**	**25,240**	100%	29	4,438	12,165	16,633	100%
Male	<16	0	-	2	<0.1%	14	<0.1%	**16**	<0.1%	<1	6	15	21	<0.1%
	16-19	8	10.7%	641	7.9%	2,485	8.3%	**3,134**	8.2%	9	480	1,927	2,416	9.8%
	20-24	9	12.0%	980	12.0%	3,900	13.0%	**4,889**	12.8%	12	627	2,408	3,046	12.3%
	25-34	19	25.3%	1,644	20.2%	6,276	21.0%	**7,939**	20.8%	16	980	3,613	4,608	18.6%
	35-44	8	10.7%	1,574	19.3%	5,203	17.4%	**6,785**	17.8%	15	965	3,318	4,297	17.3%
	45-54	11	14.7%	1,552	19.0%	5,244	17.5%	**6,807**	17.8%	16	960	3,651	4,627	18.7%
	55-64	11	14.7%	985	12.1%	3,753	12.5%	**4,749**	12.4%	10	633	2,588	3,232	13.0%
	65+	9	12.0%	780	9.6%	3,077	10.3%	**3,866**	10.1%	12	482	2,033	2,527	10.2%
	Not Stated	0	-	1	-	5	-	**6**	-	<1	196	833	1,029	-
	Total Male*	**75**	**100%**	**8,159**	**100%**	**29,957**	**100%**	**38,191**	100%	89	5,329	20,386	25,804	100%

*Percentage of the total does not include the 'not stated' category.
Note: Counts of drivers in the 2008-2012 average may not add to the total due to rounding.
Note: Some drivers do not have age and gender recorded and are therefore missing from the table above.

Figure 8-3 Proportion of Drivers Involved in Traffic Collisions by Gender and Collision Severity



The majority of drivers involved in traffic collisions are male. Among all drivers involved in traffic collisions in 2013 where the driver gender is known, nearly 60% are male and nearly 40% female.

- Fatal collisions: 71% involved male drivers, 29% female drivers.
- Injury collisions: nearly 53% involved male drivers, more than 47% female drivers.
- PDO collisions: 63% involved male drivers, 37% female drivers.

The reader should note that the count of drivers involved in collisions does not take into account exposure to risk in terms of driving situations, hours driven or kilometres driven.

As shown in Table 8-6 (on the following page), young male drivers account for a larger proportion of collisions than any other group of drivers. In 2013:

- Male drivers aged 16 to 24 account for 13% of all collisions, 16% of fatal collisions, 10% of injury collisions, and 13% of PDO collisions;
- Male drivers aged 25 to 34 account for nearly 13% of all collisions, 18% of fatal collisions, 11% of injury collisions, and 13% of PDO collisions;
- Female drivers aged 16 to 24 account for nearly 9% of all collisions, 12% of fatal collisions, 9% of injury collisions and 8% of PDO collisions; and,
- Female drivers aged 25 to 34 account for nearly 9% of all collisions, 4% of fatal collisions, nearly 11% of injury collisions and 8% of PDO collisions.

Table 8-6 Drivers Involved in Traffic Collisions by Age Group and Gender and Collision Severity

Table 8-6

Total Drivers Involved in Traffic Collisions by Age Group and Gender and Collision Severity: 2013, 2008-2012 Average

Age Group - Gender		2013 Collision Severity						**2013 Total Collisions**	% of 2013 Total Collisions*	2008-2012 Average Count of Drivers				
		Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
<16	Female	0	-	4	<0.1%	14	<0.1%	**18**	<0.1%	<1	3	15	19	<0.1%
	Male	0	-	2	<0.1%	14	<0.1%	**16**	<0.1%	<1	6	15	21	<0.1%
16 to 24	Female	13	12.4%	1,440	9.3%	3,952	8.3%	**5,405**	8.5%	8	986	2,731	3,725	9.1%
	Male	17	16.2%	1,621	10.4%	6,385	13.4%	**8,023**	12.7%	21	1,107	4,335	5,463	13.4%
25 to 34	Female	4	3.8%	1,633	10.5%	3,795	7.9%	**5,432**	8.6%	5	891	2,222	3,118	7.6%
	Male	19	18.1%	1,644	10.6%	6,276	13.1%	**7,939**	12.5%	16	980	3,613	4,608	11.3%
35 to 44	Female	2	1.9%	1,465	9.4%	3,330	7.0%	**4,797**	7.6%	5	830	2,121	2,957	7.2%
	Male	8	7.6%	1,574	10.1%	5,203	10.9%	**6,785**	10.7%	15	965	3,318	4,297	10.5%
45 to 54	Female	4	3.8%	1,408	9.1%	3,016	6.3%	**4,428**	7.0%	6	791	2,126	2,922	7.2%
	Male	11	10.5%	1,552	10.0%	5,244	11.0%	**6,807**	10.7%	16	960	3,651	4,627	11.3%
55 to 64	Female	0	-	850	5.5%	2,138	4.5%	**2,988**	4.7%	1	501	1,411	1,913	4.7%
	Male	11	10.5%	985	6.3%	3,753	7.9%	**4,749**	7.5%	10	633	2,588	3,232	7.9%
65 and older	Female	7	6.7%	571	3.7%	1,586	3.3%	**2,164**	3.4%	4	320	1,038	1,362	3.3%
	Male	9	8.6%	780	5.0%	3,077	6.4%	**3,866**	6.1%	12	482	2,033	2,527	6.2%
Not Stated	Female	0	-	2	-	6	-	**8**	-	<1	115	501	617	-
	Male	0	-	1	-	5	-	**6**	-	<1	196	833	1,029	-
Total	Female	30	28.6%	7,373	47.4%	17,837	37.3%	**25,240**	39.8%	29	4,438	12,165	16,633	39.2%
	Male	75	71.4%	8,159	52.5%	29,957	62.7%	**38,191**	60.2%	88	5,329	20,386	25,804	60.7%

*Percentage of the total does not include the 'not stated' category.
Note: Counts of drivers in the 2008-2012 average may not add to the total due to rounding.
Note: Some drivers do not have age and gender recorded and are therefore missing from the table above.

Table 8-7 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Gender and Age Group and Collision Severity

Table 8-7
Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Gender and Age Group and Collision Severity: 2013, 2008-2012 Average

Gender - Age Group		2013 Collision Severity			**2013 Total Collisions**	2008-2012 Average			
		Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Female	<16	-	-	-	**-**	-	-	-	-
	16-19	1.3	225.2	664.8	**891.2**	1.6	176.9	521.8	700.4
	20-24	2.8	255.7	670.0	**928.5**	1.3	180.9	477.4	659.7
	25-34	0.6	232.2	539.6	**772.4**	0.7	140.4	350.0	491.2
	35-44	0.3	211.2	480.0	**691.5**	0.8	124.6	318.5	443.9
	45-54	0.5	182.1	390.1	**572.7**	0.7	102.3	275.0	378.0
	55-64	0.0	126.1	317.1	**443.2**	0.2	81.4	229.4	311.0
	65+	1.0	83.1	230.8	**314.9**	0.6	54.0	175.1	229.7
	Total	0.7	178.8	432.6	**612.2**	0.8	115.8	317.5	434.0
Male	<16	-	-	-	**-**	-	-	-	-
	16-19	3.2	252.6	979.2	**1,234.9**	3.7	195.6	785.4	984.7
	20-24	2.4	260.7	1,037.7	**1,300.8**	3.4	185.5	712.5	901.4
	25-34	2.5	219.5	837.9	**1,059.9**	2.3	146.0	538.3	686.6
	35-44	1.1	214.4	708.8	**924.4**	2.1	136.1	467.9	606.0
	45-54	1.3	185.7	627.6	**814.6**	1.9	114.8	436.3	552.9
	55-64	1.5	136.5	520.1	**658.2**	1.6	95.8	391.5	488.8
	65+	1.2	102.0	402.2	**505.4**	1.7	71.5	301.8	375.0
	Total	1.7	184.0	675.5	**861.2**	2.1	128.9	493.0	624.0

The rate of involvement for men in traffic collisions in 2013 is 861.2, nearly one-and-a-half times that of females (612.2). Driver involvement rates in 2013:

- Fatal collisions: male rate – 1.7, female rate – 0.7
- Injury collisions: male rate – 184.0, female rate – 178.8
- PDO collisions: male rate – 675.5, female rate – 432.6

The reader should note that the calculated driver involvement rates do not take into account exposure to risk in terms of driving situations, hours driven or kilometres driven.

In 2013, young males, especially those under age 25, have the highest driver involvement rates of all driver-gender age groups. Young females under age 25 have higher driver involvement rates in total collisions than male drivers aged 35 and older.

Compared to the previous five year (2008 to 2012) annual average, driver involvement rates for all gender-age groups increased for overall traffic collisions, injury collisions, and PDO collisions in 2013.

Driver involvement rates in fatal collisions show some changes. Comparing 2013 to the previous five year (2008 to 2012) annual average:

- Female involvement rates in fatal collisions decreased by nearly 5% overall, but more than doubled for female drivers aged 20-24 and increased by 67% among female drivers age 65 and older.
- Male involvement rates in fatal collisions decreased 21% overall, including decreasing by 14% for drivers aged 16 to 19 and by 30% for drivers aged 20 to 24. Male drivers age 25 to 34 were the only group of male drivers to see an increase in their fatal collision involvement rate; it went up by 9% compared with the previous five years.

SECTION 9 – Contributing Factors

Introduction

This section examines the contributing factors to traffic collisions as reported on the Traffic Accident Report (TAR). Detail is provided at the collision level, at the victim level and at the driver level. Driver involvement rates (per 10,000 licensed drivers) in collisions with specific contributing factors are also provided and discussed. The reader is cautioned to note that more than one contributing factor can be recorded for each vehicle and/or driver involved in a collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles, drivers or victims in those crashes.

Key Highlights

In 2013, 77% of all collisions have some at-fault contributing factor recorded (84% of fatal collisions; 74% of injury collisions). In 2013:

- A driver action is a contributing factor in 62% of all **collisions** (nearly 73% of fatal collisions; 68% of injury collisions; 60% of PDO collisions);
- A human condition is a contributing factor in 1% of all **collisions** (38% of fatal collisions; nearly 3% of injury collisions; 1% of PDO collisions); and,
- Environmental conditions are contributing factors in 17% of all **collisions** (13% of fatal collisions; 8% of injury collisions; 20% of PDO collisions).

The most prevalent **contributing factors recorded for collisions** in 2013 include:

- Distracted driving – 16% of all collisions (26% fatal; nearly 16% injury; 16% PDO);
- "Following too closely" – 15% of all collisions (three fatal; nearly 24% injury; nearly 13% PDO);
- The actions of a wild animal – 11% of all collisions (none fatal; 2% injury; 14% PDO);
- "Backing unsafely" – 7% of all collisions (none fatal; 2% injury; 8% PDO);
- Speed – 6% of all collisions (nearly 15% fatal; 6% injury; 6% PDO);
- "Turning improperly" – 5% of all collisions (none fatal; 6% injury; 5% PDO);
- "Fail to yield right-of-way" – 5% of all collisions (10% fatal; 7% injury; 4% PDO);
- "Changing lanes improperly" – 4% of all collisions (one fatal; 3% injury; 4% PDO);
- "Lost control/Drive off the road" – 4% of all collisions (23% fatal; 4% injury; 4% PDO); and
- "Slippery road surface" – 4% of all collisions (9% fatal; 4% injury; 4% PDO).

Considering the **victims from collisions** in 2013:

- 68% of all victims resulted from a collision where at least one driver is noted as having a driver action contributing to the collision (nearly 77% of people killed; 62% of people seriously injured);
- 3% of all victims resulted from a collision where at least one driver is noted as having a human condition contributing to the collision (38% of people killed; 20% of people seriously injured); and,
- 8% of all victims resulted from a collision where environmental conditions are noted as contributing to the collision (12% of people killed; 13% of people seriously injured).

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2013 include:

- Distracted driving – 33% of people killed and 21% of people seriously injured;
- Impaired – 22% of people killed and 10% of people seriously injured;
- "Lost control/Drive off the road" – 21% of people killed and 13% of people seriously injured;
- Speed – nearly 17% of people killed and 12% of people seriously injured;
- "Fail to yield right-of-way" – 11% of people killed and nearly 9% of people seriously injured;
- "Slippery road surface" – 7% of people killed and 5% of people seriously injured;
- "Disobey traffic control device/officer" – 7% of people killed and 4% of people seriously injured;
- "Following too closely" – 6% of people killed and 5% of people seriously injured;
- "Pedestrian error/confusion" – 6% people killed and 3% of people seriously injured;
- "Passing improperly" – 6% of people killed and 1% of people seriously injured;
- "Weather" – Nearly 4% of people killed and 2% of people seriously injured;
- "Extreme fatigue/Fell asleep" – 2% of people killed and 2% of people seriously injured;
- "Turning improperly" – none of people killed and 5% of people seriously injured; and,
- The actions of a wild animal – none of people killed and 4% of people seriously injured.

In 2013, 44% of the **drivers involved in traffic collisions** were recorded as not being at-fault in the collision while 5% did not have any contributing factors identified.

- 38% of the drivers involved in a fatal collision were noted as not being at-fault.
- 52% of the drivers in an injury collision were noted as not being at-fault.
- 41% of the drivers in a PDO collision were noted as not being at-fault.

Driver actions were recorded for 41% of the **drivers involved in traffic collisions** in 2013.

- 48% of the drivers involved in fatal collisions had a driver action recorded.
- 38% of the drivers involved in injury collisions had a driver action recorded.
- 42% of the drivers involved in PDO collisions had a driver action recorded.

Human conditions were recorded as contributing factors for 1% of the **drivers involved in traffic collisions** in 2013.

- 23% of the drivers involved in fatal collisions had a human condition recorded.
- 1% of the drivers involved in injury collisions had a human condition recorded.
- 1% of the drivers involved in PDO collisions had a human condition recorded.

Environmental conditions were recorded as contributing factors for 11% of **drivers involved in traffic collisions** in 2013.

- 9% of the drivers involved in fatal collisions had some environmental condition recorded.
- 5% of the drivers involved in injury collisions had some environmental condition recorded.
- 14% of the drivers involved in PDO collisions had some environmental condition recorded.

In 2013, the **driver involvement rate** (per 10,000 licensed drivers) in traffic collisions where:

- Any driver action is a contributing factor is 304.8, more than double the rate from the previous five years (138.8);
- Any human condition is a contributing factor is 6.9, decreased by 61% from the previous five years (17.9);
- Environmental conditions are a contributing factor is 84.6, increased by 4% from the previous five years (81.1);
- Distracted driving is a contributing factor is 78.3, more than two-and-a-half times the rate from the previous five years (30.4);
- Speed is a contributing factor is 28.3, increased by 49% from the previous five years (19.0); and,
- Impaired is a contributing factor is 1.4, decreased by 62% from the previous five years (3.6).

Major Elements Examined

Counts of drivers involved in collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

When reviewing the “Contributing Factors” for a traffic collision, the reader is cautioned to note that more than one contributing factor can be recorded for each collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles, drivers or victims in those crashes.

For the purposes of this report, speed as a contributing factor is discussed as being a combination of the individual factors “exceeding speed limit”, “driving too fast for conditions” and “unsafe operating speed (too fast or too slow)”.

For the purposes of this report, impaired as a contributing factor is discussed as being a combination of the individual factors “ability impaired by alcohol”, “ability impaired by drugs” and “had been drinking/suspected alcohol use”.

For the purposes of this report, distracted driving as a contributing factor is discussed as being a combination of the individual factors “careless driving” and “distraction/inattention”.

It is important to note that the number of collisions is not equal to the number of drivers involved in collisions because some collisions involve more than one driver while others involve a single driver. (A full definition of what constitutes a "driver" for this report is provided under the "Terms and Definitions" heading.) Because there are more drivers involved in collisions than collisions overall, relative involvement rates calculated based on the number of drivers will be higher than the relative involvement rates calculated based on the number of collisions.

When exploring the number of drivers in different age groups involved in traffic collisions, the reader is cautioned that the driver's age is missing in some collisions. In 2013, less than 1% of drivers are not identified by age. In the five year (2008 to 2012) annual average, 13% of drivers are not identified by age.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Average annual calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Drivers"

- The number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

"Collision severity"

- A classification of a collision based on the most severe result of the collision; i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

“Fatal Collision”

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

“Injury Collision”

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: ‘major’ (admitted to hospital); ‘minor’ (treated and released from hospital); and, ‘minimal’ (no hospital treatment required).

“Property Damage Only (PDO) Collision”

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

“Driver Involvement Rate”

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This involvement rate does not take into account the number of vehicle kilometers driven by each driver group.

Table 9-1 Contributing Factors to a Collision by Collision Severity

Table 9-1

Contributing Factors to a Collision by Collision Severity: 2013

Contributing Factor	2013 Collision Severity						2013 Total Collisions	% of 2013 Total Collisions
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	32	46.4%	6,830	78.2%	18,143	54.9%	**25,005**	**59.8%**
Driver Action - Driving properly	2	2.9%	259	3.0%	597	1.8%	**858**	**2.1%**
Any Driver Action	50	72.5%	5,904	67.6%	19,905	60.3%	**25,859**	**61.8%**
Follow too closely	3	4.3%	2,047	23.5%	4,140	12.5%	**6,190**	**14.8%**
Turning improperly	0	-	537	6.2%	1,509	4.6%	**2,046**	**4.9%**
Passing improperly	3	4.3%	26	0.3%	140	0.4%	**169**	**0.4%**
Changing lanes improperly	1	1.4%	224	2.6%	1,390	4.2%	**1,615**	**3.9%**
Fail to yield right-of-way	7	10.1%	615	7.0%	1,440	4.4%	**2,062**	**4.9%**
Disobey traffic control device/officer	5	7.2%	173	2.0%	265	0.8%	**443**	**1.1%**
Drive wrong way on roadway	1	1.4%	4	<0.1%	7	<0.1%	**12**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	188	2.2%	2,612	7.9%	**2,800**	**6.7%**
Parking improperly	1	1.4%	7	<0.1%	96	0.3%	**104**	**0.2%**
Lost control/Drive off road	16	23.2%	340	3.9%	1,242	3.8%	**1,598**	**3.8%**
Driverless vehicle ran out of control	0	-	5	<0.1%	7	<0.1%	**12**	**<0.1%**
Leave stop sign before safe to do so	2	2.9%	222	2.5%	521	1.6%	**745**	**1.8%**
Failed to signal	0	-	3	<0.1%	5	<0.1%	**8**	**<0.1%**
Take avoiding action	1	1.4%	63	0.7%	344	1.0%	**408**	**1.0%**
Driver inexperience	1	1.4%	41	0.5%	102	0.3%	**144**	**0.3%**
Pedestrian error/confusion	5	7.2%	17	0.2%	9	<0.1%	**31**	**<0.1%**
NET Speed	10	14.5%	499	5.7%	1,909	5.8%	**2,418**	**5.8%**
Exceeding speed limit	3	4.3%	8	<0.1%	3	<0.1%	**14**	**<0.1%**
Driving too fast for conditions	5	7.2%	477	5.5%	1,880	5.7%	**2,362**	**5.6%**
Unsafe operating speed (Too fast or too slow)	3	4.3%	15	0.2%	27	<0.1%	**45**	**0.1%**
NET Distracted driving	18	26.1%	1,357	15.5%	5,334	16.2%	**6,709**	**16.0%**
Careless Driving	11	15.9%	1,260	14.4%	5,138	15.6%	**6,409**	**15.3%**
Distraction/Inattention	7	10.1%	115	1.3%	237	0.7%	**359**	**0.9%**

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Contributing Factor	2013 Collision Severity						2013 Total Collisions	% of 2013 Total Collisions
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	21	30.4%	801	9.2%	2,168	6.6%	**2,990**	**7.1%**
Any Human Condition	26	37.7%	220	2.5%	353	1.1%	**599**	**1.4%**
Loss of consciousness/Blackout prior to collision	1	1.4%	21	0.2%	12	<0.1%	**34**	**<0.1%**
Extreme fatigue/Fell asleep	2	2.9%	27	0.3%	34	0.1%	**63**	**0.2%**
Defective eyesight	0	-	0	-	2	<0.1%	**2**	**<0.1%**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	2	<0.1%	8	<0.1%	**10**	**<0.1%**
Physical disability	1	1.4%	1	<0.1%	1	<0.1%	**3**	**<0.1%**
Mental disability	1	1.4%	3	<0.1%	0	-	**4**	**<0.1%**
Mental confusion/Inability to remember	0	-	10	0.1%	12	<0.1%	**22**	**<0.1%**
Sudden illness	1	1.4%	4	<0.1%	3	<0.1%	**8**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	**0**	**-**
NET Impaired	15	21.7%	50	0.6%	54	0.2%	**119**	**0.3%**
Ability impaired alcohol	11	15.9%	39	0.4%	44	0.1%	**94**	**0.2%**
Ability impaired drugs	0	-	1	<0.1%	2	<0.1%	**3**	**<0.1%**
Had been drinking/Suspected alcohol use	5	7.2%	16	0.2%	10	<0.1%	**31**	**<0.1%**
No Apparent (Vehicle) Defect	50	72.5%	6,906	79.1%	17,952	54.4%	**24,908**	**59.6%**
Any Vehicle Defect	3	4.3%	27	0.3%	159	0.5%	**189**	**0.5%**
Defective brakes	1	1.4%	5	<0.1%	8	<0.1%	**14**	**<0.1%**
Defective steering	0	-	1	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective headlights	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Defective lighting (unspecified)	1	1.4%	1	<0.1%	1	<0.1%	**3**	**<0.1%**
Defective engine controls/drive train	0	-	2	<0.1%	6	<0.1%	**8**	**<0.1%**
Defective suspension/wheels	0	-	7	<0.1%	24	<0.1%	**31**	**<0.1%**
Defective tires	1	1.4%	2	<0.1%	32	<0.1%	**35**	**<0.1%**
Tow hitch/yoke defective	0	-	0	-	15	<0.1%	**15**	**<0.1%**
Defective exhaust system	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Defective glazing (obscured windows)	0	-	0	-	2	<0.1%	**2**	**<0.1%**
Vehicle modifications	0	-	1	<0.1%	0	-	**1**	**<0.1%**
Fire	0	-	1	<0.1%	2	<0.1%	**3**	**<0.1%**
Overloaded/oversized	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	3	<0.1%	13	<0.1%	**16**	**<0.1%**
Jack-knife/trailer swing	0	-	2	<0.1%	42	0.1%	**44**	**0.1%**
Hydroplaning tires	0	-	4	<0.1%	6	<0.1%	**10**	**<0.1%**
Any Environmental Condition	9	13.0%	730	8.4%	6,492	19.7%	**7,231**	**17.3%**
Animal action - Wild	0	-	209	2.4%	4,547	13.8%	**4,756**	**11.4%**

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Contributing Factor	2013 Collision Severity						2013 Total Collisions	% of 2013 Total Collisions
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Animal action - Domestic	0	-	6	<0.1%	39	0.1%	**45**	**0.1%**
Slippery road surface	6	8.7%	364	4.2%	1,367	4.1%	**1,737**	**4.2%**
Snow drift	0	-	13	0.1%	105	0.3%	**118**	**0.3%**
Obstruction/debris on roadway	0	-	11	0.1%	141	0.4%	**152**	**0.4%**
View obstructed/limited	1	1.4%	32	0.4%	73	0.2%	**106**	**0.3%**
Glare/reflection	0	-	11	0.1%	25	<0.1%	**36**	**<0.1%**
Construction zone	0	-	3	<0.1%	8	<0.1%	**11**	**<0.1%**
Defective driving surface	1	1.4%	14	0.2%	45	0.1%	**60**	**0.1%**
Shoulders defective	0	-	6	<0.1%	4	<0.1%	**10**	**<0.1%**
Lane markings inadequate	0	-	1	<0.1%	9	<0.1%	**10**	**<0.1%**
Defective/inoperative traffic control device	1	1.4%	6	<0.1%	5	<0.1%	**12**	**<0.1%**
Weather	2	2.9%	57	0.7%	155	0.5%	**214**	**0.5%**
Pedestrian corridor in use	0	-	3	<0.1%	4	<0.1%	**7**	**<0.1%**
Uninvolved vehicle	0	-	6	<0.1%	14	<0.1%	**20**	**<0.1%**
Uninvolved pedestrian	0	-	2	<0.1%	6	<0.1%	**8**	**<0.1%**
Presence of prior accident	0	-	4	<0.1%	5	<0.1%	**9**	**<0.1%**
No Contributing Factor(s) Identified	9	13.0%	1,006	11.5%	2,111	6.4%	**3,126**	**7.5%**
Not Applicable/Not Stated	0	-	0	-	0	-	**0**	**-**
Total	69	100%	8,729	100%	33,021	100%	**41,819**	**100.0%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-1a Contributing Factors to a Collision by Collision Severity for Previous Five Years

Table 9-1a

Contributing Factors to a Collision by Collision Severity: 2008-2012 Average

Contributing Factor	2008-2012 Average Count				
	Fatal	Injury	PDO	Total Collisions	% of Total Collisions
Driver Action - Driving Properly and Human Condition - Apparently Normal	30	3,708	11,761	15,498	50.3%
Driver Action - Driving properly	5	405	1,528	1,938	6.3%
Any Driver Action	64	2,627	8,314	11,005	35.7%
Following too closely	<1	674	1,658	2,333	7.6%
Turning improperly	2	186	646	834	2.7%
Passing improperly	2	24	103	129	0.4%
Changing lanes improperly	<1	88	567	656	2.1%
Fail to yield right-of-way	7	326	890	1,222	4.0%
Disobey traffic control device/officer	4	165	303	472	1.5%
Drive wrong way on roadway	2	10	17	29	<0.1%
Passing a vehicle at pedestrian X-walk	<1	2	<1	2	<0.1%
Back unsafely	-	60	1,044	1,104	3.6%
Parking improperly	-	5	63	67	0.2%
Lost control/Drive off road	18	294	568	880	2.9%
Driverless vehicle ran out of control	-	1	10	12	<0.1%
Leave stop sign before safe to do so	3	119	233	355	1.2%
Failed to signal	-	4	14	17	<0.1%
Take avoiding action	3	78	296	377	1.2%
Driver inexperience	2	81	221	304	1.0%
Pedestrian error/confusion	3	62	9	74	0.2%
NET Speed	22	401	1,087	1,510	4.9%
Exceeding speed limit	7	30	49	87	0.3%
Driving too fast for conditions	10	297	969	1,276	4.1%
Unsafe operating speed (Too fast or too slow)	6	80	83	169	0.5%
NET Distracted driving	25	611	1,811	2,447	7.9%
Careless Driving	17	361	1,157	1,535	5.0%
Distraction/Inattention	9	277	701	988	3.2%
Human Condition - Apparently Normal	15	1,399	4,764	6,178	20.0%
Any Human Condition	38	466	962	1,467	4.8%
Loss of consciousness/Blackout prior to collision	2	23	16	42	0.1%
Extreme fatigue/Fell asleep	1	37	53	91	0.3%
Defective eyesight	<1	4	8	11	<0.1%
Defective hearing	<1	1	2	3	<0.1%
Medical disability	<1	7	7	14	<0.1%
Physical disability	<1	5	8	13	<0.1%
Mental disability	1	4	3	8	<0.1%
Mental confusion/Inability to remember	<1	8	13	21	<0.1%
Sudden illness	1	5	6	12	<0.1%
Exceed hours of service (commercial drivers only)	-	<1	<1	<1	<0.1%
NET Impaired	25	114	166	305	1.0%
Ability impaired alcohol	15	74	109	198	0.6%
Ability impaired drugs	1	4	7	12	<0.1%
Had been drinking/Suspected alcohol use	10	43	58	111	0.4%
No Apparent (Vehicle) Defect	46	4,095	12,828	16,969	55.1%
Any Vehicle Defect	2	48	163	213	0.7%
Defective brakes	<1	13	32	46	0.1%
Defective steering	-	4	9	12	<0.1%
Defective headlights	<1	1	2	4	<0.1%
Defective brake lights	-	<1	3	3	<0.1%

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Contributing Factor	2008-2012 Average Count				
	Fatal	Injury	PDO	Total Collisions	% of Total Collisions
Defective lighting (unspecified)	<1	1	3	4	<0.1%
Defective engine controls/drive train	-	4	12	16	<0.1%
Defective suspension/wheels	-	3	16	19	<0.1%
Defective tires	<1	8	29	38	0.1%
Tow hitch/yoke defective	-	2	9	11	<0.1%
Defective exhaust system	<1	<1	<1	2	<0.1%
Hood/tailgate/door/covering opened	-	3	6	9	<0.1%
Defective glazing (obscured windows)	-	2	4	6	<0.1%
Vehicle modifications	-	<1	4	5	<0.1%
Fire	-	-	<1	<1	<0.1%
Overloaded/oversized	<1	<1	3	3	<0.1%
Load shifted/spilled	-	2	14	15	<0.1%
Jack-knife/trailer swing	-	<1	16	16	<0.1%
Hydroplaning tires	-	3	3	6	<0.1%
Any Environmental Condition	11	716	5,593	6,320	20.5%
Animal action - Wild	<1	209	3,543	3,753	12.2%
Animal action - Domestic	<1	18	129	147	0.5%
Slippery road surface	5	301	1,327	1,633	5.3%
Snow drift	-	17	104	121	0.4%
Obstruction/debris on roadway	<1	14	99	113	0.4%
View obstructed/limited	1	44	157	203	0.7%
Glare/reflection	<1	19	42	61	0.2%
Construction zone	-	6	27	33	0.1%
Defective driving surface	-	35	96	130	0.4%
Shoulders defective	-	5	13	18	<0.1%
Lane markings inadequate	-	2	6	7	<0.1%
Defective/inoperative traffic control device	-	3	7	10	<0.1%
Weather	2	59	178	239	0.8%
Pedestrian corridor in use	-	12	4	15	<0.1%
Uninvolved vehicle	<1	12	41	53	0.2%
Uninvolved pedestrian	-	5	8	13	<0.1%
Presence of prior accident	-	6	13	19	<0.1%
No Contributing Factor(s) Identified	16	2,126	7,452	9,594	31.1%
Not Applicable/Not Stated	-	29	89	117	0.4%
Total	86	6,269	24,468	30,823	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.
*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

While contributing factors are recorded for each vehicle and/or driver involved in a collision, examining contributing factors at the driver level does not reveal the full detail of what may have caused the collision overall. To understand the **contributing factors to a collision**, contributing factors recorded for each vehicle and/or driver involved in the collision are examined at the collision level, that is, rather than at the individual driver level. In this analysis (presented in Table 9-1 and Table 9-1a), all factors noted as contributing to the collision overall are examined.

In 2013, 77% of **all collisions** have at least one driver noted as having an at-fault contributing factor[2]. Most fatal collisions (84%) have at least one driver with an at-fault contributing factor while 74% of injury collisions do. In the previous five year (2008 to 2012) annual average, 55% of all collisions have at least one driver noted as having an at-fault contributing factor, including 87% of fatal collisions and 53% of injury collisions.

In 2013:

- 62% of all collisions have at least one driver noted as having a driver action (nearly 73% of fatal collisions; 68% of injury collisions; 60% of PDO collisions);
- 1% of all collisions have at least one driver noted as having a human condition (38% of fatal collisions; nearly 3% of injury collisions; 1% of PDO collisions);
- 17% of all collisions have some environmental condition noted as contributing to the collision (13% of fatal collisions; 8% of injury collisions; 20% of PDO collisions); and,
- Nearly 1% of all collisions have some vehicle defect noted as contributing to the collision, including three fatal collisions.

In the five year (2008 to 2012) annual average:

- 36% of all collisions have at least one driver noted as having a driver action (74% of fatal collisions; 42% of injury collisions; 34% of PDO collisions);
- 5% of all collisions have at least one driver noted as having a human condition (nearly 45% of fatal collisions; 7% of injury collisions; 4% of PDO collisions);
- Nearly 21% of all collisions have an environmental condition noted as contributing to the collision (13% of fatal collisions; 11% of injury collisions; 23% of PDO collisions); and,
- 1% of collisions have a vehicle defect noted as contributing to the collision.

The most prevalent **contributing factors recorded for collisions** in 2013 include:

- Distracted driving – 16% of all collisions (26% fatal; nearly 16% injury; 16% PDO);
- "Following too closely" – 15% of all collisions (three fatal; nearly 24% injury; nearly 13% PDO);
- The actions of a wild animal – 11% of all collisions (none fatal; 2% injury; 14% PDO);
- "Backing unsafely" – 7% of all collisions (none fatal; 2% injury; 8% PDO);
- Speed – 6% of all collisions (nearly 15% fatal; 6% injury; 6% PDO);
- "Fail to yield right-of-way" – 5% of all collisions (10% fatal; 7% injury; 4% PDO);
- "Turning improperly" – 5% of all collisions (none fatal; 6% injury; 5% PDO);
- "Slippery road surface" – 4% of all collisions (9% fatal; 4% injury; 4% PDO);
- "Changing lanes improperly" – 4% of all collisions (one fatal; 3% injury; 4% PDO); and,
- "Lost control/Drive off the road" – 4% of all collisions (23% fatal; 4% injury; 4% PDO).

NOTE: For a detailed count of contributing factors recorded for collisions occurring in each year from 2008 to 2013, please refer to "*Table 9-6 Historical Summary of Contributing Factors to a Collision*" at the end of this section.

[2] An "at-fault contributing factor" is an indication that some action or condition of the driver, vehicle or environment has been recorded as contributing to the collision. It excludes indications of the driver "driving properly" and being "apparently normal".

Table 9-2 Contributing Factors for Victims of a Collision by Casualty Type

Table 9-2
Contributing Factors for Each Victim of a Collision by Casualty Type: 2013

Contributing Factor	2013 Casualty Type								**2013 Total Casualties**	**% of 2013 Total Casualties**
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Other Injuries	% of Total Other Injuries	Total Injuries	% of Total Injuries		
Driver Action - Driving Properly and Human Condition - Apparently Normal	43	50.6%	144	46.9%	8,699	80.2%	8,843	79.3%	**8,886**	**79.1%**
Driver Action - Driving properly	3	3.5%	10	3.3%	351	3.2%	361	3.2%	**364**	**3.2%**
Any Driver Action	65	76.5%	189	61.6%	7,382	68.1%	7,571	67.9%	**7,636**	**68.0%**
Following too closely	5	5.9%	15	4.9%	2,558	23.6%	2,573	23.1%	**2,578**	**22.9%**
Turning improperly	0	-	16	5.2%	701	6.5%	717	6.4%	**717**	**6.4%**
Passing improperly	5	5.9%	4	1.3%	35	0.3%	39	0.3%	**44**	**0.4%**
Changing lanes improperly	2	2.4%	4	1.3%	263	2.4%	267	2.4%	**269**	**2.4%**
Fail to yield right-of-way	9	10.6%	26	8.5%	807	7.4%	833	7.5%	**842**	**7.5%**
Disobey traffic control device/officer	6	7.1%	11	3.6%	228	2.1%	239	2.1%	**245**	**2.2%**
Drive wrong way on roadway	1	1.2%	2	0.7%	5	<0.1%	7	<0.1%	**8**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	3	1.0%	211	1.9%	214	1.9%	**214**	**1.9%**
Parking improperly	1	1.2%	0	-	9	<0.1%	9	<0.1%	**10**	**<0.1%**
Lost control/Drive off road	18	21.2%	41	13.4%	400	3.7%	441	4.0%	**459**	**4.1%**
Driverless vehicle ran out of control	0	-	0	-	6	<0.1%	6	<0.1%	**6**	**<0.1%**
Leave stop sign before safe to do so	2	2.4%	5	1.6%	294	2.7%	299	2.7%	**301**	**2.7%**
Failed to signal	0	-	0	-	4	<0.1%	4	<0.1%	**4**	**<0.1%**
Take avoiding action	1	1.2%	4	1.3%	75	0.7%	79	0.7%	**80**	**0.7%**
Driver inexperience	1	1.2%	5	1.6%	54	0.5%	59	0.5%	**60**	**0.5%**
Pedestrian error/confusion	5	5.9%	8	2.6%	14	0.1%	22	0.2%	**27**	**0.2%**
NET Speed	14	16.5%	38	12.4%	644	5.9%	682	6.1%	**696**	**6.2%**
Exceeding speed limit	4	4.7%	8	2.6%	14	0.1%	22	0.2%	**26**	**0.2%**
Driving too fast for conditions	6	7.1%	22	7.2%	618	5.7%	640	5.7%	**646**	**5.8%**
Unsafe operating speed (Too fast or too slow)	5	5.9%	8	2.6%	16	0.1%	24	0.2%	**29**	**0.3%**
NET Distracted driving	28	32.9%	64	20.8%	1,667	15.4%	1,731	15.5%	**1,759**	**15.7%**
Careless Driving	19	22.4%	50	16.3%	1,552	14.3%	1,602	14.4%	**1,621**	**14.4%**
Distraction/Inattention	9	10.6%	14	4.6%	138	1.3%	152	1.4%	**161**	**1.4%**

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Contributing Factor	2013 Casualty Type								2013 Total Casualties	% of 2013 Total Casualties
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Other Injuries	% of Total Other Injuries	Total Injuries	% of Total Injuries		
Human Condition - Apparently Normal	24	28.2%	52	16.9%	1,047	9.7%	1,099	9.9%	**1,123**	**10.0%**
Any Human Condition	32	37.6%	62	20.2%	259	2.4%	321	2.9%	**353**	**3.1%**
Loss of consciousness/Blackout prior to collision	1	1.2%	6	2.0%	19	0.2%	25	0.2%	**26**	**0.2%**
Extreme fatigue/Fell asleep	2	2.4%	7	2.3%	30	0.3%	37	0.3%	**39**	**0.3%**
Defective eyesight	0	-	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	2	<0.1%	2	<0.1%	**2**	**<0.1%**
Physical disability	1	1.2%	0	-	3	<0.1%	3	<0.1%	**4**	**<0.1%**
Mental disability	1	1.2%	0	-	3	<0.1%	3	<0.1%	**4**	**<0.1%**
Mental confusion/Inability to remember	0	-	2	0.7%	10	<0.1%	12	0.1%	**12**	**0.1%**
Sudden illness	1	1.2%	2	0.7%	3	<0.1%	5	<0.1%	**6**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	**0**	**-**
NET Impaired	19	22.4%	32	10.4%	67	0.6%	99	0.9%	**118**	**1.1%**
Ability impaired alcohol	12	14.1%	22	7.2%	53	0.5%	75	0.7%	**87**	**0.8%**
Ability impaired drugs	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Had been drinking/Suspected alcohol use	8	9.4%	13	4.2%	23	0.2%	36	0.3%	**44**	**0.4%**
No Apparent (Vehicle) Defect	61	71.8%	176	57.3%	8,774	80.9%	8,950	80.3%	**9,011**	**80.2%**
Any Vehicle Defect	3	3.5%	5	1.6%	37	0.3%	42	0.4%	**45**	**0.4%**
Defective brakes	1	1.2%	0	-	9	<0.1%	9	<0.1%	**10**	**<0.1%**
Defective steering	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Defective headlights	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	1	1.2%	0	-	3	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective engine controls/drive train	0	-	1	0.3%	1	<0.1%	2	<0.1%	**2**	**<0.1%**
Defective suspension/wheels	0	-	2	0.7%	9	<0.1%	11	<0.1%	**11**	**<0.1%**
Defective tires	1	1.2%	1	0.3%	6	<0.1%	7	<0.1%	**8**	**<0.1%**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Fire	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Overloaded/oversized	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	3	<0.1%	3	<0.1%	**3**	**<0.1%**
Jack-knife/trailer swing	0	-	1	0.3%	3	<0.1%	4	<0.1%	**4**	**<0.1%**
Hydroplaning tires	0	-	1	0.3%	4	<0.1%	5	<0.1%	**5**	**<0.1%**

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Contributing Factor	2013 Casualty Type								**2013 Total Casualties**	**% of 2013 Total Casualties**
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Other Injuries	% of Total Other Injuries	Total Injuries	% of Total Injuries		
Any Environmental Condition	10	11.8%	39	12.7%	862	8.0%	901	8.1%	**911**	**8.1%**
Animal action - Wild	0	-	12	3.9%	228	2.1%	240	2.2%	**240**	**2.1%**
Animal action - Domestic	0	-	0	-	7	<0.1%	7	<0.1%	**7**	**<0.1%**
Slippery road surface	6	7.1%	15	4.9%	454	4.2%	469	4.2%	**475**	**4.2%**
Snow drift	0	-	0	-	16	0.1%	16	0.1%	**16**	**0.1%**
Obstruction/debris on roadway	0	-	1	0.3%	11	0.1%	12	0.1%	**12**	**0.1%**
View obstructed/limited	1	1.2%	3	1.0%	40	0.4%	43	0.4%	**44**	**0.4%**
Glare/reflection	0	-	0	-	13	0.1%	13	0.1%	**13**	**0.1%**
Construction zone	0	-	0	-	9	<0.1%	9	<0.1%	**9**	**<0.1%**
Defective driving surface	1	1.2%	2	0.7%	15	0.1%	17	0.2%	**18**	**0.2%**
Shoulders defective	0	-	1	0.3%	5	<0.1%	6	<0.1%	**6**	**<0.1%**
Lane markings inadequate	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Defective/inoperative traffic control device	1	1.2%	0	-	9	<0.1%	9	<0.1%	**10**	**<0.1%**
Weather	3	3.5%	5	1.6%	66	0.6%	71	0.6%	**74**	**0.7%**
Pedestrian corridor in use	0	-	1	0.3%	2	<0.1%	3	<0.1%	**3**	**<0.1%**
Uninvolved vehicle	0	-	0	-	7	<0.1%	7	<0.1%	**7**	**<0.1%**
Uninvolved pedestrian	0	-	0	-	2	<0.1%	2	<0.1%	**2**	**<0.1%**
Presence of prior accident	0	-	0	-	4	<0.1%	4	<0.1%	**4**	**<0.1%**
No Contributing Factor(s) Identified	10	11.8%	57	18.6%	1,319	12.2%	1,376	12.3%	**1,386**	**12.3%**
Not Applicable/Not Stated	0	-	0	-	0	-	0	-	**0**	**-**
Total	85	100%	307	100.0%	10,842	100.0%	11,149	100.0%	**11,234**	**100.0%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each casualty type will add to more than the total victims of that casualty type.
"Other Injuries" includes injuries defined as "Minor", Minimal" and "Other", or undefined in severity.

Table 9-2a Contributing Factors for Victims of a Collision by Casualty Type for Previous Five Years

Table 9-2a

Contributing Factors for Each Victim of a Collision by Casualty Type: 2008-2012 Average

Contributing Factor	2008-2012 Average Count of Casualties					
	Killed	Serious Injury	Other Injuries	Total Injuries	Total Casualties	% of Total Casualties
Driver Action - Driving Properly and Human Condition - Apparently Normal	33	147	4,756	4,903	4,936	59.7%
Driver Action - Driving properly	6	23	523	546	552	6.7%
Any Driver Action	70	193	3,383	3,576	3,645	44.1%
Following too closely	<1	6	849	855	856	10.4%
Turning improperly	2	9	246	255	257	3.1%
Passing improperly	2	3	32	35	37	0.5%
Changing lanes improperly	<1	3	111	114	114	1.4%
Fail to yield right-of-way	7	27	431	458	465	5.6%
Disobey traffic control device/officer	5	15	241	256	261	3.2%
Drive wrong way on roadway	2	2	14	15	18	0.2%
Passing a vehicle at pedestrian X-walk	<1	<1	2	2	2	<0.1%
Back unsafely	-	1	65	67	67	0.8%
Parking improperly	-	<1	5	6	6	<0.1%
Lost control/Drive off road	19	53	373	425	444	5.4%
Driverless vehicle ran out of control	-	<1	1	2	2	<0.1%
Leave stop sign before safe to do so	3	12	170	182	185	2.2%
Failed to signal	-	-	4	4	4	<0.1%
Take avoiding action	3	9	97	106	110	1.3%
Driver inexperience	2	12	114	126	129	1.6%
Pedestrian error/confusion	3	7	59	66	70	0.8%
NET Speed	25	53	528	581	606	7.3%
Exceeding speed limit	8	11	43	54	62	0.8%
Driving too fast for conditions	11	27	390	417	429	5.2%
Unsafe operating speed (Too fast or too slow)	7	16	105	122	129	1.6%
NET Distracted driving	28	57	804	861	889	10.8%
Careless Driving	19	38	469	506	526	6.4%
Distraction/Inattention	10	22	373	394	404	4.9%
Human Condition - Apparently Normal	17	72	1,811	1,883	1,900	23.0%
Any Human Condition	42	76	616	691	733	8.9%
Loss of consciousness/Blackout prior to collision	3	5	24	29	31	0.4%
Extreme fatigue/Fell asleep	1	9	41	51	52	0.6%
Defective eyesight	<1	<1	4	5	5	<0.1%
Defective hearing	<1	-	2	2	2	<0.1%
Medical disability	<1	2	8	10	10	0.1%
Physical disability	<1	<1	6	7	7	<0.1%
Mental disability	1	<1	5	6	7	<0.1%
Mental confusion/Inability to remember	<1	2	9	10	10	0.1%
Sudden illness	1	1	5	6	8	<0.1%
Exceed hours of service (commercial drivers only)	-	-	<1	<1	<1	<0.1%
NET Impaired	29	39	162	201	230	2.8%
Ability impaired alcohol	17	26	105	131	147	1.8%
Ability impaired drugs	1	1	5	7	8	<0.1%
Had been drinking/Suspected alcohol use	13	14	61	75	87	1.1%
No Apparent (Vehicle) Defect	52	189	5,226	5,416	5,468	66.2%
Any Vehicle Defect	3	6	61	68	71	0.9%
Defective brakes	<1	<1	17	18	18	0.2%
Defective steering	-	<1	3	4	4	<0.1%
Defective headlights	<1	1	3	4	4	<0.1%

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Contributing Factor	2008-2012 Average Count of Casualties					
	Killed	Serious Injury	Other Injuries	Total Injuries	Total Casualties	% of Total Casualties
Defective brake lights	-	<1	1	1	1	<0.1%
Defective lighting (unspecified)	<1	<1	<1	1	2	<0.1%
Defective engine controls/drive train	-	<1	6	6	6	<0.1%
Defective suspension/wheels	-	-	3	3	3	<0.1%
Defective tires	<1	2	10	12	13	0.2%
Tow hitch/yoke defective	-	-	3	3	3	<0.1%
Defective exhaust system	<1	<1	<1	1	2	<0.1%
Hood/tailgate/door/covering opened	-	-	4	4	4	<0.1%
Defective glazing (obscured windows)	-	-	2	2	2	<0.1%
Vehicle modifications	-	-	<1	<1	<1	<0.1%
Fire	-	-	-	-	-	-
Overloaded/oversized	<1	-	<1	<1	<1	<0.1%
Load shifted/spilled	-	<1	2	2	2	<0.1%
Jack-knife/trailer swing	-	-	2	2	2	<0.1%
Hydroplaning tires	-	<1	4	4	4	<0.1%
Any Environmental Condition	13	55	910	966	978	11.8%
Animal action - Wild	<1	12	243	254	255	3.1%
Animal action - Domestic	<1	1	20	22	22	0.3%
Slippery road surface	6	21	404	425	431	5.2%
Snow drift	-	1	22	24	24	0.3%
Obstruction/debris on roadway	<1	2	22	23	24	0.3%
View obstructed/limited	2	6	60	66	67	0.8%
Glare/reflection	<1	1	24	25	26	0.3%
Construction zone	-	<1	9	9	9	0.1%
Defective driving surface	-	5	43	47	47	0.6%
Shoulders defective	-	<1	5	5	5	<0.1%
Lane markings inadequate	-	<1	2	3	3	<0.1%
Defective/inoperative traffic control device	-	<1	4	4	4	<0.1%
Weather	3	7	83	90	93	1.1%
Pedestrian corridor in use	-	1	12	13	13	0.2%
Uninvolved vehicle	<1	<1	17	17	17	0.2%
Uninvolved pedestrian	-	<1	7	7	7	<0.1%
Presence of prior accident	-	<1	10	11	11	0.1%
No Contributing Factor(s) Identified	17	88	2,564	2,652	2,669	32.3%
Not Applicable/Not Stated	-	2	36	37	37	0.5%
Total	94	354	7,815	8,169	8,263	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.
*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each casualty type will add to more than the total victims of that casualty type.
"Other Injuries" includes injuries defined as "Minor", Minimal" and "Other", or undefined in severity.

Contributing factors recorded for each vehicle and/or driver involved in the collision are examined at the **victim level** in Table 9-2 and Table 9-2a. In this analysis, the contributing factors recorded for any driver involved in a fatal or injury collision is considered as contributing to the person being killed or injured.

In 2013, at-fault contributing factors are recorded for 74% of all **casualties**. At-fault contributing factors are recorded for:

- 86% of people killed;
- 76% of people seriously injured; and,
- 74% of victims with other injuries (including minor, minimal and undefined injuries).

In 2013, driver actions are recorded for 68% of **all victims** (nearly 77% of people killed and 62% of people seriously injured) while human conditions are recorded for 3% of all victims (38% of people killed and 20% of people seriously injured). Environmental conditions are recorded as a contributing factor for 8% of all victims (12% of people killed and 13% of people seriously injured).

In the previous five year (2008 to 2012) annual average, driver actions are recorded for 44% of all victims (74% of people killed and nearly 55% of people seriously injured) – human conditions are recorded for 9% of all victims (44% of people killed and 21% of people seriously injured). Environmental conditions are recorded as a contributing factor for 12% of all victims, including for 13% of people killed and 16% of people seriously injured.

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2013 include:

- Distracted driving – 33% of people killed and 21% of people seriously injured;
- Impaired – 22% of people killed and 10% of people seriously injured;
- "Lost control/Drive off the road" – 21% of people killed and 13% of people seriously injured;
- Speed – nearly 17% of people killed and 12% of people seriously injured;
- "Fail to yield right-of-way" – 11% of people killed and nearly 9% of people seriously injured;
- "Slippery road surface" – 7% of people killed and 5% of people seriously injured;
- "Disobey traffic control device/officer" – 7% of people killed and 4% of people seriously injured;
- "Following too closely" – 6% of people killed and 5% of people seriously injured;
- "Pedestrian error/confusion" – 6% people killed and 3% of people seriously injured;
- "Passing improperly" – 6% of people killed and 1% of people seriously injured;
- "Weather" – Nearly 4% of people killed and 2% of people seriously injured;
- "Extreme fatigue/Fell asleep" – 2% of people killed and 2% of people seriously injured;
- "Turning improperly" – none of people killed and 5% of people seriously injured; and,
- The actions of a wild animal – none of people killed and 4% of people seriously injured.

NOTE: For a detailed count of contributing factors recorded for collisions occurring in each year from 2008 to 2013, please refer to "*Table 9-7 Historical Summary of Contributing Factors Recorded for Victims of Collisions*" at the end of this section.

Table 9-3 Drivers Involved in Traffic Collisions by Contributing Factor and Collision Severity

Table 9-3
Drivers Involved in Collisions by Contributing Factors and Collision Severity: 2013

Contributing Factor	2013 Collision Severity						2013 Total Drivers	% of 2013 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	35	33.0%	7,440	47.9%	18,626	38.9%	**26,101**	**41.1%**
Driver Action - Driving properly	2	1.9%	261	1.7%	600	1.3%	**863**	**1.4%**
Any Driver Action	51	48.1%	5,953	38.3%	20,083	42.0%	**26,087**	**41.1%**
Following too closely	3	2.8%	2,055	13.2%	4,149	8.7%	**6,207**	**9.8%**
Turning improperly	0	-	538	3.5%	1,515	3.2%	**2,053**	**3.2%**
Passing improperly	3	2.8%	29	0.2%	141	0.3%	**173**	**0.3%**
Changing lanes improperly	1	0.9%	224	1.4%	1,417	3.0%	**1,642**	**2.6%**
Fail to yield right-of-way	7	6.6%	613	3.9%	1,450	3.0%	**2,070**	**3.3%**
Disobey traffic control device/officer	5	4.7%	170	1.1%	267	0.6%	**442**	**0.7%**
Drive wrong way on roadway	1	0.9%	3	<0.1%	7	<0.1%	**11**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	200	1.3%	2,627	5.5%	**2,827**	**4.5%**
Parking improperly	1	0.9%	7	<0.1%	88	0.2%	**96**	**0.2%**
Lost control/Drive off road	16	15.1%	338	2.2%	1,243	2.6%	**1,597**	**2.5%**
Driverless vehicle ran out of control	0	-	5	<0.1%	7	<0.1%	**12**	**<0.1%**
Leave stop sign before safe to do so	2	1.9%	222	1.4%	526	1.1%	**750**	**1.2%**
Failed to signal	0	-	3	<0.1%	5	<0.1%	**8**	**<0.1%**
Take avoiding action	1	0.9%	63	0.4%	344	0.7%	**408**	**0.6%**
Driver inexperience	1	0.9%	41	0.3%	103	0.2%	**145**	**0.2%**
Pedestrian error/confusion	3	2.8%	8	<0.1%	6	<0.1%	**17**	**<0.1%**
NET Speed	11	10.4%	499	3.2%	1,910	4.0%	**2,420**	**3.8%**
Exceeding speed limit	4	3.8%	8	<0.1%	3	<0.1%	**15**	**<0.1%**
Driving too fast for conditions	5	4.7%	477	3.1%	1,881	3.9%	**2,363**	**3.7%**
Unsafe operating speed (Too fast or too slow)	3	2.8%	15	<0.1%	27	<0.1%	**45**	**<0.1%**
NET Distracted driving	17	16.0%	1,349	8.7%	5,336	11.2%	**6,702**	**10.6%**
Careless Driving	11	10.4%	1,256	8.1%	5,140	10.7%	**6,407**	**10.1%**
Distraction/Inattention	6	5.7%	111	0.7%	237	0.5%	**354**	**0.6%**

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Contributing Factor	2013 Collision Severity						2013 Total Drivers	% of 2013 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	19	17.9%	786	5.1%	2,243	4.7%	**3,048**	**4.8%**
Any Human Condition	24	22.6%	215	1.4%	353	0.7%	**592**	**0.9%**
Loss of consciousness/Blackout prior to collision	1	0.9%	21	0.1%	12	<0.1%	**34**	**<0.1%**
Extreme fatigue/Fell asleep	2	1.9%	27	0.2%	34	<0.1%	**63**	**<0.1%**
Defective eyesight	0	-	0	-	2	<0.1%	**2**	**<0.1%**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	2	<0.1%	8	<0.1%	**10**	**<0.1%**
Physical disability	0	-	1	<0.1%	1	<0.1%	**2**	**<0.1%**
Mental disability	1	0.9%	3	<0.1%	0	-	**4**	**<0.1%**
Mental confusion/Inability to remember	0	-	10	<0.1%	12	<0.1%	**22**	**<0.1%**
Sudden illness	1	0.9%	4	<0.1%	3	<0.1%	**8**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	**0**	**-**
NET Impaired	14	13.2%	49	0.3%	54	0.1%	**117**	**0.2%**
Ability impaired alcohol	11	10.4%	38	0.2%	44	<0.1%	**93**	**0.1%**
Ability impaired drugs	0	-	1	<0.1%	2	<0.1%	**3**	**<0.1%**
Had been drinking/Suspected alcohol use	4	3.8%	16	0.1%	10	<0.1%	**30**	**<0.1%**
No Apparent (Vehicle) Defect	64	60.4%	7,779	50.1%	19,042	39.8%	**26,885**	**42.3%**
Any Vehicle Defect	3	2.8%	27	0.2%	158	0.3%	**188**	**0.3%**
Defective brakes	1	0.9%	5	<0.1%	8	<0.1%	**14**	**<0.1%**
Defective steering	0	-	1	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective headlights	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Defective lighting (unspecified)	1	0.9%	1	<0.1%	1	<0.1%	**3**	**<0.1%**
Defective engine controls/drive train	0	-	2	<0.1%	6	<0.1%	**8**	**<0.1%**
Defective suspension/wheels	0	-	7	<0.1%	24	<0.1%	**31**	**<0.1%**
Defective tires	1	0.9%	2	<0.1%	32	<0.1%	**35**	**<0.1%**
Tow hitch/yoke defective	0	-	0	-	15	<0.1%	**15**	**<0.1%**
Defective exhaust system	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Defective glazing (obscured windows)	0	-	0	-	2	<0.1%	**2**	**<0.1%**
Vehicle modifications	0	-	1	<0.1%	0	-	**1**	**<0.1%**
Fire	0	-	1	<0.1%	2	<0.1%	**3**	**<0.1%**
Overloaded/oversized	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	3	<0.1%	13	<0.1%	**3**	**<0.1%**

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Contributing Factor	2013 Collision Severity						2013 Total Drivers	% of 2013 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Any Environmental Condition	10	9.4%	728	4.7%	6,502	13.6%	**7,240**	**11.4%**
Animal action - Wild	0	-	209	1.3%	4,548	9.5%	**4,757**	**7.5%**
Animal action - Domestic	0	-	6	<0.1%	39	<0.1%	**45**	**<0.1%**
Slippery road surface	6	5.7%	364	2.3%	1,370	2.9%	**1,740**	**2.7%**
Snow drift	0	-	13	<0.1%	105	0.2%	**118**	**0.2%**
Obstruction/debris on roadway	0	-	11	<0.1%	142	0.3%	**153**	**0.2%**
View obstructed/limited	1	0.9%	30	0.2%	73	0.2%	**104**	**0.2%**
Glare/reflection	0	-	11	<0.1%	25	<0.1%	**36**	**<0.1%**
Construction zone	0	-	3	<0.1%	8	<0.1%	**11**	**<0.1%**
Defective driving surface	1	0.9%	14	<0.1%	45	<0.1%	**60**	**<0.1%**
Shoulders defective	0	-	6	<0.1%	4	<0.1%	**10**	**<0.1%**
Lane markings inadequate	0	-	1	<0.1%	9	<0.1%	**10**	**<0.1%**
Defective/inoperative traffic control device	1	0.9%	6	<0.1%	5	<0.1%	**12**	**<0.1%**
Weather	2	1.9%	58	0.4%	155	0.3%	**215**	**0.3%**
Pedestrian corridor in use	0	-	2	<0.1%	5	<0.1%	**7**	**<0.1%**
Uninvolved vehicle	0	-	6	<0.1%	14	<0.1%	**20**	**<0.1%**
Uninvolved pedestrian	0	-	1	<0.1%	6	<0.1%	**7**	**<0.1%**
Presence of prior accident	0	-	4	<0.1%	5	<0.1%	**9**	**<0.1%**
No Contributing Factor(s) Identified	4	3.8%	946	6.1%	2,019	4.2%	**2,969**	**4.7%**
Not Applicable/Not Stated	0	-	0	-	0	-	**0**	**-**
Total	106	100%	15,539	100.0%	47,856	100.0%	**63,501**	**100.0%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-3a Drivers Involved in Traffic Collisions by Contributing Factor and Collision Severity for Previous Five Years

Table 9-3a

Drivers Involved in Collisions by Contributing Factors and Collision Severity: 2008-2012 Average

Contributing Factor	2008-2012 Average Count				
	Fatal	Injury	PDO	Total Drivers	% of Total Drivers
Driver Action - Driving Properly and Human Condition - Apparently Normal	31	4,274	12,586	16,891	35.8%
Driver Action - Driving properly	5	413	1,490	1,908	4.0%
Any Driver Action	61	2,593	8,406	11,061	23.5%
Following too closely	1	682	1,675	2,357	5.0%
Turning improperly	2	184	647	832	1.8%
Passing improperly	2	23	103	128	0.3%
Changing lanes improperly	<1	87	570	658	1.4%
Fail to yield right-of-way	5	316	891	1,212	2.6%
Disobey traffic control device/officer	3	161	305	469	1.0%
Drive wrong way on roadway	2	7	16	25	<0.1%
Passing a vehicle at pedestrian X-walk	<1	2	<1	2	<0.1%
Back unsafely	-	62	1,040	1,102	2.3%
Parking improperly	-	4	54	58	0.1%
Lost control/Drive off road	18	293	567	878	1.9%
Driverless vehicle ran out of control	-	1	7	9	<0.1%
Leave stop sign before safe to do so	3	118	235	356	0.8%
Failed to signal	-	4	14	17	<0.1%
Take avoiding action	3	78	300	381	0.8%
Driver inexperience	2	78	220	301	0.6%
Pedestrian error/confusion	2	14	8	23	<0.1%
NET Speed	21	402	1,092	1,515	3.2%
Exceeding speed limit	7	30	49	86	0.2%
Driving too fast for conditions	10	298	974	1,282	2.7%
Unsafe operating speed (Too fast or too slow)	5	80	83	168	0.4%
NET Distracted driving	24	587	1,810	2,420	21.5%
Careless Driving	17	354	1,153	1,523	13.5%
Distraction/Inattention	8	258	704	971	8.6%
Human Condition - Apparently Normal	14	1,427	5,070	6,511	13.8%
Any Human Condition	33	429	963	1,426	3.0%
Loss of consciousness/Blackout prior to collision	2	23	16	41	<0.1%
Extreme fatigue/Fell asleep	1	37	53	91	0.2%
Defective eyesight	<1	3	8	11	<0.1%
Defective hearing	<1	<1	2	3	<0.1%
Medical disability	<1	7	7	14	<0.1%
Physical disability	-	4	8	12	<0.1%
Mental disability	<1	2	3	5	<0.1%
Mental confusion/Inability to remember	<1	7	12	20	<0.1%
Sudden illness	1	4	6	12	<0.1%
Exceed hours of service (commercial drivers only)	-	<1	<1	<1	<0.1%
NET Impaired	22	98	163	284	0.6%
Ability impaired alcohol	14	63	107	184	0.4%
Ability impaired drugs	<1	3	7	11	<0.1%
Had been drinking/Suspected alcohol use	9	37	57	103	0.2%
No Apparent (Vehicle) Defect	54	5,491	15,682	21,227	45.0%
Any Vehicle Defect	2	45	160	206	0.4%
Defective brakes	-	12	31	44	<0.1%
Defective steering	-	3	9	12	<0.1%

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Contributing Factor	2008-2012 Average Count				
	Fatal	Injury	PDO	Total Collisions	% of Total Collisions
Defective headlights	<1	1	2	4	<0.1%
Defective brake lights	-	<1	3	3	<0.1%
Defective lighting (unspecified)	-	<1	3	3	<0.1%
Defective engine controls/drive train	-	4	10	14	<0.1%
Defective suspension/wheels	-	3	16	19	<0.1%
Defective tires	<1	8	29	37	<0.1%
Tow hitch/yoke defective	-	2	9	11	<0.1%
Defective exhaust system	<1	<1	<1	2	<0.1%
Hood/tailgate/door/covering opened	-	3	5	8	<0.1%
Defective glazing (obscured windows)	-	2	4	6	<0.1%
Vehicle modifications	-	<1	4	5	<0.1%
Fire	-	-	<1	<1	<0.1%
Overloaded/oversized	<1	<1	2	3	<0.1%
Load shifted/spilled	-	2	13	15	<0.1%
Jack-knife/trailer swing	-	<1	15	16	<0.1%
Hydroplaning tires	-	3	3	6	<0.1%
Any Environmental Condition	12	746	5,702	6,460	13.7%
Animal action - Wild	<1	209	3,545	3,755	8.0%
Animal action - Domestic	<1	18	129	148	13.7%
Slippery road surface	6	323	1,399	1,728	3.7%
Snow drift	-	17	109	126	0.3%
Obstruction/debris on roadway	<1	15	100	116	0.2%
View obstructed/limited	2	46	166	214	0.5%
Glare/reflection	<1	19	42	61	0.1%
Construction zone	-	7	29	36	<0.1%
Defective driving surface	-	34	95	129	0.3%
Shoulders defective	-	5	13	18	<0.1%
Lane markings inadequate	-	2	6	8	<0.1%
Defective/inoperative traffic control device	-	3	8	11	<0.1%
Weather	3	64	186	253	0.5%
Pedestrian corridor in use	-	9	4	12	<0.1%
Uninvolved vehicle	<1	12	44	56	0.1%
Uninvolved pedestrian	-	4	9	14	<0.1%
Presence of prior accident	-	7	16	23	<0.1%
No Contributing Factor(s) Identified	11	2,450	8,789	11,251	23.9%
Not Applicable/Not Stated	-	<1	<1	1	<0.1%
Total	119	10,620	36,397	47,137	100%

Note: Counts of collisions in the 2008-2012 average may not add to the total due to rounding.
*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-3 and Table 9-3a examine the contributing factors recorded for each driver involved in a collision.

In 2013, about half of the **drivers involved in traffic collisions** (44%) are recorded as not being at-fault in the collision. Virtually all of these drivers (41% overall) are noted in the traffic accident report (TAR) as both "driving properly" and being "apparently normal" at the time of a collision. Another 1% of drivers are noted as "driving properly" while 5% are noted as being in "apparently normal" human condition. Five percent of drivers have no contributing factors recorded for the collision.

- 38% of the drivers involved in a fatal collision are noted as not being at-fault.
- 52% of the drivers in an injury collision are noted as not being at-fault.
- 41% of the drivers in a PDO collision are noted as not being at-fault.

Driver actions are recorded for 41% of the **drivers involved in traffic collisions** in 2013. This is an increase from the previous five year (2008 to 2012) annual average, where nearly 24% of drivers are recorded as being at-fault in the collision. In 2013:

- 48% of the drivers involved in **fatal collisions** have a driver action recorded, including:
  - 16% who are driving while distracted (including "careless driving" and "distraction/ inattention");
  - 15% who "lost control/ drive off road";
  - 10% who are speeding (including "exceeding speed limit", "driving too fast for conditions" and "unsafe operating speed");
  - 7% who "fail to yield right-of-way"; and,
  - 5% who "disobey traffic control device/officer";
- 38% of the drivers involved in **injury collisions** have a driver action recorded, including:
  - 13% who are "following too closely";
  - 9% who are driving while distracted;
  - 4% who "fail to yield right-of-way";
  - Nearly 4% who "turning improperly"; and,
  - 3% who are speeding;
- 42% of the drivers involved in **PDO collisions** have a driver action recorded, including:
  - 11% who are driving while distracted;
  - 9% who are "following too closely";
  - Nearly 6% who are "back unsafely"; and,
  - 4% who are speeding.

Human conditions are recorded for 1% of the **drivers involved in traffic collisions** in 2013, a decrease from the previous five year (2008 to 2012) annual average (3%). In 2013:

- 23% of the **drivers involved in fatal collisions** have a human condition recorded, including 13% who are impaired (including "ability impaired by alcohol", "ability impaired by drugs" and "had been drinking/suspected alcohol use"); and,
- 1% of the **drivers involved in injury collisions** have a human condition recorded, including 0.3% who are impaired.

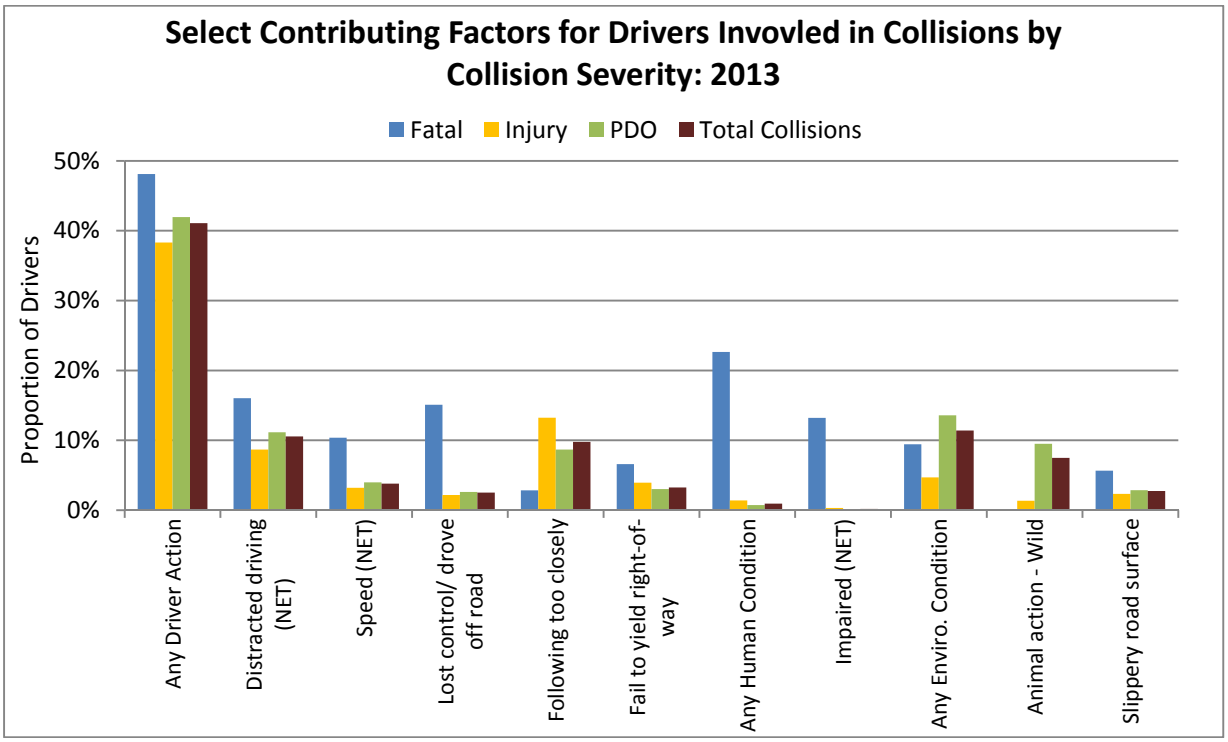
A vehicle defect is recorded for 0.3% of drivers involved in traffic collisions in 2013 (0.4% in the previous five years, 2008 to 2012, annual average).

Environmental conditions are recorded as contributing factors for 11% of **drivers involved in traffic collisions** (9% of fatal collisions, 5% of injury collisions and 14% of PDO collisions) in 2013; compare to 14% in the previous five year (2008 to 2012) annual average. In 2013:

- Nearly 8% of collisions have "animal action – wild" recorded as a contributing factor (none fatal; 1% injury);
- 3% of collisions have "slippery road surface" recorded as a contributing factor (6% fatal; 2% injury); and,
- 0.3% of collisions have "weather" recorded as a contributing factor (2% fatal).

NOTE: For a detailed count of contributing factors recorded for drivers involved in collisions occurring in each year from 2008 to 2013, please refer to "*Table 9-8 Historical Summary of Contributing Factors for Drivers Involved in Collisions*" at the end of this section.

Figure 9-1 Select Contributing Factors for Drivers Involved in Collisions by Collision Severity



While many contributing factors are recorded for the **drivers involved in traffic collisions**, generally there are only a few that account for a large proportion of traffic collisions in Manitoba. In 2013, driver actions and human conditions are most often recorded for fatal traffic collisions, with the most frequent of these being distracted driving, losing control of the vehicle, impaired driving and speeding. Driver actions and environmental conditions (including following too closely and the actions of wild animals) are the most often recorded contributing factors for PDO collisions.

Table 9-4 Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Collisions Severity

Table 9-4

Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Collision Severity: 2013, 2008-2012 Average

Contributing Factor	2013 Collision Severity			**2013 Total**	2008-2012 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Any Driver Action	0.6	69.6	234.7	**304.8**	0.8	32.5	105.5	138.8
Following too closely	<0.1	24.0	48.5	**72.5**	<0.1	8.6	21.0	29.6
Turning improperly	-	6.3	17.7	**24.0**	<0.1	2.3	8.1	10.4
Passing improperly	<0.1	0.3	1.6	**2.0**	<0.1	0.3	1.3	1.6
Changing lanes improperly	<0.1	2.6	16.6	**19.2**	<0.1	1.1	7.2	8.3
Fail to yield right-of-way	<0.1	7.2	16.9	**24.2**	<0.1	4.0	11.2	15.2
Disobey traffic control device/officer	<0.1	2.0	3.1	**5.2**	<0.1	2.0	3.8	5.9
Drive wrong way on roadway	<0.1	<0.1	<0.1	**0.1**	<0.1	<0.1	0.2	0.3
Passing a vehicle at pedestrian X-walk	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Back unsafely	-	2.3	30.7	**33.0**	-	0.8	13.1	13.8
Parking improperly	<0.1	<0.1	1.0	**1.1**	-	<0.1	0.7	0.7
Lost control/Drive off road	0.2	3.9	14.5	**18.7**	0.2	3.7	7.1	11.0
Driverless vehicle ran out of control	-	<0.1	<0.1	**0.1**	-	<0.1	<0.1	0.1
Leave stop sign before safe to do so	<0.1	2.6	6.1	**8.8**	<0.1	1.5	2.9	4.5
Failed to signal	-	<0.1	<0.1	**<0.1**	-	<0.1	0.2	0.2
Take avoiding action	<0.1	0.7	4.0	**4.8**	<0.1	1.0	3.8	4.8
Driver inexperience	<0.1	0.5	1.2	**1.7**	<0.1	1.0	2.8	3.8
Pedestrian error/confusion	<0.1	<0.1	<0.1	**0.2**	<0.1	0.2	0.1	0.3
NET Speed	0.1	5.8	22.3	**28.3**	0.3	5.0	13.7	19.0
Exceeding speed limit	<0.1	<0.1	<0.1	**0.2**	<0.1	0.4	0.6	1.1
Driving too fast for conditions	<0.1	5.6	22.0	**27.6**	0.1	3.7	12.2	16.1
Unsafe operating speed (Too fast or too slow)	<0.1	0.2	0.3	**0.5**	<0.1	1.0	1.0	2.1
NET Distracted driving	0.2	15.8	62.4	**78.3**	0.3	7.4	22.7	30.4
Careless Driving	0.1	14.7	60.1	**74.9**	0.2	4.4	14.5	19.1
Distraction/Inattention	<0.1	1.3	2.8	**4.1**	0.1	3.2	8.8	12.2
Any Human Condition	0.3	2.5	4.1	**6.9**	0.4	5.4	12.1	17.9
Loss of consciousness/Blackout prior to collision	<0.1	0.2	0.1	**0.4**	<0.1	0.3	0.2	0.5
Extreme fatigue/Fell asleep	<0.1	0.3	0.4	**0.7**	<0.1	0.5	0.7	1.1
Defective eyesight	-	-	<0.1	**<0.1**	<0.1	<0.1	<0.1	0.1
Defective hearing	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Medical disability	-	<0.1	<0.1	**0.1**	<0.1	<0.1	<0.1	0.2
Physical disability	-	<0.1	<0.1	**<0.1**	-	<0.1	0.1	0.2
Mental disability	<0.1	<0.1	-	**<0.1**	<0.1	<0.1	<0.1	<0.1

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Contributing Factor	2013 Collision Severity			2013 Total	2008-2012 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Mental confusion/Inability to remember	-	0.1	0.1	**0.3**	<0.1	<0.1	0.2	0.3
Sudden illness	<0.1	<0.1	<0.1	**<0.1**	<0.1	<0.1	<0.1	0.1
Exceed hours of service (commercial drivers only)	-	-	-	**-**	-	<0.1	<0.1	<0.1
NET Impaired	0.2	0.6	0.6	**1.4**	0.3	1.2	2.1	3.6
Ability impaired alcohol	0.1	0.4	0.5	**1.1**	0.2	0.8	1.3	2.3
Ability impaired drugs	-	<0.1	<0.1	**<0.1**	<0.1	<0.1	<0.1	0.1
Had been drinking/Suspected alcohol use	<0.1	0.2	0.1	**0.4**	0.1	0.5	0.7	1.3
Any Vehicle Defect	<0.1	0.3	1.8	**2.2**	<0.1	0.6	2.0	2.6
Defective brakes	<0.1	<0.1	<0.1	**0.2**	-	0.2	0.4	0.5
Defective steering	-	<0.1	<0.1	**<0.1**	-	<0.1	0.1	0.2
Defective headlights	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Defective brake lights	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Defective lighting (unspecified)	<0.1	<0.1	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Defective engine controls/drive train	-	<0.1	<0.1	**<0.1**	-	<0.1	0.1	0.2
Defective suspension/wheels	-	<0.1	0.3	**0.4**	-	<0.1	0.2	0.2
Defective tires	<0.1	<0.1	0.4	**0.4**	<0.1	<0.1	0.4	0.5
Tow hitch/yoke defective	-	-	0.2	**0.2**	-	<0.1	0.1	0.1
Defective exhaust system	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Hood/tailgate/door/covering opened	-	-	<0.1	**<0.1**	-	<0.1	<0.1	0.1
Defective glazing (obscured windows)	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Vehicle modifications	-	<0.1	-	**<0.1**	-	<0.1	<0.1	<0.1
Fire	-	<0.1	<0.1	**<0.1**	-	-	<0.1	<0.1
Overloaded/oversized	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Load shifted/spilled	-	<0.1	0.2	**<0.1**	-	<0.1	0.2	0.2
Jack-knife/trailer swing	-	<0.1	0.5	**0.5**	-	<0.1	0.2	0.2
Hydroplaning tires	-	<0.1	<0.1	**0.1**	-	<0.1	<0.1	<0.1
Any Environmental Condition	0.1	8.5	76.0	**84.6**	0.1	9.4	71.6	81.1
Animal action - Wild	-	2.4	53.1	**55.6**	<0.1	2.6	44.5	47.1
Animal action - Domestic	-	<0.1	0.5	**0.5**	<0.1	0.2	1.6	1.9
Slippery road surface	<0.1	4.3	16.0	**20.3**	<0.1	4.1	17.6	21.7
Snow drift	-	0.2	1.2	**1.4**	-	0.2	1.4	1.6
Obstruction/debris on roadway	-	0.1	1.7	**1.8**	<0.1	0.2	1.3	1.5
View obstructed/limited	<0.1	0.4	0.9	**1.2**	<0.1	0.6	2.1	2.7
Glare/reflection	-	0.1	0.3	**0.4**	<0.1	0.2	0.5	0.8
Construction zone	-	<0.1	<0.1	**0.1**	-	<0.1	0.4	0.4
Defective driving surface	<0.1	0.2	0.5	**0.7**	-	0.4	1.2	1.6

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Contributing Factor	2013 Collision Severity			2013 Total	2008-2012 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Shoulders defective	-	<0.1	<0.1	**0.1**	-	<0.1	0.2	0.2
Lane markings inadequate	-	<0.1	0.1	**0.1**	-	<0.1	<0.1	0.1
Defective/inoperative traffic control device	<0.1	<0.1	<0.1	**0.1**	-	<0.1	0.1	0.1
Weather	<0.1	0.7	1.8	**2.5**	<0.1	0.8	2.3	3.2
Pedestrian corridor in use	-	<0.1	<0.1	**<0.1**	-	0.1	<0.1	0.2
Uninvolved vehicle	-	<0.1	0.2	**0.2**	<0.1	0.1	0.6	0.7
Uninvolved pedestrian	-	<0.1	<0.1	**<0.1**	-	<0.1	0.1	0.2
Presence of prior accident	-	<0.1	<0.1	**0.1**	-	<0.1	0.2	0.3

Recognizing that counts of drivers involved in collisions could be impacted either positively or negatively by changing population statistics, relative involvement rates per 10,000 licensed drivers is examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on the rate at which drivers are involved in collisions instead of simply a raw count of the number of drivers involved overall.

Driver involvement rates (per 10,000 licensed drivers) in collisions where an at-fault contributing factor has been recorded generally increased in 2013 compared to the previous five years (2008 to 2012) annual average. The observed change in involvement rates compared to the previous five-year average is at least partially attributable to the change in reporting structure that took effect in October 2011. This change, discussed in detail in the 2012 Traffic Collision Statistics Report, resulted in a significant increase in the number of drivers involved in PDO collisions and less severe injury collisions being reported in the Traffic Accident Report Database than in previous years.

In 2013, the **driver involvement rate** (per 10,000 licensed drivers) in traffic collisions where:

- Any driver action is a contributing factor is 304.8, more than double the rate from the previous five years (138.8);
- Any human condition is a contributing factor is 6.9, decreased by 61% from the previous five years (17.9);
- Environmental conditions are a contributing factor is 84.6, increased by 4% from the previous five years (81.1);
- Distracted driving is a contributing factor is 78.3, more than two-and-a-half times the rate from the previous five years (30.4);
- “Following too closely” is a contributing factor is 72.5, about two-and-a-half times the rate from the previous five years (29.6);
- “Animal action - wild” is a contributing factor is 55.6, increased by 18% from the previous five years (47.1);
- “Backing unsafely” is a contributing factor is 33.0, about two-and-a-half times the rate from the previous five years 13.8);
- Speed is a contributing factor is 28.3, increased by 49% from the previous five years (19.0);
- “Fail to yield right-of-way” is a contributing factor is 24.2, increased by 59% from the previous five years (15.2);
- “Turning improperly” is a contributing factor is 24.0, more than double the rate from the previous five years (10.4);
- “Slippery road surface” is a contributing factor is 20.3, decreased by 6% from the previous five years (21.7);
- “Changing lanes improperly” is a contributing factor is 19.2, more than double the rate from the previous five years (8.3);
- “Lost control/Drove off road” is a contributing factor is 18.7, increased by 69% from the previous five years (11.0); and,
- Impaired is a contributing factor is 1.4, decreased by 62% from the previous five years (3.6).

In 2013, the **driver involvement rate** (per 10,000 licensed drivers) in **fatal traffic collisions** where:

- A driver action is a contributing factor is 0.6, decreased slightly compared to the previous five years (0.8);
- Distracted driving is a contributing factor is 0.2, decreased slightly compared to the previous five years (0.3);
- Speed is a contributing factor is 0.1, down from 0.3 in the previous five years;
- “Lost control/Drove off road” is a contributing factor is 0.2, equal to the previous five years;
- A human condition is a contributing factor is 0.3, down slightly from 0.4 in the previous five years; and,
- Impaired is a contributing factor is 0.2, down slightly from 0.3 the previous five years.

Table 9-5 Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age

Table 9-5

Driver Involvement Rate (per 10,000 Licensed Drivers) in All Collisions by Contributing Factors and Age Group: 2013

Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Any Driver Action	562.1	528.3	377.8	304.0	254.6	204.3	184.1
Following too closely	144.0	145.4	96.0	73.9	59.7	41.6	30.9
Turning improperly	39.3	36.0	31.0	21.7	19.1	18.6	18.4
Passing improperly	3.9	3.3	2.3	2.0	1.4	1.7	1.5
Changing lanes improperly	29.0	30.3	22.7	18.8	15.0	14.2	16.4
Fail to yield right-of-way	45.4	37.8	27.2	24.1	20.8	16.0	18.9
Disobey traffic control device/officer	9.3	6.9	6.6	4.8	3.7	4.0	4.5
Drive wrong way on roadway	0.2	0.3	0.1	0.2	<0.1	-	0.1
Passing a vehicle at pedestrian X-walk	-	-	-	-	-	-	-
Back unsafely	44.6	32.7	32.7	36.5	35.2	31.2	25.5
Parking improperly	0.4	1.0	1.2	0.9	1.6	0.8	1.3
Lost control/Drive off road	50.1	40.9	25.1	16.9	13.2	9.5	6.8
Driverless vehicle ran out of control	-	0.4	0.2	<0.1	0.2	<0.1	-
Leave stop sign before safe to do so	17.4	11.3	8.6	9.0	6.6	6.7	8.9
Failed to signal	0.4	0.1	0.1	<0.1	0.1	-	-
Take avoiding action	9.3	12.2	6.6	5.1	3.3	2.7	0.9
Driver inexperience	8.5	4.5	1.9	0.8	1.2	0.4	0.2
Pedestrian error/confusion	-	-	0.5	0.2	0.1	0.2	0.1
NET Speed	62.9	56.0	41.7	28.0	20.9	14.5	10.8
Exceeding speed limit	0.2	0.5	0.4	0.1	<0.1	-	<0.1
Driving too fast for conditions	60.6	54.5	40.2	27.7	20.5	14.5	10.7
Unsafe operating speed (Too fast or too slow)	2.2	1.0	1.1	0.1	0.4	<0.1	<0.1
NET Distracted driving	137.1	139.1	96.0	78.0	65.5	52.8	48.8
Careless Driving	131.0	134.3	91.9	74.5	62.5	50.5	45.9
Distraction/Inattention	7.3	6.3	5.0	4.3	3.2	2.7	3.4
Any Human Condition	14.6	11.4	8.9	6.6	4.6	4.2	5.6
Loss of consciousness/Blackout prior to collision	0.4	0.4	0.3	0.3	0.3	0.4	0.8
Extreme fatigue/Fell asleep	2.8	1.0	1.5	0.3	0.4	0.4	0.3
Defective eyesight	-	-	<0.1	<0.1	-	-	-
Defective hearing	-	-	-	-	-	-	-
Medical disability	-	-	-	<0.1	0.1	0.1	0.3
Physical disability	-	-	-	-	<0.1	-	<0.1
Mental disability	-	0.1	0.1	-	-	-	<0.1
Mental confusion/Inability to remember	0.2	-	0.3	0.1	<0.1	<0.1	0.8
Sudden illness	-	0.1	<0.1	-	0.1	-	0.3
Exceed hours of service (commercial drivers only)	-	-	-	-	-	-	-
NET Impaired	4.1	3.6	1.8	1.6	0.6	0.6	0.2
Ability impaired alcohol	3.4	2.3	1.5	1.5	0.4	0.4	0.1
Ability impaired drugs	-	0.4	-	-	-	-	-
Had been drinking/Suspected alcohol use	1.2	1.2	0.3	0.2	0.2	0.2	<0.1
Any Vehicle Defect	2.8	2.7	2.9	2.1	1.9	2.7	0.8
Defective brakes	0.4	0.5	<0.1	0.3	<0.1	0.1	-
Defective steering	0.2	-	0.1	-	-	<0.1	-
Defective headlights	-	-	-	-	-	-	-
Defective brake lights	0.2	-	<0.1	-	-	<0.1	-
Defective lighting (unspecified)	-	-	<0.1	-	-	<0.1	-
Defective engine controls/drive train	0.2	0.3	0.1	-	-	0.2	-
Defective suspension/wheels	0.8	0.3	0.7	0.1	0.5	0.2	0.1
Defective tires	0.6	0.5	0.6	0.4	0.2	0.6	0.1

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Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Tow hitch/yoke defective	0.2	0.3	0.2	0.1	-	0.5	-
Defective exhaust system	-	-	-	-	-	-	-
Hood/tailgate/door/covering opened	-	-	<0.1	<0.1	<0.1	-	-
Defective glazing (obscured windows)	0.2	-	-	<0.1	-	-	-
Vehicle modifications	-	0.1	-	-	-	-	-
Fire	-	-	<0.1	-	0.1	-	-
Overloaded/oversized	-	-	-	-	-	-	-
Load shifted/spilled	-	0.1	0.2	-	0.4	0.4	<0.1
Jack-knife/trailer swing	-	0.4	0.4	0.8	0.6	0.5	0.4
Hydroplaning tires	-	0.1	0.3	0.1	<0.1	-	<0.1
Any Environmental Condition	114.2	128.1	105.4	93.8	85.7	65.3	40.2
Animal action - Wild	65.9	77.0	65.8	62.1	61.6	46.6	26.5
Animal action - Domestic	1.2	0.7	0.8	0.4	0.5	0.4	0.2
Slippery road surface	35.3	37.5	27.2	22.2	17.2	12.7	8.7
Snow drift	2.8	2.9	2.3	1.5	0.6	0.9	0.4
Obstruction/debris on roadway	1.8	2.7	2.3	2.3	1.3	1.4	1.1
View obstructed/limited	1.6	2.1	1.7	1.5	0.6	1.0	0.8
Glare/reflection	0.8	0.4	0.6	0.4	0.2	0.4	0.4
Construction zone	-	0.1	0.3	0.3	<0.1	<0.1	-
Defective driving surface	1.0	1.1	1.0	0.8	0.7	0.3	0.3
Shoulders defective	0.2	0.1	0.2	-	0.2	-	<0.1
Lane markings inadequate	-	0.1	0.1	-	<0.1	0.3	0.1
Defective/inoperative traffic control device	0.2	-	0.2	<0.1	0.2	<0.1	0.2
Weather	3.9	3.7	3.7	2.7	2.4	1.4	1.2
Pedestrian corridor in use	-	0.1	<0.1	0.1	0.1	-	<0.1
Uninvolved vehicle	0.4	0.4	0.2	0.1	0.2	0.3	0.2
Uninvolved pedestrian	0.2	0.3	0.1	-	0.1	-	-
Presence of prior accident	0.2	0.1	0.2	0.1	<0.1	<0.1	-

Table 9-5a Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age for Previous Five Years

Table 9-5a

Driver Involvement Rate (per 10,000 Licensed Drivers) in All Collisions by Contributing Factors and Age Group: 2008-2012 Average

Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Any Driver Action	296.7	238.1	151.1	120.8	95.4	84.6	82.2
Following too closely	56.2	55.9	37.0	26.3	19.9	15.9	11.7
Turning improperly	17.8	15.4	10.4	7.7	7.3	7.2	8.1
Passing improperly	2.5	2.2	1.7	1.2	1.2	0.9	1.2
Changing lanes improperly	13.3	12.4	7.9	6.4	5.6	6.0	6.4
Fail to yield right-of-way	27.5	20.6	14.4	11.3	9.8	10.7	13.1
Disobey traffic control device/officer	9.7	8.9	5.2	4.1	3.3	3.5	4.3
Drive wrong way on roadway	0.5	0.5	0.3	0.2	0.1	0.2	0.2
Passing a vehicle at pedestrian X-walk	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Back unsafely	17.8	15.2	12.7	13.6	13.0	12.5	11.1
Parking improperly	0.8	0.7	0.8	0.7	0.6	0.6	0.7
Lost control/Drive off road	36.1	23.7	13.6	9.6	7.0	5.1	4.3
Driverless vehicle ran out of control	0.3	<0.1	0.2	<0.1	0.1	<0.1	<0.1
Leave stop sign before safe to do so	8.6	5.9	4.2	3.9	3.1	2.8	4.8
Failed to signal	0.3	0.3	0.3	0.3	0.1	0.1	<0.1
Take avoiding action	10.8	9.5	5.8	5.1	3.7	2.6	1.8
Driver inexperience	35.3	6.8	2.4	4.9	0.6	0.4	0.3
Pedestrian error/confusion	0.4	0.5	0.3	0.3	0.2	0.3	0.2
NET Speed	56.9	41.3	22.7	18.0	11.4	7.9	6.0
Exceeding speed limit	5.0	3.0	1.2	0.8	0.4	0.1	0.2
Driving too fast for conditions	45.3	34.9	19.5	15.4	9.8	7.0	5.0
Unsafe operating speed (Too fast or too slow)	7.7	4.1	2.3	1.9	1.2	0.8	0.8
NET Distracted driving	67.1	56.4	33.3	25.3	20.6	18.7	19.5
Careless Driving	39.3	36.6	21.8	16.6	13.6	12.1	12.0
Distraction/Inattention	30.3	21.7	12.3	9.6	7.6	7.2	8.1
Any Human Condition	43.0	34.4	19.3	14.1	11.0	9.8	11.4
Loss of consciousness/Blackout prior to collision	0.5	0.8	0.5	0.4	0.3	0.5	0.7
Extreme fatigue/Fell asleep	3.9	2.7	1.5	0.7	0.7	0.6	0.5
Defective eyesight	0.2	<0.1	<0.1	<0.1	<0.1	0.2	0.3
Defective hearing	-	-	-	<0.1	<0.1	<0.1	0.1
Medical disability	<0.1	<0.1	0.2	<0.1	0.2	0.1	0.4
Physical disability	0.2	<0.1	0.1	0.1	<0.1	<0.1	0.3
Mental disability	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1
Mental confusion/Inability to remember	0.1	0.2	0.2	<0.1	0.1	0.1	0.9
Sudden illness	0.2	0.1	<0.1	0.1	0.1	0.1	0.3
Exceed hours of service (commercial drivers only)	-	-	-	-	<0.1	<0.1	-
NET Impaired	8.2	9.6	4.8	3.2	2.0	1.1	0.3
Ability impaired alcohol	5.1	5.7	3.2	2.2	1.5	0.8	0.2
Ability impaired drugs	0.3	0.4	0.1	<0.1	<0.1	<0.1	<0.1
Had been drinking/Suspected alcohol use	3.2	4.0	1.7	1.1	0.6	0.2	0.2
Any Vehicle Defect	5.7	4.5	2.6	2.2	2.4	1.7	0.9
Defective brakes	1.8	0.7	0.4	0.7	0.5	0.3	0.2
Defective steering	0.5	0.4	0.2	0.1	<0.1	<0.1	<0.1
Defective headlights	0.3	<0.1	<0.1	<0.1	<0.1	-	<0.1
Defective brake lights	0.1	<0.1	<0.1	<0.1	-	-	<0.1
Defective lighting (unspecified)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-
Defective engine controls/drive train	0.3	0.3	0.1	<0.1	0.2	0.2	0.1
Defective suspension/wheels	0.5	0.4	0.2	0.2	0.3	0.2	<0.1
Defective tires	1.3	1.2	0.5	0.3	0.4	0.2	0.2

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Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Tow hitch/yoke defective	-	0.1	0.3	0.1	0.1	<0.1	<0.1
Defective exhaust system	-	<0.1	<0.1	<0.1	-	<0.1	-
Hood/tailgate/door/covering opened	<0.1	0.1	0.1	<0.1	0.1	0.1	<0.1
Defective glazing (obscured windows)	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Vehicle modifications	0.1	0.2	<0.1	<0.1	<0.1	<0.1	-
Fire	-	-	<0.1	-	<0.1	-	-
Overloaded/oversized	-	-	<0.1	<0.1	<0.1	<0.1	<0.1
Load shifted/spilled	<0.1	0.2	0.2	0.2	0.2	0.2	<0.1
Jack-knife/trailer swing	0.2	0.2	0.3	0.2	0.2	0.1	<0.1
Hydroplaning tires	0.3	0.3	<0.1	<0.1	<0.1	0.1	-
Any Environmental Condition	134.8	121.2	88.9	79.4	80.7	64.3	40.2
Animal action - Wild	55.4	61.2	49.3	47.2	53.6	43.7	24.2
Animal action - Domestic	3.6	3.0	1.9	2.0	1.8	1.3	1.1
Slippery road surface	51.7	40.1	26.2	21.4	17.0	12.0	8.8
Snow drift	3.1	2.9	1.9	1.6	1.3	1.2	0.5
Obstruction/debris on roadway	2.5	2.3	1.6	1.2	1.4	1.0	0.9
View obstructed/limited	5.4	4.1	2.8	2.3	2.3	1.9	1.7
Glare/reflection	1.6	0.9	0.8	0.6	0.7	0.5	0.8
Construction zone	0.6	0.7	0.5	0.3	0.4	0.4	0.4
Defective driving surface	6.9	3.1	1.9	1.3	1.2	0.9	0.5
Shoulders defective	0.5	0.5	0.2	0.1	0.2	0.1	0.2
Lane markings inadequate	0.3	0.3	<0.1	0.1	<0.1	<0.1	<0.1
Defective/inoperative traffic control device	0.4	0.2	<0.1	<0.1	0.1	<0.1	0.1
Weather	6.5	5.6	4.1	3.1	2.4	2.3	1.4
Pedestrian corridor in use	0.1	0.3	0.2	0.1	0.1	<0.1	<0.1
Uninvolved vehicle	1.4	1.3	0.6	0.6	0.5	0.6	0.4
Uninvolved pedestrian	0.3	0.3	0.2	0.2	0.1	<0.1	0.1
Presence of prior accident	0.3	0.6	0.3	0.2	0.3	0.2	<0.1

Younger drivers, especially those under the age of 25, tend to have higher **driver involvement rates** in traffic collisions overall and in collisions where specific contributing factors are noted.

In 2013, the involvement rate in collisions for drivers aged 16 to 19 with:

- An at-fault contributing factor is:
  - 1.0 times that of drivers aged 20 to 24;
  - 1.4 times that of drivers aged 25 to 34;
  - 1.7 times that of drivers aged 35 to 44; and,
  - 2.5 times that of drivers aged 45 and older.
- A driver action as a contributing factor is:
  - 1.1 times that of drivers aged 20 to 24;
  - 1.5 times that of drivers aged 25 to 34;
  - 1.8 times that of drivers aged 35 to 44; and,
  - 2.7 times that of drivers aged 45 and older.
- A human condition as a contributing factor is:
  - 1.3 times that of drivers aged 20 to 24;
  - 1.6 times that of drivers aged 25 to 34;
  - 2.2 times that of drivers aged 35 to 44; and,
  - 3.1 times that of drivers aged 45 and older.
- “Driver inexperience” as a contributing factor is:
  - 1.9 times that of drivers aged 20 to 24;
  - 4.4 times that of drivers aged 25 to 34;
  - 10.1 times that of drivers aged 35 to 44; and,
  - 22.8 times that of drivers aged 45 and older.

In 2013, the involvement rate in collisions for drivers aged 20 to 24 with:

- An at-fault contributing factor is:
  - 1.4 times that of drivers aged 25 to 34;
  - 1.6 times that of drivers aged 35 to 44; and,
  - 2.4 times that of drivers aged 45 and older.
- A driver action as a contributing factor is:
  - 1.4 times that of drivers aged 25 to 34;
  - 1.7 times that of drivers aged 35 to 44; and,
  - 2.5 times that of drivers aged 45 and older.
- A human condition as a contributing factor is:
  - 1.3 times that of drivers aged 25 to 34;
  - 1.7 times that of drivers aged 35 to 44; and,
  - 2.4 times that of drivers aged 45 and older.
- "Driver inexperience" as a contributing factor is:
  - 2.4 times that of drivers aged 25 to 34;
  - 5.4 times that of drivers aged 35 to 44; and,
  - 12.1 times that of drivers aged 45 and older.

As with **driver involvement rates** in traffic collisions overall, many drivers in specific age groups experienced increases in their involvement in specific contributing factors when comparing 2013 to the previous five years (2008 to 2012) annual average while some experienced decreases. It is possible that this is partially due to a change in the reporting requirements that affects many PDO and minimal injury collisions that were not captured or reported in the Traffic Accident Report Database in the past.

Table 9-6 Historical Summary of Contributing Factors to a Collision Overall

Table 9-6

Summary of Contributing Factors to a Collision: 2008 to 2013

Contributing Factor	2008 Total Collisions	% of 2008 Total Collisions	2009 Total Collisions	% of 2009 Total Collisions	2010 Total Collisions	% of 2010 Total Collisions	2011 Total Collisions	% of 2011 Total Collisions	2012 Total Collisions	% of 2012 Total Collisions	**2013 Total Collisions**	**% of 2013 Total Collisions**
Driver Action - Driving Properly and Human Condition - Apparently Normal	11,269	41.6%	11,196	42.1%	12,438	45.8%	17,016	49.6%	25,573	65.6%	**25,005**	**59.8%**
Driver Action - Driving properly	2,156	8.0%	2,421	9.1%	2,363	8.7%	1,907	5.6%	843	2.2%	**858**	**2.1%**
Any Driver Action	7,358	27.2%	7,236	27.2%	7,387	27.2%	12,785	37.3%	20,260	52.0%	**25,859**	**61.8%**
Following too closely	984	3.6%	1,088	4.1%	1,400	5.2%	2,945	8.6%	5,247	13.5%	**6,190**	**14.8%**
Turning improperly	508	1.9%	572	2.2%	701	2.6%	861	2.5%	1,527	3.9%	**2,046**	**4.9%**
Passing improperly	120	0.4%	124	0.5%	137	0.5%	134	0.4%	129	0.3%	**169**	**0.4%**
Changing lanes improperly	305	1.1%	363	1.4%	436	1.6%	823	2.4%	1,351	3.5%	**1,615**	**3.9%**
Fail to yield right-of-way	1,108	4.1%	1,134	4.3%	1,091	4.0%	1,400	4.1%	1,378	3.5%	**2,062**	**4.9%**
Disobey traffic control device/officer	508	1.9%	479	1.8%	493	1.8%	525	1.5%	357	0.9%	**443**	**1.1%**
Drive wrong way on roadway	31	0.1%	26	<0.1%	38	0.1%	42	0.1%	9	<0.1%	**12**	**<0.1%**
Passing a vehicle at pedestrian X-walk	3	<0.1%	3	<0.1%	2	<0.1%	1	<0.1%	2	<0.1%	**0**	**-**
Back unsafely	469	1.7%	493	1.9%	509	1.9%	1,417	4.1%	2,634	6.8%	**2,800**	**6.7%**
Parking improperly	43	0.2%	46	0.2%	46	0.2%	98	0.3%	104	0.3%	**104**	**0.2%**
Lost control/Drive off road	915	3.4%	849	3.2%	582	2.1%	992	2.9%	1,064	2.7%	**1,598**	**3.8%**
Driverless vehicle ran out of control	10	<0.1%	10	<0.1%	10	<0.1%	11	<0.1%	18	<0.1%	**12**	**<0.1%**
Leave stop sign before safe to do so	269	1.0%	259	1.0%	316	1.2%	438	1.3%	493	1.3%	**745**	**1.8%**
Failed to signal	24	<0.1%	17	<0.1%	12	<0.1%	18	<0.1%	16	<0.1%	**8**	**<0.1%**
Take avoiding action	333	1.2%	412	1.6%	357	1.3%	425	1.2%	356	0.9%	**408**	**1.0%**
Driver inexperience	478	1.8%	348	1.3%	253	0.9%	282	0.8%	161	0.4%	**144**	**0.3%**
Pedestrian error/confusion	91	0.3%	88	0.3%	86	0.3%	76	0.2%	29	<0.1%	**31**	**<0.1%**
NET Speed	1,518	5.6%	1,436	5.4%	1,078	4.0%	1,627	4.7%	1,891	4.9%	**2,418**	**5.8%**
Exceeding speed limit	140	0.5%	117	0.4%	103	0.4%	57	0.2%	16	<0.1%	**14**	**<0.1%**
Driving too fast for conditions	1,207	4.5%	1,078	4.1%	838	3.1%	1,443	4.2%	1,813	4.7%	**2,362**	**5.6%**
Unsafe operating speed (Too fast or too slow)	198	0.7%	280	1.1%	159	0.6%	143	0.4%	67	0.2%	**45**	**0.1%**
NET Distracted driving	1,876	6.9%	1,630	6.1%	1,534	5.6%	2,415	7.0%	4,780	12.3%	**6,709**	**16.0%**
Careless Driving	662	2.4%	628	2.4%	460	1.7%	1,451	4.2%	4,474	11.5%	**6,409**	**15.3%**
Distraction/Inattention	1,306	4.8%	1,087	4.1%	1,135	4.2%	1,038	3.0%	372	1.0%	**359**	**0.9%**
Human Condition - Apparently Normal	6,528	24.1%	5,826	21.9%	5,657	20.8%	5,894	17.2%	6,983	17.9%	**2,990**	**7.1%**

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Contributing Factor	2008 Total Collisions	% of 2008 Total Collisions	2009 Total Collisions	% of 2009 Total Collisions	2010 Total Collisions	% of 2010 Total Collisions	2011 Total Collisions	% of 2011 Total Collisions	2012 Total Collisions	% of 2012 Total Collisions	**2013 Total Collisions**	**% of 2013 Total Collisions**
Any Human Condition	1,923	7.1%	1,685	6.3%	1,691	6.2%	1,429	4.2%	607	1.6%	**599**	**1.4%**
Loss of consciousness/Blackout prior to collision	47	0.2%	37	0.1%	50	0.2%	44	0.1%	33	<0.1%	**34**	**<0.1%**
Extreme fatigue/Fell asleep	114	0.4%	95	0.4%	97	0.4%	88	0.3%	63	0.2%	**63**	**0.2%**
Defective eyesight	15	<0.1%	16	<0.1%	8	<0.1%	6	<0.1%	12	<0.1%	**2**	**<0.1%**
Defective hearing	6	<0.1%	2	<0.1%	5	<0.1%	2	<0.1%	1	<0.1%	**0**	**-**
Medical disability	12	<0.1%	23	<0.1%	19	<0.1%	11	<0.1%	6	<0.1%	**10**	**<0.1%**
Physical disability	19	<0.1%	18	<0.1%	11	<0.1%	16	<0.1%	1	<0.1%	**3**	**<0.1%**
Mental disability	15	<0.1%	6	<0.1%	11	<0.1%	6	<0.1%	2	<0.1%	**4**	**<0.1%**
Mental confusion/Inability to remember	23	<0.1%	25	<0.1%	21	<0.1%	21	<0.1%	13	<0.1%	**22**	**<0.1%**
Sudden illness	14	<0.1%	17	<0.1%	8	<0.1%	10	<0.1%	10	<0.1%	**8**	**<0.1%**
Exceed hours of service (commercial drivers only)	1	<0.1%	1	<0.1%	0	-	1	<0.1%	0	-	**0**	**-**
NET Impaired	396	1.5%	405	1.5%	373	1.4%	230	0.7%	123	0.3%	**119**	**0.3%**
Ability impaired alcohol	253	0.9%	263	1.0%	229	0.8%	147	0.4%	97	0.2%	**94**	**0.2%**
Ability impaired drugs	19	<0.1%	16	<0.1%	12	<0.1%	10	<0.1%	1	<0.1%	**3**	**<0.1%**
Had been drinking/Suspected alcohol use	144	0.5%	151	0.6%	152	0.6%	80	0.2%	30	<0.1%	**31**	**<0.1%**
No Apparent (Vehicle) Defect	13,499	49.8%	13,072	49.2%	14,097	51.9%	17,843	52.0%	26,336	67.6%	**24,908**	**59.6%**
Any Vehicle Defect	239	0.9%	214	0.8%	227	0.8%	223	0.7%	163	0.4%	**189**	**0.5%**
Defective brakes	54	0.2%	50	0.2%	68	0.3%	40	0.1%	17	<0.1%	**14**	**<0.1%**
Defective steering	12	<0.1%	17	<0.1%	17	<0.1%	13	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective headlights	3	<0.1%	7	<0.1%	6	<0.1%	4	<0.1%	0	-	**0**	**-**
Defective brake lights	8	<0.1%	1	<0.1%	3	<0.1%	3	<0.1%	1	<0.1%	**3**	**<0.1%**
Defective lighting (unspecified)	3	<0.1%	7	<0.1%	7	<0.1%	5	<0.1%	0	-	**3**	**<0.1%**
Defective engine controls/drive train	20	<0.1%	17	<0.1%	23	<0.1%	13	<0.1%	6	<0.1%	**8**	**<0.1%**
Defective suspension/wheels	11	<0.1%	11	<0.1%	19	<0.1%	27	<0.1%	25	<0.1%	**31**	**<0.1%**
Defective tires	41	0.2%	35	0.1%	41	0.2%	46	0.1%	27	<0.1%	**35**	**<0.1%**
Tow hitch/yoke defective	9	<0.1%	5	<0.1%	10	<0.1%	18	<0.1%	14	<0.1%	**15**	**<0.1%**
Defective exhaust system	3	<0.1%	1	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	**0**	**-**
Hood/tailgate/door/covering opened	11	<0.1%	23	<0.1%	3	<0.1%	4	<0.1%	4	<0.1%	**3**	**<0.1%**
Defective glazing (obscured windows)	7	<0.1%	12	<0.1%	5	<0.1%	2	<0.1%	3	<0.1%	**2**	**<0.1%**
Vehicle modifications	15	<0.1%	3	<0.1%	1	<0.1%	2	<0.1%	2	<0.1%	**1**	**<0.1%**
Fire	0	-	0	-	1	<0.1%	0	-	2	<0.1%	**3**	**<0.1%**
Overloaded/oversized	2	<0.1%	4	<0.1%	4	<0.1%	5	<0.1%	2	<0.1%	**0**	**-**
Load shifted/spilled	23	<0.1%	10	<0.1%	9	<0.1%	19	<0.1%	15	<0.1%	**16**	**<0.1%**
Jack-knife/trailer swing	12	<0.1%	9	<0.1%	6	<0.1%	16	<0.1%	39	0.1%	**44**	**0.1%**
Hydroplaning tires	8	<0.1%	7	<0.1%	7	<0.1%	6	<0.1%	4	<0.1%	**10**	**<0.1%**

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Contributing Factor	2008 Total Collisions	% of 2008 Total Collisions	2009 Total Collisions	% of 2009 Total Collisions	2010 Total Collisions	% of 2010 Total Collisions	2011 Total Collisions	% of 2011 Total Collisions	2012 Total Collisions	% of 2012 Total Collisions	**2013 Total Collisions**	**% of 2013 Total Collisions**
Any Environmental Condition	5,742	21.2%	5,764	21.7%	5,320	19.6%	8,143	23.7%	6,631	17.0%	**7,231**	**17.3%**
Animal action - Wild	2,922	10.8%	3,035	11.4%	3,133	11.5%	4,706	13.7%	4,967	12.7%	**4,756**	**11.4%**
Animal action - Domestic	148	0.5%	149	0.6%	175	0.6%	223	0.7%	41	0.1%	**45**	**0.1%**
Slippery road surface	1,821	6.7%	1,868	7.0%	1,214	4.5%	2,111	6.2%	1,151	3.0%	**1,737**	**4.2%**
Snow drift	166	0.6%	89	0.3%	126	0.5%	207	0.6%	15	<0.1%	**118**	**0.3%**
Obstruction/debris on roadway	113	0.4%	71	0.3%	117	0.4%	149	0.4%	116	0.3%	**152**	**0.4%**
View obstructed/limited	215	0.8%	224	0.8%	212	0.8%	296	0.9%	66	0.2%	**106**	**0.3%**
Glare/reflection	79	0.3%	54	0.2%	63	0.2%	84	0.2%	26	<0.1%	**36**	**<0.1%**
Construction zone	28	0.1%	35	0.1%	26	<0.1%	49	0.1%	27	<0.1%	**11**	**<0.1%**
Defective driving surface	124	0.5%	146	0.5%	138	0.5%	199	0.6%	45	0.1%	**60**	**0.1%**
Shoulders defective	18	<0.1%	19	<0.1%	26	<0.1%	22	<0.1%	4	<0.1%	**10**	**<0.1%**
Lane markings inadequate	5	<0.1%	9	<0.1%	10	<0.1%	7	<0.1%	6	<0.1%	**10**	**<0.1%**
Defective/inoperative traffic control device	9	<0.1%	14	<0.1%	9	<0.1%	11	<0.1%	6	<0.1%	**12**	**<0.1%**
Weather	257	0.9%	206	0.8%	223	0.8%	353	1.0%	158	0.4%	**214**	**0.5%**
Pedestrian corridor in use	19	<0.1%	17	<0.1%	10	<0.1%	15	<0.1%	16	<0.1%	**7**	**<0.1%**
Uninvolved vehicle	86	0.3%	57	0.2%	49	0.2%	58	0.2%	14	<0.1%	**20**	**<0.1%**
Uninvolved pedestrian	15	<0.1%	20	<0.1%	9	<0.1%	15	<0.1%	8	<0.1%	**8**	**<0.1%**
Presence of prior accident	30	0.1%	23	<0.1%	18	<0.1%	20	<0.1%	4	<0.1%	**9**	**<0.1%**
No Contributing Factor(s) Identified	11,757	43.4%	11,523	43.4%	11,909	43.8%	9,276	27.0%	3,507	9.0%	**3,126**	**7.5%**
Not Applicable/Not Stated	4	<0.1%	8	<0.1%	5	<0.1%	570	1.7%	0	-	**0**	**-**
Total	27,092	100%	26,578	100%	27,172	100%	34,302	100%	38,972	100%	**41,819**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-7 Historical Summary of Contributing Factors Recorded for Victims of Collisions

Table 9-7

Summary of Contributing Factors for Victims (Killed and Injured, Combined) of Collisions: 2008 to 2013

Contributing Factor	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	2012 Total Victims	% of 2012 Total Victims	**2013 Total Victims**	**% of 2013 Total Victims**
Driver Action - Driving Properly and Human Condition - Apparently Normal	3,743	47.2%	3,507	48.0%	3,762	52.8%	4,990	59.9%	8,678	81.7%	**8,886**	**79.1%**
Driver Action - Driving properly	611	7.7%	685	9.4%	630	8.8%	486	5.8%	348	3.3%	**364**	**3.2%**
Any Driver Action	3,200	40.4%	2,802	38.4%	2,641	37.0%	3,717	44.6%	5,866	55.2%	**7,636**	**68.0%**
Following too closely	361	4.6%	359	4.9%	420	5.9%	950	11.4%	2,191	20.6%	**2,578**	**22.9%**
Turning improperly	175	2.2%	190	2.6%	202	2.8%	284	3.4%	434	4.1%	**717**	**6.4%**
Passing improperly	31	0.4%	26	0.4%	36	0.5%	41	0.5%	53	0.5%	**44**	**0.4%**
Changing lanes improperly	57	0.7%	55	0.8%	66	0.9%	123	1.5%	270	2.5%	**269**	**2.4%**
Fail to yield right-of-way	440	5.6%	408	5.6%	408	5.7%	518	6.2%	550	5.2%	**842**	**7.5%**
Disobey traffic control device/officer	317	4.0%	287	3.9%	247	3.5%	258	3.1%	194	1.8%	**245**	**2.2%**
Drive wrong way on roadway	21	0.3%	7	<0.1%	19	0.3%	25	0.3%	17	0.2%	**8**	**<0.1%**
Passing a vehicle at pedestrian X-walk	3	<0.1%	3	<0.1%	1	<0.1%	1	<0.1%	2	<0.1%	**0**	**-**
Back unsafely	26	0.3%	25	0.3%	31	0.4%	68	0.8%	184	1.7%	**214**	**1.9%**
Parking improperly	3	<0.1%	5	<0.1%	2	<0.1%	11	0.1%	8	<0.1%	**10**	**<0.1%**
Lost control/Drive off road	631	8.0%	544	7.5%	357	5.0%	366	4.4%	324	3.0%	**459**	**4.1%**
Driverless vehicle ran out of control	0	-	3	<0.1%	2	<0.1%	1	<0.1%	2	<0.1%	**6**	**<0.1%**
Leave stop sign before safe to do so	176	2.2%	150	2.1%	186	2.6%	211	2.5%	202	1.9%	**301**	**2.7%**
Failed to signal	5	<0.1%	6	<0.1%	0	-	4	<0.1%	7	<0.1%	**4**	**<0.1%**
Take avoiding action	144	1.8%	137	1.9%	109	1.5%	91	1.1%	67	0.6%	**80**	**0.7%**
Driver inexperience	230	2.9%	151	2.1%	114	1.6%	92	1.1%	56	0.5%	**60**	**0.5%**
Pedestrian error/confusion	89	1.1%	87	1.2%	83	1.2%	64	0.8%	25	0.2%	**27**	**0.2%**
NET Speed	805	10.2%	670	9.2%	457	6.4%	553	6.6%	543	5.1%	**696**	**6.2%**
Exceeding speed limit	107	1.4%	83	1.1%	80	1.1%	27	0.3%	15	0.1%	**26**	**0.2%**
Driving too fast for conditions	560	7.1%	357	4.9%	286	4.0%	448	5.4%	492	4.6%	**646**	**5.8%**
Unsafe operating speed (Too fast or too slow)	160	2.0%	249	3.4%	112	1.6%	85	1.0%	37	0.3%	**29**	**0.3%**
NET Distracted driving	991	12.5%	782	10.7%	709	9.9%	715	8.6%	1,249	11.8%	**1,759**	**15.7%**
Careless Driving	480	6.1%	358	4.9%	276	3.9%	403	4.8%	1,111	10.5%	**1,621**	**14.4%**
Distraction/Inattention	578	7.3%	458	6.3%	473	6.6%	348	4.2%	164	1.5%	**161**	**1.4%**

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Contributing Factor	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	2012 Total Victims	% of 2012 Total Victims	**2013 Total Victims**	**% of 2013 Total Victims**
Human Condition - Apparently Normal	2,090	26.4%	1,732	23.7%	1,747	24.5%	1,665	20.0%	2,264	21.3%	**1,123**	**10.0%**
Any Human Condition	1,021	12.9%	871	11.9%	816	11.4%	642	7.7%	315	3.0%	**353**	**3.1%**
Loss of consciousness/Blackout prior to collision	42	0.5%	27	0.4%	40	0.6%	28	0.3%	20	0.2%	**26**	**0.2%**
Extreme fatigue/Fell asleep	71	0.9%	65	0.9%	47	0.7%	51	0.6%	26	0.2%	**39**	**0.3%**
Defective eyesight	8	0.1%	6	<0.1%	3	<0.1%	3	<0.1%	5	<0.1%	**0**	**-**
Defective hearing	6	<0.1%	0	-	2	<0.1%	1	<0.1%	0	-	**0**	**-**
Medical disability	10	0.1%	14	0.2%	10	0.1%	11	0.1%	5	<0.1%	**2**	**<0.1%**
Physical disability	6	<0.1%	10	0.1%	9	0.1%	9	0.1%	0	-	**4**	**<0.1%**
Mental disability	12	0.2%	2	<0.1%	9	0.1%	9	0.1%	3	<0.1%	**4**	**<0.1%**
Mental confusion/Inability to remember	13	0.2%	11	0.2%	12	0.2%	9	0.1%	7	<0.1%	**12**	**0.1%**
Sudden illness	8	0.1%	12	0.2%	4	<0.1%	9	0.1%	5	<0.1%	**6**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	1	<0.1%	0	-	0	-	0	-	**0**	**-**
NET Impaired	312	3.9%	293	4.0%	248	3.5%	190	2.3%	106	1.0%	**118**	**1.1%**
Ability impaired alcohol	189	2.4%	185	2.5%	165	2.3%	122	1.5%	76	0.7%	**87**	**0.8%**
Ability impaired drugs	19	0.2%	5	<0.1%	9	0.1%	5	<0.1%	1	<0.1%	**1**	**<0.1%**
Had been drinking/Suspected alcohol use	130	1.6%	117	1.6%	87	1.2%	68	0.8%	34	0.3%	**44**	**0.4%**
No Apparent (Vehicle) Defect	4,582	57.8%	4,066	55.7%	4,340	60.9%	5,341	64.1%	9,009	84.8%	**9,011**	**80.2%**
Any Vehicle Defect	74	0.9%	93	1.3%	114	1.6%	49	0.6%	23	0.2%	**45**	**0.4%**
Defective brakes	19	0.2%	29	0.4%	27	0.4%	8	<0.1%	9	<0.1%	**10**	**<0.1%**
Defective steering	6	<0.1%	6	<0.1%	4	<0.1%	4	<0.1%	0	-	**1**	**<0.1%**
Defective headlights	5	<0.1%	4	<0.1%	11	0.2%	2	<0.1%	0	-	**0**	**-**
Defective brake lights	0	-	0	-	3	<0.1%	0	-	3	<0.1%	**0**	**-**
Defective lighting (unspecified)	1	<0.1%	1	<0.1%	4	<0.1%	3	<0.1%	0	-	**4**	**<0.1%**
Defective engine controls/drive train	7	<0.1%	7	<0.1%	13	0.2%	3	<0.1%	0	-	**2**	**<0.1%**
Defective suspension/wheels	3	<0.1%	3	<0.1%	6	<0.1%	3	<0.1%	0	-	**11**	**<0.1%**
Defective tires	7	<0.1%	10	0.1%	20	0.3%	23	0.3%	3	<0.1%	**8**	**<0.1%**
Tow hitch/yoke defective	3	<0.1%	2	<0.1%	8	0.1%	1	<0.1%	1	<0.1%	**0**	**-**
Defective exhaust system	7	<0.1%	1	<0.1%	1	<0.1%	0	-	3	<0.1%	**0**	**-**
Hood/tailgate/door/covering opened	4	<0.1%	12	0.2%	2	<0.1%	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	1	<0.1%	7	<0.1%	2	<0.1%	0	-	2	<0.1%	**0**	**-**
Vehicle modifications	1	<0.1%	0	-	1	<0.1%	1	<0.1%	0	-	**1**	**<0.1%**
Fire	0	-	0	-	0	-	0	-	0	-	**1**	**<0.1%**
Overloaded/oversized	0	-	2	<0.1%	1	<0.1%	0	-	0	-	**0**	**-**
Load shifted/spilled	8	0.1%	0	-	1	<0.1%	0	-	1	<0.1%	**3**	**<0.1%**
Jack-knife/trailer swing	1	<0.1%	4	<0.1%	3	<0.1%	0	-	0	-	**4**	**<0.1%**
Hydroplaning tires	2	<0.1%	8	0.1%	8	0.1%	2	<0.1%	1	<0.1%	**5**	**<0.1%**

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Contributing Factor	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	2012 Total Victims	% of 2012 Total Victims	**2013 Total Victims**	**% of 2013 Total Victims**
Any Environmental Condition	986	12.4%	1,042	14.3%	979	13.7%	1,172	14.1%	713	6.7%	**911**	**8.1%**
Animal action - Wild	241	3.0%	246	3.4%	239	3.4%	275	3.3%	274	2.6%	**240**	**2.1%**
Animal action - Domestic	29	0.4%	21	0.3%	20	0.3%	39	0.5%	1	<0.1%	**7**	**<0.1%**
Slippery road surface	434	5.5%	498	6.8%	374	5.2%	558	6.7%	290	2.7%	**475**	**4.2%**
Snow drift	34	0.4%	18	0.2%	27	0.4%	39	0.5%	1	<0.1%	**16**	**0.1%**
Obstruction/debris on roadway	27	0.3%	22	0.3%	30	0.4%	29	0.3%	10	<0.1%	**12**	**0.1%**
View obstructed/limited	63	0.8%	96	1.3%	67	0.9%	89	1.1%	22	0.2%	**44**	**0.4%**
Glare/reflection	29	0.4%	21	0.3%	31	0.4%	32	0.4%	17	0.2%	**13**	**0.1%**
Construction zone	8	0.1%	10	0.1%	15	0.2%	5	<0.1%	9	<0.1%	**9**	**<0.1%**
Defective driving surface	42	0.5%	44	0.6%	77	1.1%	58	0.7%	16	0.2%	**18**	**0.2%**
Shoulders defective	3	<0.1%	4	<0.1%	10	0.1%	7	<0.1%	1	<0.1%	**6**	**<0.1%**
Lane markings inadequate	3	<0.1%	3	<0.1%	2	<0.1%	5	<0.1%	1	<0.1%	**1**	**<0.1%**
Defective/inoperative traffic control device	2	<0.1%	10	0.1%	3	<0.1%	5	<0.1%	1	<0.1%	**10**	**<0.1%**
Weather	77	1.0%	102	1.4%	99	1.4%	120	1.4%	69	0.6%	**74**	**0.7%**
Pedestrian corridor in use	18	0.2%	21	0.3%	6	<0.1%	11	0.1%	11	0.1%	**3**	**<0.1%**
Uninvolved vehicle	25	0.3%	22	0.3%	23	0.3%	14	0.2%	3	<0.1%	**7**	**<0.1%**
Uninvolved pedestrian	10	0.1%	8	0.1%	4	<0.1%	7	<0.1%	5	<0.1%	**2**	**<0.1%**
Presence of prior accident	8	0.1%	17	0.2%	16	0.2%	13	0.2%	0	-	**4**	**<0.1%**
No Contributing Factor(s) Identified	3,229	40.7%	3,005	41.2%	2,900	40.7%	2,605	31.2%	1,605	15.1%	**1,386**	**12.3%**
Not Applicable/Not Stated	5	<0.1%	2	<0.1%	1	<0.1%	178	2.1%	0	-	**0**	**-**
Total	7,924	100%	7,302	100%	7,130	100%	8,337	100%	10,623	100%	**11,234**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each year will add to more than the total victims for that year.

Table 9-8 Historical Summary of Contributing Factors Recorded for Drivers Involved in Collisions

Table 9-8
Summary of Contributing Factors for Drivers Involved in Collisions: 2008 to 2013

Contributing Factor	2008 Total Drivers	% of 2008 Total Drivers	2009 Total Drivers	% of 2009 Total Drivers	2010 Total Drivers	% of 2010 Total Drivers	2011 Total Drivers	% of 2011 Total Drivers	2012 Total Drivers	% of 2012 Total Drivers	**2013 Total Drivers**	**% of 2013 Total Drivers**
Driver Action - Driving Properly and Human Condition - Apparently Normal	12,041	28.6%	11,958	29.1%	13,243	31.3%	18,204	35.5%	29,010	49.3%	**26,101**	**41.1%**
Driver Action - Driving properly	2,123	5.0%	2,397	5.8%	2,297	5.4%	1,882	3.7%	843	1.4%	**863**	**1.4%**
Any Driver Action	7,368	17.5%	7,313	17.8%	7,422	17.5%	12,805	25.0%	20,397	34.6%	**26,087**	**41.1%**
Following too closely	1,001	2.4%	1,110	2.7%	1,433	3.4%	2,973	5.8%	5,269	8.9%	**6,207**	**9.8%**
Turning improperly	503	1.2%	572	1.4%	700	1.7%	859	1.7%	1,528	2.6%	**2,053**	**3.2%**
Passing improperly	117	0.3%	124	0.3%	139	0.3%	131	0.3%	129	0.2%	**173**	**0.3%**
Changing lanes improperly	307	0.7%	362	0.9%	438	1.0%	821	1.6%	1,363	2.3%	**1,642**	**2.6%**
Fail to yield right-of-way	1,092	2.6%	1,123	2.7%	1,084	2.6%	1,393	2.7%	1,370	2.3%	**2,070**	**3.3%**
Disobey traffic control device/officer	496	1.2%	480	1.2%	493	1.2%	521	1.0%	356	0.6%	**442**	**0.7%**
Drive wrong way on roadway	23	<0.1%	22	<0.1%	29	<0.1%	40	<0.1%	9	<0.1%	**11**	**<0.1%**
Passing a vehicle at pedestrian X-walk	3	<0.1%	3	<0.1%	2	<0.1%	1	<0.1%	2	<0.1%	**0**	**-**
Back unsafely	464	1.1%	479	1.2%	498	1.2%	1,406	2.7%	2,665	4.5%	**2,827**	**4.5%**
Parking improperly	33	<0.1%	37	<0.1%	37	<0.1%	80	0.2%	101	0.2%	**96**	**0.2%**
Lost control/Drive off road	913	2.2%	849	2.1%	578	1.4%	986	1.9%	1,062	1.8%	**1,597**	**2.5%**
Driverless vehicle ran out of control	6	<0.1%	7	<0.1%	7	<0.1%	7	<0.1%	16	<0.1%	**12**	**<0.1%**
Leave stop sign before safe to do so	267	0.6%	259	0.6%	317	0.7%	440	0.9%	495	0.8%	**750**	**1.2%**
Failed to signal	24	<0.1%	17	<0.1%	11	<0.1%	18	<0.1%	16	<0.1%	**8**	**<0.1%**
Take avoiding action	337	0.8%	428	1.0%	355	0.8%	433	0.8%	353	0.6%	**408**	**0.6%**
Driver inexperience	468	1.1%	344	0.8%	249	0.6%	281	0.5%	161	0.3%	**145**	**0.2%**
Pedestrian error/confusion	26	<0.1%	23	<0.1%	22	<0.1%	20	<0.1%	26	<0.1%	**17**	**<0.1%**
NET Speed	1,530	3.6%	1,453	3.5%	1,082	2.6%	1,621	3.2%	1,890	3.2%	**2,420**	**3.8%**
Exceeding speed limit	137	0.3%	117	0.3%	103	0.2%	56	0.1%	16	<0.1%	**15**	**<0.1%**
Driving too fast for conditions	1,222	2.9%	1,095	2.7%	841	2.0%	1,441	2.8%	1,813	3.1%	**2,363**	**3.7%**
Unsafe operating speed (Too fast or too slow)	196	0.5%	278	0.7%	159	0.4%	139	0.3%	66	0.1%	**45**	**<0.1%**
NET Distracted driving	1,848	4.4%	1,613	3.9%	1,492	3.5%	2,382	4.6%	4,767	8.1%	**6,702**	**10.6%**
Careless Driving	650	1.5%	623	1.5%	445	1.1%	1,437	2.8%	4,461	7.6%	**6,407**	**10.1%**
Distraction/Inattention	1,286	3.1%	1,075	2.6%	1,105	2.6%	1,018	2.0%	372	0.6%	**354**	**0.6%**

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Contributing Factor	2008 Total Drivers	% of 2008 Total Drivers	2009 Total Drivers	% of 2009 Total Drivers	2010 Total Drivers	% of 2010 Total Drivers	2011 Total Drivers	% of 2011 Total Drivers	2012 Total Drivers	% of 2012 Total Drivers	**2013 Total Drivers**	**% of 2013 Total Drivers**
Human Condition - Apparently Normal	7,065	16.8%	6,309	15.4%	6,033	14.3%	6,111	11.9%	7,037	12.0%	**3,048**	**4.8%**
Any Human Condition	1,865	4.4%	1,637	4.0%	1,630	3.9%	1,397	2.7%	602	1.0%	**592**	**0.9%**
Loss of consciousness/Blackout prior to collision	45	0.1%	35	<0.1%	50	0.1%	44	<0.1%	33	<0.1%	**34**	**<0.1%**
Extreme fatigue/Fell asleep	113	0.3%	95	0.2%	97	0.2%	87	0.2%	63	0.1%	**63**	**<0.1%**
Defective eyesight	15	<0.1%	15	<0.1%	8	<0.1%	6	<0.1%	12	<0.1%	**2**	**<0.1%**
Defective hearing	4	<0.1%	2	<0.1%	4	<0.1%	2	<0.1%	1	<0.1%	**0**	**-**
Medical disability	12	<0.1%	23	<0.1%	19	<0.1%	12	<0.1%	6	<0.1%	**10**	**<0.1%**
Physical disability	18	<0.1%	15	<0.1%	10	<0.1%	16	<0.1%	1	<0.1%	**2**	**<0.1%**
Mental disability	7	<0.1%	6	<0.1%	8	<0.1%	2	<0.1%	2	<0.1%	**4**	**<0.1%**
Mental confusion/Inability to remember	23	<0.1%	24	<0.1%	20	<0.1%	20	<0.1%	13	<0.1%	**22**	**<0.1%**
Sudden illness	14	<0.1%	16	<0.1%	8	<0.1%	10	<0.1%	10	<0.1%	**8**	**<0.1%**
Exceed hours of service (commercial drivers only)	1	<0.1%	1	<0.1%	0	-	1	<0.1%	0	-	**0**	**-**
NET Impaired	367	0.9%	374	0.9%	344	0.8%	217	0.4%	118	0.2%	**117**	**0.2%**
Ability impaired alcohol	234	0.6%	246	0.6%	209	0.5%	139	0.3%	93	0.2%	**93**	**0.1%**
Ability impaired drugs	18	<0.1%	16	<0.1%	11	<0.1%	10	<0.1%	1	<0.1%	**3**	**<0.1%**
Had been drinking/Suspected alcohol use	133	0.3%	137	0.3%	142	0.3%	75	0.1%	29	<0.1%	**30**	**<0.1%**
No Apparent (Vehicle) Defect	16,885	40.1%	16,395	39.9%	17,631	41.7%	21,567	42.1%	33,658	57.2%	**26,885**	**42.3%**
Any Vehicle Defect	231	0.5%	206	0.5%	216	0.5%	216	0.4%	163	0.3%	**188**	**0.3%**
Defective brakes	50	0.1%	48	0.1%	65	0.2%	39	<0.1%	17	<0.1%	**14**	**<0.1%**
Defective steering	11	<0.1%	17	<0.1%	17	<0.1%	13	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective headlights	3	<0.1%	7	<0.1%	6	<0.1%	3	<0.1%	0	-	**0**	**-**
Defective brake lights	8	<0.1%	1	<0.1%	3	<0.1%	3	<0.1%	1	<0.1%	**3**	**<0.1%**
Defective lighting (unspecified)	3	<0.1%	4	<0.1%	6	<0.1%	4	<0.1%	0	-	**3**	**<0.1%**
Defective engine controls/drive train	18	<0.1%	14	<0.1%	20	<0.1%	13	<0.1%	6	<0.1%	**8**	**<0.1%**
Defective suspension/wheels	11	<0.1%	11	<0.1%	19	<0.1%	27	<0.1%	25	<0.1%	**31**	**<0.1%**
Defective tires	41	<0.1%	33	<0.1%	40	<0.1%	46	<0.1%	27	<0.1%	**35**	**<0.1%**
Tow hitch/yoke defective	9	<0.1%	5	<0.1%	10	<0.1%	17	<0.1%	14	<0.1%	**15**	**<0.1%**
Defective exhaust system	3	<0.1%	1	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	**0**	**-**
Hood/tailgate/door/covering opened	11	<0.1%	22	<0.1%	2	<0.1%	2	<0.1%	4	<0.1%	**3**	**<0.1%**
Defective glazing (obscured windows)	6	<0.1%	12	<0.1%	5	<0.1%	2	<0.1%	3	<0.1%	**2**	**<0.1%**
Vehicle modifications	17	<0.1%	3	<0.1%	0	-	2	<0.1%	2	<0.1%	**1**	**<0.1%**
Fire	0	-	0	-	1	<0.1%	0	-	2	<0.1%	**3**	**<0.1%**
Overloaded/oversized	2	<0.1%	4	<0.1%	3	<0.1%	4	<0.1%	2	<0.1%	**0**	**-**
Load shifted/spilled	22	<0.1%	10	<0.1%	9	<0.1%	19	<0.1%	15	<0.1%	**16**	**<0.1%**
Jack-knife/trailer swing	11	<0.1%	9	<0.1%	6	<0.1%	16	<0.1%	39	<0.1%	**43**	**<0.1%**
Hydroplaning tires	8	<0.1%	7	<0.1%	7	<0.1%	6	<0.1%	4	<0.1%	**10**	**<0.1%**

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Contributing Factor	2008 Total Drivers	% of 2008 Total Drivers	2009 Total Drivers	% of 2009 Total Drivers	2010 Total Drivers	% of 2010 Total Drivers	2011 Total Drivers	% of 2011 Total Drivers	2012 Total Drivers	% of 2012 Total Drivers	**2013 Total Drivers**	**% of 2013 Total Drivers**
Any Environmental Condition	5,959	14.1%	5,964	14.5%	5,490	13.0%	8,256	16.1%	6,630	11.3%	**7,240**	**11.4%**
Animal action - Wild	2,926	6.9%	3,036	7.4%	3,137	7.4%	4,708	9.2%	4,969	8.4%	**4,757**	**7.5%**
Animal action - Domestic	148	0.4%	149	0.4%	175	0.4%	226	0.4%	41	<0.1%	**45**	**<0.1%**
Slippery road surface	1,972	4.7%	2,012	4.9%	1,316	3.1%	2,190	4.3%	1,152	2.0%	**1,740**	**2.7%**
Snow drift	171	0.4%	96	0.2%	132	0.3%	215	0.4%	15	<0.1%	**118**	**0.2%**
Obstruction/debris on roadway	116	0.3%	74	0.2%	125	0.3%	147	0.3%	116	0.2%	**153**	**0.2%**
View obstructed/limited	231	0.5%	240	0.6%	229	0.5%	305	0.6%	65	0.1%	**104**	**0.2%**
Glare/reflection	77	0.2%	53	0.1%	65	0.2%	84	0.2%	26	<0.1%	**36**	**<0.1%**
Construction zone	32	<0.1%	37	<0.1%	32	<0.1%	51	<0.1%	27	<0.1%	**11**	**<0.1%**
Defective driving surface	124	0.3%	145	0.4%	135	0.3%	198	0.4%	45	<0.1%	**60**	**<0.1%**
Shoulders defective	17	<0.1%	19	<0.1%	26	<0.1%	22	<0.1%	4	<0.1%	**10**	**<0.1%**
Lane markings inadequate	5	<0.1%	10	<0.1%	11	<0.1%	8	<0.1%	6	<0.1%	**10**	**<0.1%**
Defective/inoperative traffic control device	11	<0.1%	14	<0.1%	11	<0.1%	12	<0.1%	6	<0.1%	**12**	**<0.1%**
Weather	280	0.7%	220	0.5%	240	0.6%	364	0.7%	159	0.3%	**215**	**0.3%**
Pedestrian corridor in use	16	<0.1%	9	<0.1%	9	<0.1%	14	<0.1%	14	<0.1%	**7**	**<0.1%**
Uninvolved vehicle	96	0.2%	59	0.1%	51	0.1%	61	0.1%	13	<0.1%	**20**	**<0.1%**
Uninvolved pedestrian	14	<0.1%	25	<0.1%	8	<0.1%	14	<0.1%	7	<0.1%	**7**	**<0.1%**
Presence of prior accident	39	<0.1%	28	<0.1%	22	<0.1%	23	<0.1%	4	<0.1%	**9**	**<0.1%**
No Contributing Factor(s) Identified	13,882	33.0%	13,445	32.7%	14,082	33.3%	11,540	22.5%	3,304	5.6%	**2,969**	**4.7%**
Not Applicable/Not Stated	1	<0.1%	2	<0.1%	2	<0.1%	0	-	0	-	**0**	**-**
Total	42,120	100%	41,097	100%	42,310	100%	51,279	100%	58,877	100%	**63,501**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-9 Summary of 'Speed', 'Distracted driving' and 'Impaired' as Contributing Factors

Table 9-9
Summary of 'Speed', 'Distracted driving' & 'Impaired' as Contributing Factors: 2008 to 2013

		2008	2009	2010	2011	2012	2008-2012 average	**2013**
NET Speed ('Exceeding speed limit', 'Driving too fast for conditions' and 'Unsafe operating speed (too fast or too slow)' combined)								
Collisions	All collisions	1,518	1,436	1,078	1,627	1,891	1,510	**2,418**
		5.6%	5.4%	4.0%	4.7%	4.9%	4.9%	**5.8%**
	Fatal collisions	21	23	20	30	17	22	**10**
		24.7%	27.7%	25.6%	31.9%	19.1%	25.9%	**14.5%**
	Injury collisions	556	424	285	348	393	401	**499**
		9.3%	7.9%	5.3%	5.5%	4.7%	6.4%	**5.7%**
Victims	All victims (killed or injured)	805	670	457	553	543	606	**696**
		10.2%	9.2%	6.4%	6.6%	5.1%	7.3%	**6.2%**
	People killed	22	24	23	37	19	25	**14**
		23.9%	27.9%	26.4%	33.6%	19.8%	26.5%	**16.5%**
	People seriously injured	76	53	43	56	35	53	**38**
		19.2%	13.8%	13.8%	16.6%	10.3%	14.9%	**12.4%**
Driver Involvement (/10,000 drivers)	All collisions	19.8	18.5	13.6	20.0	22.6	19.0	**28.3**
	Fatal collisions	0.3	0.3	0.3	0.4	0.2	0.3	**0.1**
	Injury collisions	7.3	5.5	3.6	4.3	4.7	5.0	**5.8**
NET Distracted driving ('Distraction/ inattention' and 'Careless driving' combined)								
Collisions	All collisions	1,876	1,630	1,534	2,415	4,780	2,447	**6,709**
		6.9%	6.1%	5.6%	7.0%	12.3%	7.9%	**16.0%**
	Fatal collisions	19	19	30	24	35	25	**18**
		22.4%	22.9%	38.5%	25.5%	39.3%	29.6%	**26.1%**
	Injury collisions	656	522	452	477	948	611	**1,357**
		11.0%	9.7%	8.4%	7.6%	11.4%	9.7%	**15.5%**
Victims	All victims (killed or injured)	991	782	709	715	1,249	889	**1,759**
		12.5%	10.7%	9.9%	8.6%	11.8%	10.8%	**15.7%**
	People killed	22	20	31	30	37	28	**28**
		23.9%	23.3%	35.6%	27.3%	38.5%	29.7%	**32.9%**
	People seriously injured	75	62	56	46	45	57	**64**
		18.9%	16.1%	17.9%	13.6%	13.3%	16.1%	**20.8%**
Driver Involvement (/10,000 drivers)	All collisions	24.5	21.0	19.4	29.7	57.0	30.4	**78.3**
	Fatal collisions	0.2	0.2	0.4	0.3	0.4	0.3	**0.2**
	Injury collisions	8.6	6.7	5.7	5.9	11.3	7.4	**15.8**
NET Impaired ('Impaired by alcohol', 'Impaired by drugs' and 'Had been drinking/Suspected alcohol use' combined)								
Collisions	All collisions	396	405	373	230	123	305	**119**
		1.5%	1.5%	1.4%	0.7%	0.3%	1.0%	**0.3%**
	Fatal collisions	33	23	21	21	28	25	**15**
		38.8%	27.7%	26.9%	22.3%	31.5%	29.4%	**21.7%**
	Injury collisions	151	160	135	88	36	114	**50**
		2.5%	3.0%	2.5%	1.4%	0.4%	1.8%	**0.6%**
Victims	All victims (killed or injured)	312	293	248	190	106	230	**118**
		3.9%	4.0%	3.5%	2.3%	1.0%	2.8%	**1.1%**
	People killed	38	25	22	27	32	29	**19**
		41.3%	29.1%	25.3%	24.5%	33.3%	30.6%	**22.4%**
	People seriously injured	48	46	40	38	23	39	**32**
		12.1%	12.0%	12.8%	11.3%	6.8%	11.0%	**10.4%**
Driver Involvement (/10,000 drivers)	All collisions	5.2	5.2	4.7	2.8	1.5	3.6	**1.4**
	Fatal collisions	0.4	0.3	0.3	0.3	0.3	0.3	**0.2**
	Injury collisions	2.0	2.1	1.7	1.1	0.4	1.2	**0.6**

NOTE: Proportions provided for each contributing factor in a specific category are for the count of contributing factor as a portion of all collisions in the specific category. E.g., the proportion of fatal collisions where speed is a factor is derived from the count of fatal collisions in the specific year where speed is a factor divided by the total fatal collisions in that year.

SECTION 10 - National Safety Code Monitoring Report

Introduction

This section counts the number of commercial vehicles involved in collisions, the severity of those collisions and the victims killed and injured in those collisions. This section includes only commercial vehicles with a National Safety Code (NSC).

Key Highlights

In 2013, there are 1,910 commercial vehicles involved in traffic collisions. Of these:

- 18 are involved in fatal collisions;
- 407 are involved in injury collisions; and,
- 1,485 are involved in PDO collisions.

Traffic collisions where at least one commercial vehicle is involved resulted in a total of 536 victims in 2013, including:

- 20 people killed;
- 28 people seriously injured; and,
- 335 people where the injury is minor, minimal or unspecified.

Major Elements Examined

Counts of NSC commercial vehicles involved in collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of vehicles involved in those collisions, nor does it equal the number of victims in those collisions. All collisions reported involve at least one vehicle, but may involve more than one as well. Likewise, a single collision could involve no victims, or one or more victims.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

The reader is cautioned that not all victims in a collision involving an NSC commercial vehicle will be a driver or passenger in the commercial vehicle. This section counts the number of total victims resulting from a collision where a commercial vehicle was involved, not just the victims in the commercial vehicle.

Terms and Definitions

“Collision severity”

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

“Fatal Collision”

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4,500 kg and pick-up under 4,500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4,500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"Truck greater than 4,500 kilograms (unit chassis)"

- A vehicle category that includes all straight trucks with a gross vehicle mass 4,500 kg and over on the vehicle registration. This does not include truck tractors with a fifth wheel assembly.

"Power Unit for Semi-Trailer"

- A vehicle category that includes truck tractors used for the moving of cargo in or on a trailer by means of a fifth wheel connection. This does not include pickups equipped with a fifth wheel.

"Truck (Other)"

- A vehicle category used if the type and size of truck is unknown.

"School Bus"

- A vehicle category that includes a bus authorized for the transportation of students to or from school and related school activities.

"Transit Bus (Urban)"

- A vehicle category that includes a bus used for commercial carrying of passengers within an urban area.

"Inter-City Bus"

- A vehicle category that includes a bus licensed for inter-city or provincial travel.

"Bus (Other)"

- A vehicle category that includes personal use of buses and bus type conversions, but does not include original equipment manufacturer type; for example, buses converted to motor homes.

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Pre-collision activity"

- The action of a vehicle immediately prior to involvement in a collision. This is an indication of what the vehicle was doing prior to the accident or to the driver realizing that a collision may occur and does not include vehicle maneuver to avoid the collision.

Table 10-1 NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type and Collision Severity

Table 10-1

NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type and Collision Severity: 2013, 2008-2012 Average

Vehicle Category	2013 Collision Severity						**2013 Total**	% of 2013 Total	2008-2012 Average Count of Vehicles				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Truck >4,500 kgs Unit Chassis	6	33.3%	206	50.6%	885	59.6%	**1,097**	57.4%	3	119	518	641	18.0%
Power Unit (Semi-Trailer)	8	44.4%	108	26.5%	355	23.9%	**471**	24.7%	8	103	372	482	13.6%
Truck - Other	3	16.7%	20	4.9%	72	4.8%	**95**	5.0%	7	479	1,729	2,215	62.3%
School Bus	0	-	1	0.2%	0	-	**1**	<0.1%	1	9	44	53	1.5%
Transit Bus - Urban	1	5.6%	38	9.3%	63	4.2%	**102**	5.3%	<1	28	57	86	2.4%
Para-Transit Bus	0	-	2	0.5%	4	0.3%	**6**	0.3%	-	2	3	5	0.1%
Inter-City Bus	0	-	2	0.5%	5	0.3%	**7**	0.4%	<1	6	23	29	0.8%
Bus - Other	0	-	30	7.4%	101	6.8%	**131**	6.9%	-	8	39	47	1.3%
Total	18	100%	407	100%	1,485	100%	**1,910**	100%	20	754	2,785	3,558	100%

Note: Counts of vehicles in the 2008-2012 average may not add to the total due to rounding.

In 2013, there are 1,910 commercial vehicles involved in traffic collisions. Of these:

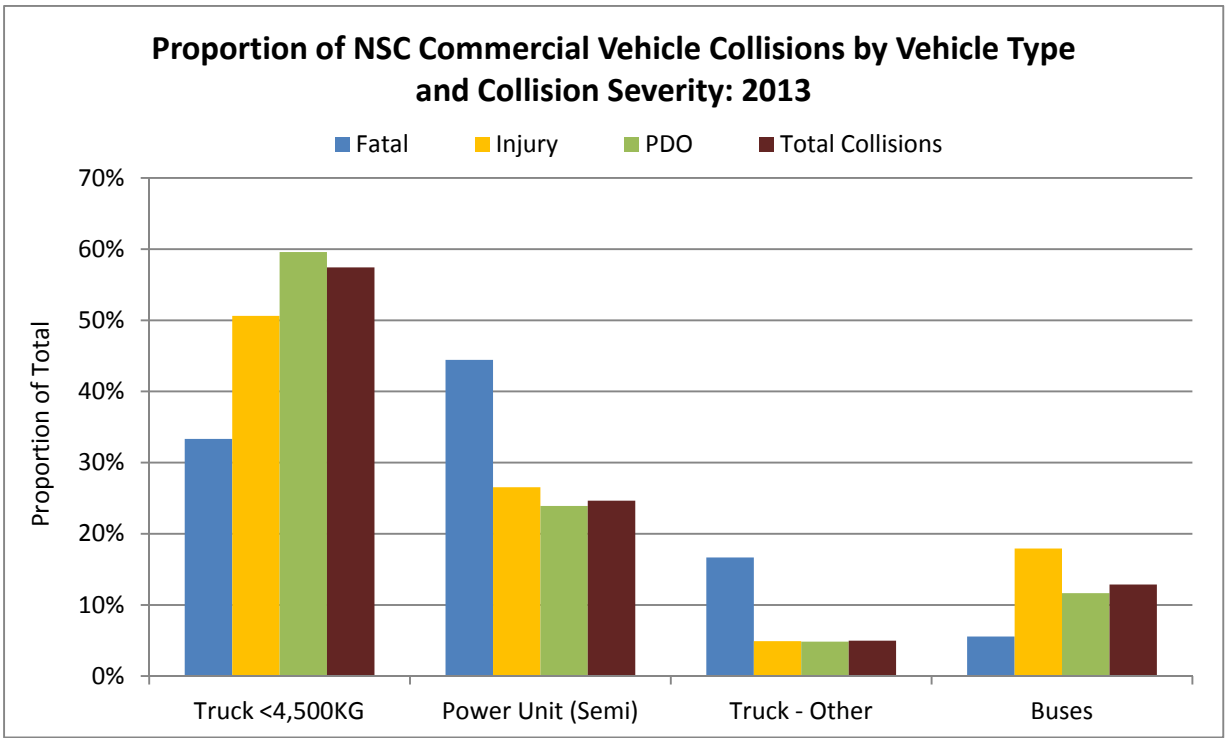
- 18 are involved in fatal collisions;
- 407 are involved in injury collisions; and,
- 1,485 are involved in PDO collisions.

The number of NSC commercial vehicles involved in collisions in 2013 has decreased substantially (by 46%, a count of 1,648) compared to the previous five year (2008 to 2012) annual average. Compared to the previous five years, the number of NSC commercial vehicles in 2013 involved in:

- Fatal collisions decreased by a count of 2;
- Injury collisions decreased by a count of 347 (a 46% decrease); and,
- PDO collisions decreased by a count of 1,300 (a 47% decrease).

NOTE: For a detailed historical count of NSC Commercial Vehicles involved in traffic collisions occurring in each year from 2008 to 2013, please refer to "*Table 10-5 Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type*" at the end of this section.

Figure 10-1 Proportion of NSC Commercial Vehicles by Vehicle Type and Collision Severity



In 2013, trucks with a unit chassis greater than 4,500 kilograms and power units for semi-trailers combined account for nearly 82% of the commercial vehicles involved in traffic collisions.

- Power units for semi-trailers account for 8 of the 18 commercial vehicles involved in fatal collisions;
- Trucks with unit chassis greater than 4,500 kilograms account for 6 of the 18 commercial vehicles involved in fatal collisions; and
- "Transit bus (urban)" accounts for 1 of the 18 commercial vehicles involved in fatal collisions.

Table 10-2 Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type

Table 10-2
Traffic Collision by NSC Commercial Vehicle Type and Casualty Type: 2013

Vehicle Type	2013 Casualty Type												**2013 Total Victims**	% of 2013 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Truck >4,500 kgs Unit Chassis	7	35.0%	7	25.0%	58	40.0%	189	56.4%	4	50.0%	258	50.0%	**265**	49.4%
Power Unit (Semi-Trailer)	8	40.0%	10	35.7%	53	36.6%	70	20.9%	2	25.0%	135	26.2%	**143**	26.7%
Truck - Other	4	20.0%	3	10.7%	9	6.2%	17	5.1%	0	-	29	5.6%	**33**	6.2%
School Bus	0	-	1	3.6%	2	1.4%	1	0.3%	1	12.5%	5	1.0%	**5**	0.9%
Transit Bus - Urban	1	5.0%	2	7.1%	14	9.7%	29	8.7%	0	-	45	8.7%	**46**	8.6%
Para-Transit Bus	0	-	0	-	0	-	2	0.6%	0	-	2	0.4%	**2**	0.4%
Inter-City Bus	0	-	0	-	0	-	2	0.6%	0	-	2	0.4%	**2**	0.4%
Bus - Other	0	-	5	17.9%	9	6.2%	25	7.5%	1	12.5%	40	7.8%	**40**	7.5%
Total	20	100%	28	100%	145	100%	335	100%	8	100%	516	100%	**536**	100%

Table 10-2a Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type for Previous Five Years

Table 10-2a
Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type: 2008-2012 Average

Vehicle Type	2008-2012 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Truck >4,500 kgs Unit Chassis	3	11	55	69	10	145	147	15.2%
Power Unit (Semi-Trailer)	8	14	56	47	8	124	132	13.7%
Truck - Other	9	23	198	276	106	602	611	63.1%
School Bus	2	1	7	4	1	13	15	1.5%
Transit Bus - Urban	<1	2	13	18	5	38	39	4.0%
Para-Transit Bus	-	-	<1	1	<1	2	2	0.2%
Inter-City Bus	<1	<1	6	2	3	11	12	1.2%
Bus - Other	-	<1	3	5	1	10	10	1.1%
Total	22	52	339	422	134	947	968	100%

Note: Counts of victims in the 2008-2012 average may not add to the total due to rounding.

Traffic collisions where at least one commercial vehicle is involved resulted in a total of 536 victims in 2013, including:

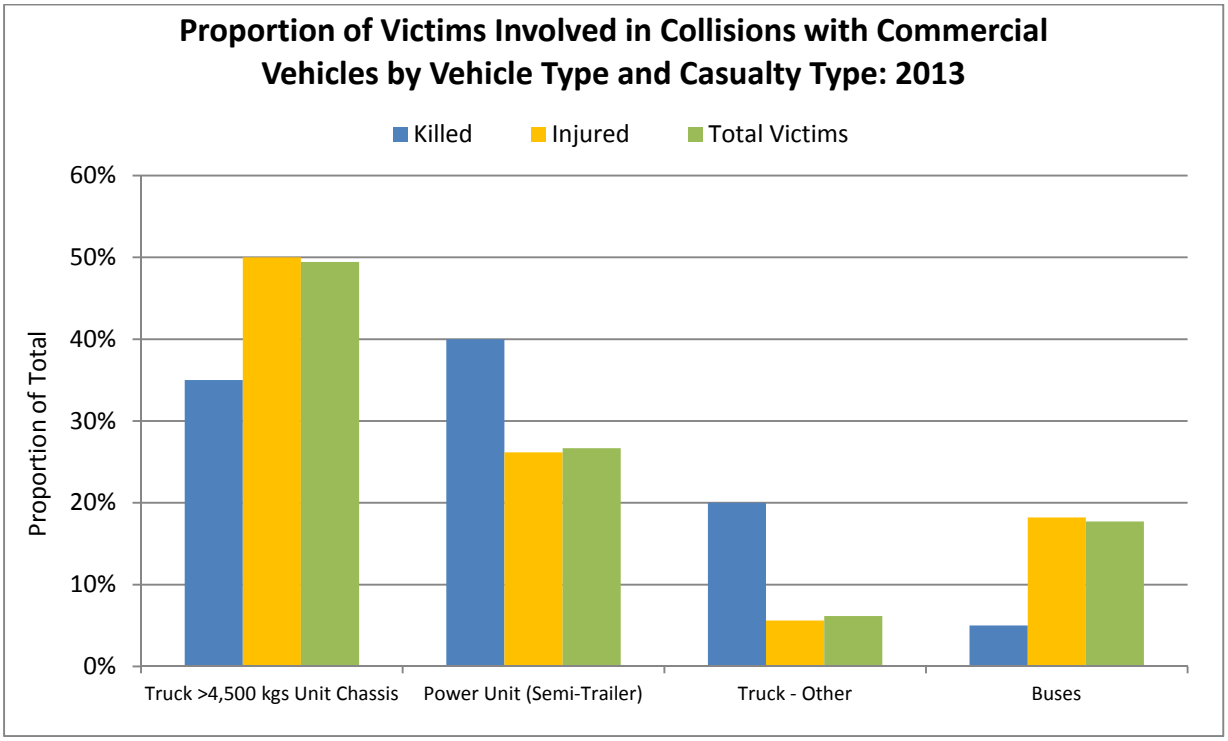
- 20 people killed;
- 28 people seriously injured; and,
- 335 people where the injury is minor, minimal or unspecified.

Collisions involving commercial vehicles in 2013 resulted in fewer people killed and injured when compared to the previous five year (2008 to 2012) annual average. In 2013:

- The number of people killed decreased by a count of 2 compared to the previous five years;
- The number of people seriously injured decreased by a count of 194 (a 57% decrease) compared to the previous five years; and,
- The number of people injured overall decreased by a count of 24 (a 46% decrease) compared to the previous five years.

NOTE: For a detailed historical count of traffic collision victims where an NSC Commercial Vehicle was involved in each year from 2008 to 2013, please refer to "*Table 10-6 Historical Summary of Traffic Collision Victims where an NSC Commercial Vehicle is Involved by Vehicle Type*" at the end of this section.

Figure 10-2 Proportion of Victims Involved in Collisions with NSC Commercial Vehicles by Vehicle Type and Casualty Type



In 2013, collisions involving trucks with unit chassis greater than 4,500 kilograms along with power units for semi-trailers make up the largest proportions of NSC vehicles involved where someone is killed (15 of 20 people killed) or injured (75% of people injured).

Table 10-3 Commercial Vehicle Involvement in Traffic Collisions by Pre-Collision Activity and Collision Severity

Table 10-3

NSC Commercial Vehicles Involved in Traffic Collisions by Pre-Collision Activity and Collision Severity: 2013, 2008-2012 Average

Pre-Collision Activity	2013 Collision Severity						**2013 Total**	**% of 2013 Total**	2008-2012 Average Count of Vehicles				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Going Straight Ahead	9	50.0%	127	31.2%	463	31.2%	**599**	31.4%	14	386	1,209	1,609	45.2%
Turning Left	0	-	25	6.1%	55	3.7%	**80**	4.2%	<1	57	192	250	7.0%
Turning Right	1	5.6%	9	2.2%	39	2.6%	**49**	2.6%	1	25	134	160	4.5%
Making U Turn	0	-	1	0.2%	5	0.3%	**6**	0.3%	-	2	9	11	0.3%
Changing Lanes – Left	0	-	7	1.7%	15	1.0%	**22**	1.2%	-	5	38	44	1.2%
Changing Lanes – Right	0	-	4	1.0%	5	0.3%	**9**	0.5%	-	8	39	47	1.3%
Merging	0	-	0	-	2	0.1%	**2**	0.1%	<1	7	28	35	1.0%
Reversing	0	-	3	0.7%	86	5.8%	**89**	4.7%	-	6	129	135	3.8%
Overtaking	0	-	0	-	3	0.2%	**3**	0.2%	<1	3	10	14	0.4%
Slowing/Stopping on Roadway	0	-	16	3.9%	39	2.6%	**55**	2.9%	-	28	91	119	3.3%
Stopped in Traffic	0	-	15	3.7%	83	5.6%	**98**	5.1%	<1	83	271	354	10.0%
Starting in Traffic	0	-	5	1.2%	8	0.5%	**13**	0.7%	-	8	21	29	0.8%
Leave Parking Position/Roadside	0	-	3	0.7%	4	0.3%	**7**	0.4%	-	2	9	10	0.3%
Enter Parking Position/Roadside	0	-	1	0.2%	11	0.7%	**12**	0.6%	-	<1	5	5	0.2%
Parked Legally	1	5.6%	1	0.2%	12	0.8%	**14**	0.7%	<1	7	112	120	3.4%
Parked Illegally	0	-	0	-	0	-	**0**	-	-	<1	4	5	0.1%
Swerving	1	5.6%	5	1.2%	6	0.4%	**12**	0.6%	<1	4	13	17	0.5%
Other	1	5.6%	4	1.0%	26	1.8%	**31**	1.6%	-	2	6	7	0.2%
Not Applicable/Unknown	5	27.8%	181	44.5%	623	42.0%	**809**	42.4%	2	122	464	587	16.5%
Total	18	100%	407	100%	1,485	100%	**1,910**	100%	20	754	2,785	3,558	100%

Note: Counts of vehicles in the 2008-2012 average may not add to the total due to rounding.

In 2013, most NSC commercial vehicles involved in a collision were “going straight ahead” when the collision occurred (31% of NSC vehicles involved in collisions; 50% of NSC vehicles involved in fatal collisions; 31% of NSC vehicles involved in injury collisions; and 31% of NSC vehicles involved in PDO collisions). In the previous five year (2008 to 2012) annual average, “going straight ahead” was noted as the pre-collision action for 45% of all commercial vehicles involved in a collision.

Other noteworthy pre-collision actions for commercial vehicles involved in collisions in 2013 include:

- Stopped or stopping (“stopped in traffic” and “slowing/stopping on roadway” combined) – 8%;
- Turning (“turning left” and “turning right” combined) – 7%; and,
- Reversing – 5% of all collisions.

Considering fatal collisions, there are very few pre-collision actions noted in 2013. “Going straight ahead” was noted for 9 of 18 vehicles involved in a fatal collision. “Turning right” was noted for one NSC vehicle involved in a fatal crash, as was “swerving”.

Commercial vehicles involved in injury collisions in 2013 were noted most often as “going straight ahead” (31%). Other pre-collision actions of commercial vehicles involved in injury collisions include:

- Turning (“turning left” and “turning right” combined) – 8%;
- Stopped or stopping (“stopped in traffic” and slowing/stopping on roadway” combined) – 8%; and,
- Changing lanes (left or right) – 3%.

Table 10-4 NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity

Table 10-4

NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity: 2013

Contributing Factor	2013 Collision Severity						2013 Total	% of 2013 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	9	50.0%	164	40.3%	559	37.6%	**732**	**38.3%**
Driver Action - Driving properly	0	-	4	1.0%	17	1.1%	**21**	**1.1%**
Any Driver Action	6	33.3%	136	33.4%	481	32.4%	**623**	**32.6%**
Follow too closely	1	5.6%	46	11.3%	85	5.7%	**132**	**6.9%**
Turning improperly	0	-	11	2.7%	60	4.0%	**71**	**3.7%**
Passing improperly	0	-	2	0.5%	6	0.4%	**8**	**0.4%**
Changing lanes improperly	0	-	8	2.0%	44	3.0%	**52**	**2.7%**
Fail to yield right of way	2	11.1%	12	2.9%	29	2.0%	**43**	**2.3%**
Disobey traffic control device/officer	1	5.6%	0	-	8	0.5%	**9**	**0.5%**
Drive wrong way on roadway	0	-	0	-	0	-	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	3	0.7%	95	6.4%	**98**	**5.1%**
Parking improperly	0	-	0	-	0	-	**0**	**-**
Lost control/Drive off road	1	5.6%	9	2.2%	24	1.6%	**34**	**1.8%**
Driverless vehicle ran out of control	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	0	-	6	1.5%	8	0.5%	**14**	**0.7%**
Failed to signal	0	-	0	-	0	-	**0**	**-**
Take avoiding action	0	-	3	0.7%	3	0.2%	**6**	**0.3%**
Driver inexperience	0	-	0	-	5	0.3%	**5**	**0.3%**
Pedestrian error/confusion	1	5.6%	0	-	0	-	**1**	**<0.1%**
NET Speed	0	-	13	3.2%	35	2.4%	**48**	**2.5%**
Exceeding speed limit	0	-	1	0.2%	0	-	**1**	**<0.1%**
Driving too fast for conditions	0	-	10	2.5%	32	2.2%	**42**	**2.2%**
Unsafe operating speed (Too fast or too slow)	0	-	2	0.5%	3	0.2%	**5**	**0.3%**
NET Distracted driving	1	5.6%	34	8.4%	110	7.4%	**145**	**7.6%**
Careless Driving	1	5.6%	30	7.4%	93	6.3%	**124**	**6.5%**
Distraction/Inattention	0	-	5	1.2%	18	1.2%	**23**	**1.2%**

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Contributing Factor	2013 Collision Severity						2013 Total	% of 2013 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	3	16.7%	34	8.4%	132	8.9%	**169**	**8.8%**
Any Human Condition	1	5.6%	10	2.5%	22	1.5%	**33**	**1.7%**
Loss of consciousness/Blackout prior to collision	0	-	1	0.2%	0	-	**1**	**<0.1%**
Extreme fatigue/Fell asleep	0	-	1	0.2%	1	<0.1%	**2**	**0.1%**
Defective eyesight	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	0	-	**0**	**-**
Physical disability	0	-	0	-	0	-	**0**	**-**
Mental disability	1	5.6%	0	-	0	-	**1**	**<0.1%**
Mental confusion/Inability to remember	0	-	1	0.2%	0	-	**1**	**<0.1%**
Sudden illness	0	-	0	-	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	**0**	**-**
NET Impaired	0	-	3	0.7%	3	0.2%	**6**	**0.3%**
Ability impaired alcohol	0	-	3	0.7%	1	<0.1%	**4**	**0.2%**
Ability impaired drugs	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Had been drinking/Suspected alcohol use	0	-	0	-	1	<0.1%	**1**	**<0.1%**
No apparent (vehicle) defect	12	66.7%	196	48.2%	606	40.8%	**814**	**42.6%**
Any Vehicle Defect	1	5.6%	3	0.7%	24	1.6%	**28**	**1.5%**
Defective brakes	1	5.6%	0	-	0	-	**1**	**<0.1%**
Defective steering	0	-	0	-	0	-	**0**	**-**
Defective headlights	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective lighting (unspecified)	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	4	0.3%	**4**	**0.2%**
Tow hitch/yoke defective	0	-	0	-	2	0.1%	**2**	**0.1%**
Defective exhaust system	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Vehicle modifications	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	2	0.5%	4	0.3%	**6**	**0.3%**
Jack-knife/trailer swing	0	-	1	0.2%	12	0.8%	**13**	**0.7%**
Hydroplaning tires	0	-	0	-	0	-	**0**	**-**

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Contributing Factor	2013 Collision Severity						2013 Total	% of 2013 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Any Environmental Condition	2	11.1%	21	5.2%	162	10.9%	**185**	**9.7%**
Animal action - Wild	0	-	1	0.2%	123	8.3%	**124**	**6.5%**
Animal action - Domestic	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Slippery road surface	1	5.6%	12	2.9%	22	1.5%	**35**	**1.8%**
Snow drift	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Obstruction/debris on roadway	0	-	0	-	6	0.4%	**6**	**0.3%**
View obstructed/limited	0	-	2	0.5%	1	<0.1%	**3**	**0.2%**
Glare/reflection	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Construction zone	0	-	0	-	0	-	**0**	**-**
Defective driving surface	0	-	2	0.5%	0	-	**2**	**0.1%**
Shoulders defective	0	-	1	0.2%	0	-	**1**	**<0.1%**
Lane markings inadequate	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective/inoperative traffic control device	1	5.6%	0	-	0	-	**1**	**<0.1%**
Weather	0	-	3	0.7%	8	0.5%	**11**	**0.6%**
Pedestrian corridor in use	0	-	1	0.2%	0	-	**1**	**<0.1%**
Uninvolved vehicle	0	-	1	0.2%	0	-	**1**	**<0.1%**
Uninvolved pedestrian	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	1	0.2%	0	-	**1**	**<0.1%**
No Contributing Factor(s) Identified	0	-	73	17.9%	163	11.0%	**236**	**12.4%**
Not Applicable/Not Stated	0	-	0	-	0	-	**0**	**-**
Total	18	100.0%	407	100.0%	1,485	100%	**1,910**	**100.0%**

*NOTE: Each vehicle and/or driver involved in a collision can have up to three contributing factors noted. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total. An exception to this is the factors “Driver Action – Driving Properly and Human Condition – Apparently Normal”, "Driver Action – Driving Properly” and “Human Condition – Apparently Normal”, which are mutually exclusive and can be added to determine a “Driver not at-fault” total.

Table 10-4a NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity for the Previous Five Years

Table 10-4a

NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity: 2008-2012 Average

Contributing Factor	2008-2012 Average Count of Vehicles				
	Fatal	Injury	PDO	Total Vehicles	% of Total Vehicles
Driver Action - Driving Properly and Human Condition - Apparently Normal	7	261	893	1,161	32.6%
Driver Action - Driving properly	2	32	123	156	4.4%
Any Driver Action	8	161	498	667	18.7%
Follow too closely	-	28	69	97	2.7%
Turning improperly	<1	11	56	67	1.9%
Passing improperly	<1	2	13	15	0.4%
Changing lanes improperly	-	5	38	43	1.2%
Fail to yield right of way	1	19	55	75	2.1%
Disobey traffic control device/officer	<1	11	21	33	0.9%
Drive wrong way on roadway	<1	-	1	1	<0.1%
Passing a vehicle at pedestrian X-walk	-	-	-	-	-
Back unsafely	-	4	71	75	2.1%
Parking improperly	-	<1	3	4	0.1%
Lost control/Drive off road	2	26	32	60	1.7%
Driverless vehicle ran out of control	-	-	1	1	<0.1%
Leave stop sign before safe to do so	<1	8	12	20	0.6%
Failed to signal	-	<1	1	1	<0.1%
Take avoiding action	<1	8	26	35	1.0%
Driver inexperience	<1	5	15	20	0.6%
Pedestrian error/confusion	<1	1	<1	2	<0.1%
NET Speed	3	38	72	112	3.2%
Exceeding speed limit	<1	2	3	6	0.2%
Driving too fast for conditions	2	26	61	89	2.5%
Unsafe operating speed (Too fast or too slow)	<1	11	8	19	0.5%
NET Distracted driving	2	38	109	149	4.2%
Careless Driving	2	20	46	68	1.9%
Distraction/Inattention	<1	19	67	86	2.4%
Human Condition - Apparently Normal	3	103	391	497	14.0%
Any Human Condition	2	31	84	117	3.3%
Loss of consciousness/Blackout prior to collision	<1	2	2	4	0.1%
Extreme fatigue/Fell asleep	-	4	3	7	0.2%
Defective eyesight	-	<1	<1	<1	<0.1%
Defective hearing	-	-	-	-	-
Medical disability	-	<1	<1	<1	<0.1%
Physical disability	-	-	<1	<1	<0.1%
Mental disability	-	-	<1	<1	<0.1%
Mental confusion/Inability to remember	-	<1	<1	<1	<0.1%
Sudden illness	-	<1	1	2	<0.1%
Exceed hours of service (commercial drivers only)	-	-	-	-	-
NET Impaired	2	6	11	18	0.5%
Ability impaired alcohol	<1	4	7	12	0.3%
Ability impaired drugs	-	-	<1	<1	<0.1%
Had been drinking/Suspected alcohol use	<1	2	3	6	0.2%
No apparent (vehicle) defect	10	349	1,124	1,482	41.7%
Any Vehicle Defect	-	8	30	39	1.1%
Defective brakes	-	2	5	7	0.2%

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Contributing Factor	2008-2012 Average Count of Vehicles				
	Fatal	Injury	PDO	Total Vehicles	% of Total Vehicles
Defective steering	-	<1	<1	1	<0.1%
Defective headlights	-	-	<1	<1	<0.1%
Defective brake lights	-	-	<1	<1	<0.1%
Defective lighting (unspecified)	-	<1	<1	1	<0.1%
Defective engine controls/drive train	-	1	1	2	<0.1%
Defective suspension/wheels	-	<1	1	1	<0.1%
Defective tires	-	1	4	5	0.2%
Tow hitch/yoke defective	-	<1	3	3	<0.1%
Defective exhaust system	-	<1	<1	<1	<0.1%
Hood/tailgate/door/covering opened	-	<1	<1	<1	<0.1%
Defective glazing (obscured windows)	-	<1	<1	<1	<0.1%
Vehicle modifications	-	<1	<1	<1	<0.1%
Fire	-	-	<1	<1	<0.1%
Overloaded/oversized	-	<1	2	2	<0.1%
Load shifted/spilled	-	1	6	7	0.2%
Jack-knife/trailer swing	-	<1	5	5	0.2%
Hydroplaning tires	-	<1	-	<1	<0.1%
Any Environmental Condition	1	67	395	463	13.0%
Animal action - Wild	-	10	190	200	5.6%
Animal action - Domestic	-	1	12	14	0.4%
Slippery road surface	1	34	127	162	4.6%
Snow drift	-	2	12	14	0.4%
Obstruction/debris on roadway	-	2	7	9	0.3%
View obstructed/limited	-	4	19	24	0.7%
Glare/reflection	-	1	2	3	<0.1%
Construction zone	-	1	4	5	0.1%
Defective driving surface	-	3	7	11	0.3%
Shoulders defective	-	<1	3	4	0.1%
Lane markings inadequate	-	<1	<1	<1	<0.1%
Defective/inoperative traffic control device	-	<1	1	2	<0.1%
Weather	<1	8	26	35	1.0%
Pedestrian corridor in use	-	<1	<1	<1	<0.1%
Uninvolved vehicle	-	1	5	7	0.2%
Uninvolved pedestrian	-	<1	1	1	<0.1%
Presence of prior accident	-	1	2	3	<0.1%
No Contributing Factor(s) Identified	2	230	901	1,133	31.8%
Not Applicable/Not Stated	-	-	<1	<1	<0.1%
Total	20	754	2,785	3,558	100%

Note: Counts of vehicles in the 2008-2012 average may not add to the total due to rounding.
*NOTE: Each vehicle and/or driver involved in a collision can have up to three contributing factors noted. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total. An exception to this is the factors “Driver Action – Driving Properly and Human Condition – Apparently Normal”, “Driver Action – Driving Properly” and “Human Condition – Apparently Normal”, which are mutually exclusive and can be added to determine a “Driver not at-fault” total.

In 2013, 48% of the drivers of NSC vehicles involved in a collision are noted as driving properly and being in a normal human condition, including 38% as both “driving properly” and “apparently normal”, 1% as “driving properly” and 9% as “apparently normal”. Over the previous five year (2008 to 2012) annual average, half (51%) of commercial drivers involved in collisions are noted as driving properly and being in a normal human condition.

A driver action is recorded for 33% of the drivers of NSC commercial vehicles involved in traffic collisions in 2013, an increase from the previous five year (2008 to 2012) annual average (19%). A human condition is recorded for 2% of the drivers of NSC vehicles involved in traffic collisions in 2013, down slightly from the previous five year (2008 to 2012) annual average (3%).

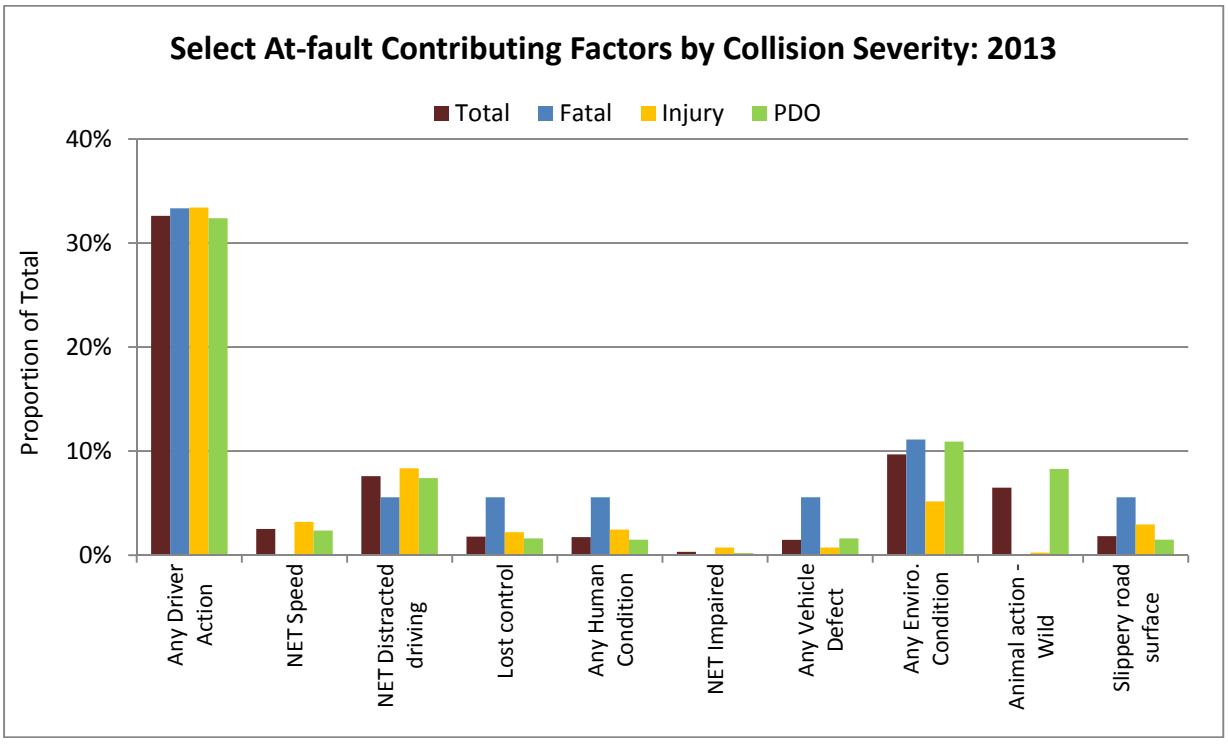
Specific driver actions and human conditions noted most often as contributing factors for drivers of NSC commercial vehicles involved a traffic collision in 2013 include:

- Distracted driving – 8% (including "careless driving" and "distraction/inattention");
- "Following too closely" – 7%;
- "Back unsafely" – 5%;
- "Turning improperly" – 4%;
- "Change lanes improperly" – 3%;
- Speed – nearly 3% (including "exceeding speed limit" "driving too fast for conditions" and "unsafe operating speed (too fast or too slow)");
- "Lost control/ drive off road" – 2%;
- "Fail to yield right of way" – 2%; and
- "Leave stop sign before safe to do so" – 1%.

A vehicle defect is recorded as a contributing factor for nearly 2% of the commercial vehicles involved in a traffic collision in 2013. This is consistent with the previous five year (2008 to 2012) annual average; vehicle defects are recorded for 1% of the commercial vehicles involved in traffic collisions.

Environmental conditions are recorded as a contributing factor for 10% of the commercial vehicles involved in traffic collisions in 2013 (down from 2008 to 2012 annual average of 13%). The two most common environmental conditions recorded for commercial vehicles involved in a traffic collision in 2013 are "the action of a wild animal" (nearly 7%) and "slippery road surface" (2%).

Figure 10-3 Select At-fault Contributing Factors for Commercial Vehicles and Drivers by Collision Severity



A driver action is recorded for 6 of 18 commercial vehicle drivers involved in fatal crashes 2013.

Table 10-5 Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type

Table 10-5

Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type: 2008 to 2013

Vehicle Category	2008 Total	% of 2008 Total	2009 Total	% of 2009 Total	2010 Total	% of 2010 Total	2011 Total	% of 2011 Total	2012 Total	% of 2012 Total	**2013 Total**	**% of 2013 Total**
Truck >4,500 kgs Unit Chassis	516	13.2%	491	12.9%	543	12.8%	721	17.4%	932	55.6%	**1,097**	**57.4%**
Power Unit (Semi-Trailer)	484	12.3%	457	12.0%	506	11.9%	546	13.2%	419	25.0%	**471**	**24.7%**
Truck - Other	2,698	68.8%	2,673	70.3%	2,961	69.7%	2,654	64.0%	88	5.3%	**95**	**5.0%**
School Bus	69	1.8%	64	1.7%	90	2.1%	44	1.1%	0	-	**1**	**<0.1%**
Transit Bus - Urban	67	1.7%	75	2.0%	96	2.3%	90	2.2%	101	6.0%	**102**	**5.3%**
Para-Transit Bus	4	0.1%	4	0.1%	1	<0.1%	8	0.2%	8	0.5%	**6**	**0.3%**
Inter-City Bus	64	1.6%	24	0.6%	26	0.6%	23	0.6%	8	0.5%	**7**	**0.4%**
Bus - Other	20	0.5%	12	0.3%	24	0.6%	58	1.4%	120	7.2%	**131**	**6.9%**
Total	3,922	100%	3,800	100%	4,247	100%	4,144	100%	1,676	100%	**1,910**	**100%**

Table 10-6 Historical Summary of Traffic Collision Victims by NSC Commercial Vehicle Type

Table 10-6

Historical Summary of Traffic Collision Victims (Killed and Injured, Combined) by NSC Commercial Vehicle Type: 2008 to 2013

Vehicle Category	2008 Total	% of 2008 Total	2009 Total	% of 2009 Total	2010 Total	% of 2010 Total	2011 Total	% of 2011 Total	2012 Total	% of 2012 Total	**2013 Total**	**% of 2013 Total**
Truck >4,500 kgs Unit Chassis	131	11.4%	132	12.4%	131	11.7%	147	14.0%	196	42.7%	**265**	**49.4%**
Power Unit (Semi-Trailer)	151	13.2%	130	12.2%	112	10.0%	113	10.8%	155	33.8%	**143**	**26.7%**
Truck - Other	792	69.2%	720	67.4%	819	73.0%	702	67.0%	22	4.8%	**33**	**6.2%**
School Bus	13	1.1%	25	2.3%	19	1.7%	17	1.6%	0	-	**5**	**0.9%**
Transit Bus - Urban	35	3.1%	32	3.0%	30	2.7%	41	3.9%	55	12.0%	**46**	**8.6%**
Para-Transit Bus	1	<0.1%	4	0.4%	0	-	2	0.2%	5	1.1%	**2**	**0.4%**
Inter-City Bus	12	1.0%	25	2.3%	5	0.4%	13	1.2%	3	0.7%	**2**	**0.4%**
Bus - Other	10	0.9%	0	-	6	0.5%	12	1.1%	23	5.0%	**40**	**7.5%**
Total	1,145	100%	1,068	100%	1,122	100%	1,047	100%	459	100%	**536**	**100%**

NOTE: Information in Table 10-7 includes all victims of collisions where an NSC commercial vehicle is involved, not only victims from the NSC vehicle.

SECTION 11 – Off-Road Vehicle Collisions

Introduction

This section counts the number of off-road vehicle (ORV) collisions in Manitoba and provides detail for collisions of different severity: fatal, injury and property damage only (PDO). Information regarding the number of ORV collisions, victims, vehicles and drivers involved over the twelve year period 2002 to 2013 is presented. Details are provided for 2013 ORV collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location, and type of collision.

Data for ORV collisions are drawn exclusively from police-reported Traffic Accident Reports (TARs). Amendments to the *Highway Traffic Act (HTA)* that took effect in October 2011 significantly affected the number of recorded ORV collisions in Manitoba. ORV collision counts between January and May 2012 are far below the 2006 to 2010 annual average. The Corporation surmises this is due to fewer traffic accident reports being taken by police because of a misunderstanding that HTA changes that took effect in October 2011 applied to ORV collisions when they did not.

Key Highlights

In 2013, there are 56 off-road vehicle collisions, involving 62 victims, 71 vehicles and 66 drivers. Of these:

- 12 are fatal collisions, involving 13 vehicles and 13 drivers, resulting in 12 people killed and 2 injured;
- 37 are injury collisions, involving 44 vehicles and 43 drivers, resulting in 48 people injured; and,
- 7 are PDO collisions, involving 14 vehicles and 10 drivers.

In 2013, ORV collisions occur most often:

- During the months from October through March, representing 31 of 56 collisions (55%).
- On Saturday and Sunday combined, representing 34 of 56 (61%) collisions.
- During daylight, representing 35 of 56 (nearly 63%) collisions.
- In the Eastern Region of Manitoba, representing 19 of 56 (34%) collisions.
- With drivers under the age of 45, 44 of 62 drivers involved in ORV collisions (71%).

Notwithstanding the overall collision trends, **fatal** ORV collisions in 2013 occur most often:

- During the months from October through to March, representing 7 of 12 fatal collisions (58%).
- On weekends (Friday, Saturday and Sunday), representing 10 of 12 fatal collisions (83%).
- Between 6 p.m. and midnight, 5 of 12 fatal collisions (42%).
- In the Eastern and South Central Regions of Manitoba combined, accounting for 8 of 12 fatal collisions (67%).
- With drivers under the age of 45, 7 of 12 drivers involved in fatal collisions (58%).

Major Elements Examined

Counts of off-road vehicle (ORV) collisions in Manitoba for 2013 and previous years are taken from Traffic Accident Reports completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable ORV collisions, fatal collisions, injury collisions and property damage only (PDO) collisions. ORV collisions are maintained in a separate database from roadway collisions. As ORV collisions occur primarily outside of roadways and road rights-of-way, most of them are not valid for inclusion in the public roadway Traffic Accident Database. However, some ORV collisions are included in the Traffic Accident Database (if they occur on a public roadway and involve a vehicle that normally operates on public roadways); therefore, statistics between this and other sections of this report are not additive.

Collisions, victims, vehicles and drivers are presented separately at the beginning of this section with counts provided for the years 2002 through 2013. The remainder of this section explores ORV collisions occurring in 2013 and provides average counts of collisions for the time period of 2008 to 2012 as a comparison.

It is important to note that the number of fatal or injury collisions is not equal to the number of fatal or injured victims as each collision can result in multiple victims. Likewise, the number of vehicles involved is not necessarily equal to the number of drivers involved as a driverless vehicle could be involved in a collision.

No statistics are calculated for off-road vehicle involvement rates due to the fact there is no reliable base population count of off-road vehicles is available. Similarly, it is difficult to establish a base count of actual riders/operators, making it difficult to calculate driver involvement rates.

"Drivers" in this section refers to the number of drivers of off-road vehicles involved in collisions. It excludes pedestrians, other types of vehicles, and driverless vehicles. In ORV collisions, there are few driverless vehicles involved, but still some.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. The terms 'fatality' and 'killed' are used interchangeably in this report.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2008 to 2012. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

When reviewing the "Contributing Factors" for a traffic collision, the reader is cautioned to note that more than one contributing factor can be recorded for each collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles or victims in those crashes.

Terms and Definitions

"Off-road Vehicle (ORV)"

- One of several vehicle types designed for off-road use. It includes snowmobiles, off-road motorcycles, all-terrain vehicles (ATVs), amphibious vehicles, dune/sport buggies, and 4-wheel drive vehicles operated off-road.

"Reportable ORV Collision"

- ORV collisions resulting in a fatality, injury or property damage in excess of $1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report (TAR) for the collision. This report deals with these reportable ORV collisions and the TARs arising from them.

"ATV"

- All Terrain Vehicle; includes vehicles with 3, 4 and 6 wheels.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed.

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal (i.e., people injured but not killed) injury sustained.

"Killed"

- The casualty type "killed" indicates where the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates where the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Light Condition"

- Describes the light conditions at the scene of the accident, including:
    - Day – the light conditions which normally occur between one half hour after sunrise and one half hour before sunset;
    - Dawn – the light conditions which normally occur between one half hour before sunrise and one half hour after sunrise;
    - Dusk – the light conditions which normally occur between one half hour before sunset and one half hour after sunset;
    - Dark – the light conditions which normally occur between one half hour after sunset and one half hour before sunrise; and,
    - Artificial lighting – artificial illumination devices were functioning at the accident site under light conditions which normally occur between one half hour after sunset and one half hour before sunrise.

"Weather Condition"

- Describes the weather conditions prevalent at the time of the accident, including:
    - Clear – bright conditions, without precipitation or airborne matter, are recorded as clear;
    - Cloudy – dull, overcast conditions, without precipitation or airborne matter, are recorded as cloudy;
    - Raining;
    - Snowing;
    - Fog or Mist – airborne matter, of natural origin, which obscures visibility;
    - Smoke or Dust – airborne matter, of a natural or artificial origin, which obscures visibility;
    - Freezing Rain / Sleet / Hail – freezing rain, sleet or hail (self explanatory);
    - Drifting Snow – snow drifting on or above roadway, which obscures visibility of the roadway, road markings, traffic devices or roadway fixtures; and,
    - Strong Winds – used if wind was a contributing factor in the accident.

"Region"

- Manitoba Infrastructure and Transportation is served by 5 regional office locations, each responsible for a geographic region (for boundaries, see Map 1-1). "Regions" are used to indicate the region in which a collision occurred.

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

Table 11-1 Historical Summary of Off-Road Vehicle Collisions

Table 11-1
Historical Summary of Off-Road Vehicle Collisions: 2002 to 2013

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	**2013**	2008-12 Average
Total Collisions	100	123	139	162	176	132	137	126	107	72	47	**56**	98
Fatal	4	7	7	9	9	6	10	10	5	12	8	**12**	9
Injury	62	80	81	104	107	78	75	82	72	38	35	**37**	60
PDO	34	36	51	49	60	48	52	34	30	22	4	**7**	28
Total Victims	91	109	107	131	142	103	106	102	92	75	54	**62**	86
Killed	5	7	7	9	9	6	11	10	6	12	9	**12**	10
Injured	86	102	100	122	133	97	95	92	86	63	45	**50**	76
Total Vehicles Involved	129	149	188	206	228	174	166	153	133	100	54	**71**	121
Fatal	8	8	9	11	12	8	13	10	6	18	9	**13**	11
Injury	73	92	111	134	138	98	89	94	87	57	39	**44**	73
PDO	48	49	68	61	78	68	64	49	40	25	6	**14**	37
Total Drivers Involved	127	148	188	206	228	174	166	148	127	97	54	**66**	118
Fatal	7	8	9	11	12	8	13	10	6	18	9	**13**	11
Injury	73	91	111	134	138	98	89	93	83	54	39	**43**	72
PDO	47	49	68	61	78	68	64	45	38	25	6	**10**	36

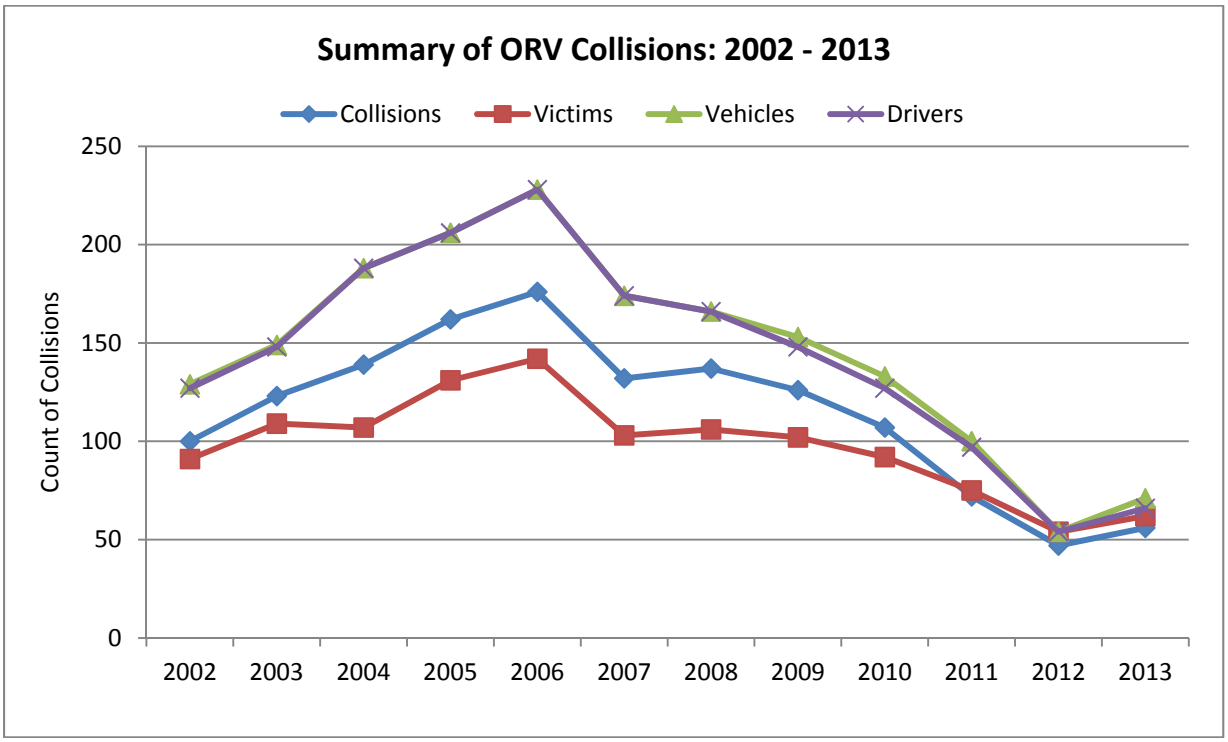
In 2013, there are 56 off-road vehicle collisions, involving 62 victims, 71 vehicles and 66 drivers. Of these:

- 12 are fatal collisions, involving 13 vehicles and 13 drivers, resulting in 12 people killed and 2 injured;
- 37 are injury collisions, involving 44 vehicles and 43 drivers, resulting in 48 people injured; and,
- 7 are PDO collisions, involving 14 vehicles and 10 drivers.

Total ORV collisions in 2013 are 19% higher than in 2012 and 43% lower than the average number of collisions in the previous five year (2008 to 2012) annual average. Compared to the previous five years, in 2013:

- ORV collision victims are down 28%;
- The number of people killed increased by 25%;
- The number of vehicles involved decreased by 41%; and,
- The number of drivers involved in decreased by 44%.

Figure 11-1 Historical Summary of ORV Collisions



In 2013, there is a significant rise in the numbers of ORV collisions and victims in those collisions since a downward trend begun after a peak in 2006. The number of vehicles and drivers involved in those collisions has also increased.

Table 11-2 Victims, Vehicles and Drivers Involved in Off-Road Vehicle Collisions by ORV Type

Table 11-2
Victims, Vehicles and Drivers Involved in Off-Road Vehicle Collisions by ORV Type: 2013, 2008-2012 Average

	2013					2008-12 Average					% Change 2013 to 2008-12 Average				
	Snowmobile	ATV	Motorcycle	Other*	**Total**	Snowmobile	ATV	Motorcycle	Other*	Total	Snowmobile	ATV	Motorcycle	Other*	Total
Total Victims	19	30	2	11	**62**	34	35	4	13	86	-44.4%	-14.3%	-44.4%	-15.4%	-27.7%
Killed	3	7	0	2	**12**	4	4	<1	<1	10	-25.0%	75.0%	-100.0%	150.0%	25.0%
Injured	16	23	2	9	**50**	30	31	3	12	76	-47.0%	-25.8%	-28.6%	-26.2%	-34.4%
Total Vehicles Involved	25	27	4	15	**71**	55	38	4	23	121	-54.7%	-29.3%	-9.1%	-35.9%	-41.4%
Fatal	5	7	0	1	**13**	4	4	1	2	11	25.0%	84.2%	-100.0%	-58.3%	16.1%
Injury	15	18	2	9	**44**	32	26	3	12	73	-52.8%	-30.8%	-37.5%	-26.2%	-39.9%
PDO	5	2	2	5	**14**	19	8	<1	9	37	-74.2%	-76.2%	900.0%	-43.2%	-62.0%
Total Drivers Involved	23	27	4	12	**66**	55	38	4	21	118	-58.2%	-28.6%	-9.1%	-43.4%	-44.3%
Fatal	5	7	0	1	**13**	4	4	1	2	11	25.0%	84.2%	-100.0%	-58.3%	16.1%
Injury	15	18	2	8	**43**	32	26	3	11	72	-52.8%	-29.7%	-37.5%	-27.3%	-39.9%
PDO	3	2	2	3	**10**	19	8	<1	8	36	-84.4%	-76.2%	900.0%	-61.5%	-71.9%

* 'Other' includes: vehicles not registered as an off-road vehicle, dune /sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, and those listed under “not stated” category.

In 2013, a total of 71 vehicles were involved in off-road collisions, including:

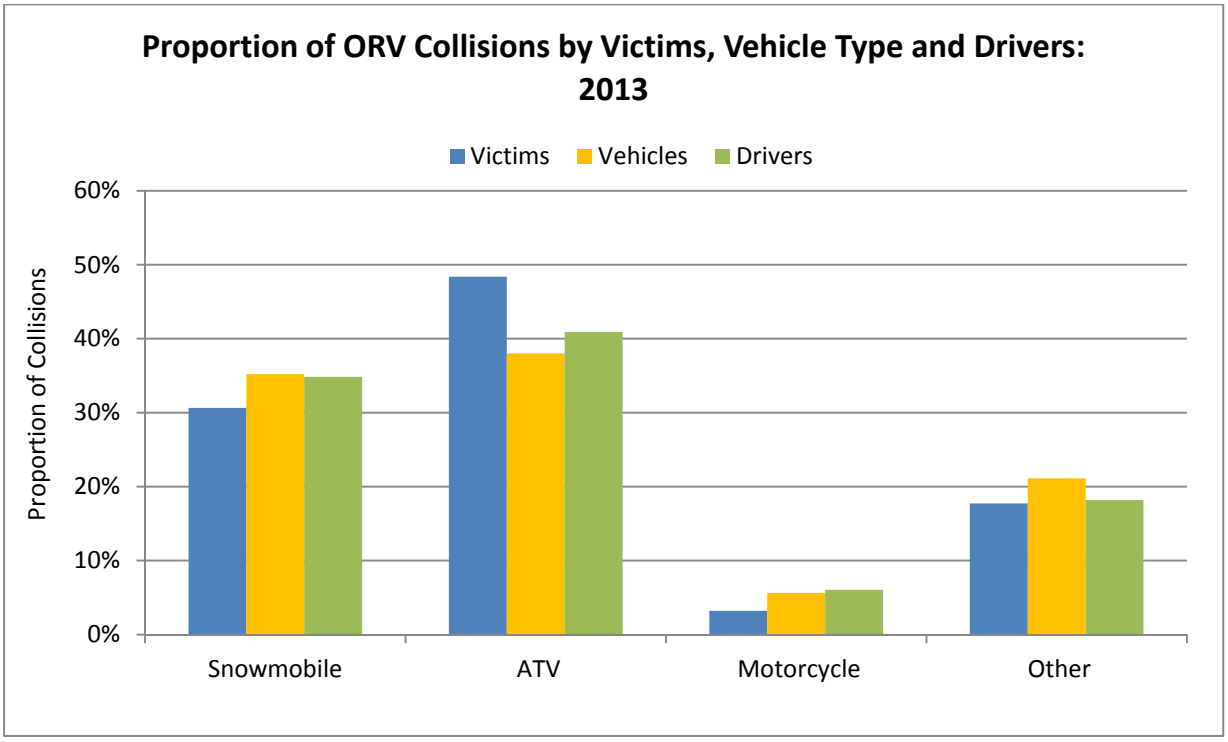
- 25 snowmobiles and 23 snowmobile drivers, resulting in 19 victims including 3 people killed;
- 27 ATVs and ATV drivers, resulting in 30 victims including 7 people killed;
- 4 motorcycle and motorcycle drivers, resulting in 2 victims and no people killed; and,
- 15 'Other' vehicles and 12 drivers of those vehicles, resulting in 11 victims and 2 people killed.

Compared to the previous five year (2008 to 2012) annual average, in 2013:

- Snowmobile collisions are below average across all categories – victims are down by 44%, while vehicles and drivers involved are down by 55% and 58%, respectively.
- ATV collisions are below average across all categories – victims are down by 14%, vehicles and drivers are down by 29% and 29%, respectively.
- Motorcycle collisions are below average across all categories – victims are down by 44%, while vehicles and drivers involved are down by 9% each.
- 'Other' vehicle collisions are below average across all categories – victims are down by 15%, while vehicles and drivers involved are down by 36% and 43%, respectively.

Note: Due to low annual counts of people killed and injured in ORV collisions, relatively small changes in these counts year-over-year can produce dramatic changes in percentage terms. Please use caution when interpreting these results.

Figure 11-2 Proportion of ORV Collisions by Victims, Vehicle Type and Drivers



In 2013, ATVs account for the largest proportion of victims, drivers and vehicles involved in ORV collisions, followed by snowmobiles. 'Other' vehicles and motorcycles operated off-road account for the third largest and the smallest proportions respectively of victims, vehicles, and drivers involved in ORV collisions.

Table 11-3 ORVs Involved in Collisions by Vehicle Type and Active Registration

Table 11-3
ORVs Involved in Collisions by Vehicle Type and Active Registration: 2013, 2008-2013 Average

Vehicle Type	2013 Active Registration			**2013 Total**	**2013 % Known to be Registered****	2008-12 Average Registered	% Change 2013 to 2008-12 Average
	Yes	No	Not Stated				
Snowmobile	14	10	1	**25**	**56.0%**	55	-54.5%
ATV	13	8	6	**27**	**48.1%**	38	-28.9%
Motorcycle	0	2	2	**4**	**-**	4	5.3%
Other*	11	2	2	**15**	**73.3%**	23	-35.3%
Total	38	22	11	**71**	**53.5%**	120	-40.8%

* 'Other' includes: vehicles not registered as an off-road vehicle, dune /sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, and those listed under “not stated” category.

** The "% known to be registered" is calculated as active registrations ('Yes' in the table) as a proportion of total ORVs in the category. “Not stated” is included in the total but are not considered as known to be registered.

A substantial number of off-road vehicles involved in collisions are not registered or not known to be registered (nearly 47%). In 2013, 38 of 71 off-road vehicles involved in collisions (nearly 54%) had active registrations at the time of the collision. At the time of the collision in 2013:

- 14 of 25 snowmobiles (56%) had active registrations;
- 13 of 27 ATVs (48%) had active registrations;
- None of 4 motorcycles (0%) had active registrations; and
- 11 of 15 ‘other’ vehicles (73%), including on-road vehicles operating off-road at the time, had active registrations.

NOTE: For a detailed count of ORV vehicle types involved in collisions occurring in each year from 2008 to 2013, please refer to “*Table 11-18 Historical Summary of ORVs Involved in Collisions by Vehicle Type and Active Registration*” at the end of this section.

Table 11-4 Drivers Involved in ORV Collisions by Active Driver's Licence and Collision Severity

Table 11-4
Drivers Involved in ORV Collisions by Active Driver's Licence and Collision Severity: 2013, 2008-2012 Average

Active Driver's Licence	Collision Severity						**2013 Total**	**% of 2013 Total**	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Yes	11	84.6%	31	72.1%	5	50.0%	**47**	**71.2%**	86	-45.2%
No	1	7.7%	4	9.3%	1	10.0%	**6**	**9.1%**	16	-61.5%
Not Stated	1	7.7%	8	18.6%	4	40.0%	**13**	**19.7%**	16	-16.7%
Not Applicable	0	-	0	-	0	-	**0**	**-**	1	-100.0%
Total	13	100%	43	100%	10	100%	**66**	**100%**	118	-44.3%

In 2013, 71% of drivers in ORV collisions have an active driver’s license while 9% do not.

- Fatal collisions: 11 of 13 drivers involved are licensed; 1 of 13 is unlicensed.
- Injury collisions: 72% of drivers involved are licensed; 9% are unlicensed.
- PDO collisions: 5 of 10 drivers involved are licensed; 1 of 10 is unlicensed.

Table 11-5 Off-Road Vehicle Collisions by Month of Occurrence and Collision Severity

Table 11-5
ORV Collisions by Month of Occurrence and Collision Severity: 2013, 2008-2012 Average

Month	Collision Severity						**2013 Total**	**% of 2013 Total**	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
January	2	16.7%	2	5.4%	1	14.3%	**5**	**8.9%**	18	-72.2%
February	0	-	6	16.2%	1	14.3%	**7**	**12.5%**	14	-51.4%
March	1	8.3%	5	13.5%	1	14.3%	**7**	**12.5%**	12	-42.6%
April	0	-	1	2.7%	0	-	**1**	**1.8%**	6	-82.8%
May	0	-	4	10.8%	2	28.6%	**6**	**10.7%**	5	11.1%
June	3	25.0%	6	16.2%	0	-	**9**	**16.1%**	8	9.8%
July	2	16.7%	2	5.4%	0	-	**4**	**7.1%**	7	-41.2%
August	0	-	2	5.4%	0	-	**2**	**3.6%**	5	-61.5%
September	0	-	3	8.1%	0	-	**3**	**5.4%**	4	-31.8%
October	3	25.0%	2	5.4%	0	-	**5**	**8.9%**	3	56.3%
November	0	-	1	2.7%	1	14.3%	**2**	**3.6%**	4	-47.4%
December	1	8.3%	3	8.1%	1	14.3%	**5**	**8.9%**	10	-51.9%
Total	12	100%	37	100%	7	100%	**56**	**100%**	98	-42.7%

The majority of ORV collisions in 2013 occur from October to March. When combined, these six months account for 55% of ORV collisions. The summer months (June, July and August) account for 27% when combined.

This is very similar to the previous five year (2008 to 2012) annual average, where the months from October through to March account for most ORV collisions (63%). The summer months (June, July and August combined) account for 21%.

NOTE: For a detailed count of ORV collisions by month of occurrence in each year from 2008 to 2013, please refer to "*Table 11-19 Historical Summary of ORV Collisions by Month of Occurrence*" at the end of this section.

Table 11-6 Off-Road Vehicle Collisions by Day of Occurrence and Collision Severity

Table 11-6
ORV Collisions by Day of Occurrence and Collision Severity: 2013, 2008-2012 Average

Day	Collision Severity						2013 Total	% of 2013 Total	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Sunday	2	16.7%	9	24.3%	4	57.1%	**15**	**26.8%**	25	-39.0%
Monday	1	8.3%	3	8.1%	0	-	**4**	**7.1%**	9	-57.4%
Tuesday	0	-	2	5.4%	1	14.3%	**3**	**5.4%**	6	-46.4%
Wednesday	0	-	4	10.8%	0	-	**4**	**7.1%**	6	-31.0%
Thursday	1	8.3%	3	8.1%	0	-	**4**	**7.1%**	8	-50.0%
Friday	3	25.0%	4	10.8%	0	-	**7**	**12.5%**	13	-47.0%
Saturday	5	41.7%	12	32.4%	2	28.6%	**19**	**33.9%**	31	-38.3%
Total	12	100%	37	100%	7	100%	**56**	**100%**	97	-42.5%

The majority of ORV collisions happen on weekends (Friday, Saturday and Sunday). In 2013, 73% of ORV collisions occurred on Friday (nearly 13%), Saturday (34%) and Sunday (27%). Monday through Thursday account for 27% of ORV collisions.

In 2013, 83% of all fatal ORV collisions occur on weekends (Friday, Saturday and Sunday combined), including 5 of 12 fatal ORV collisions on Saturdays.

Figure 11-3 Proportion of ORV Collisions by Collision Severity and Day of Occurrence

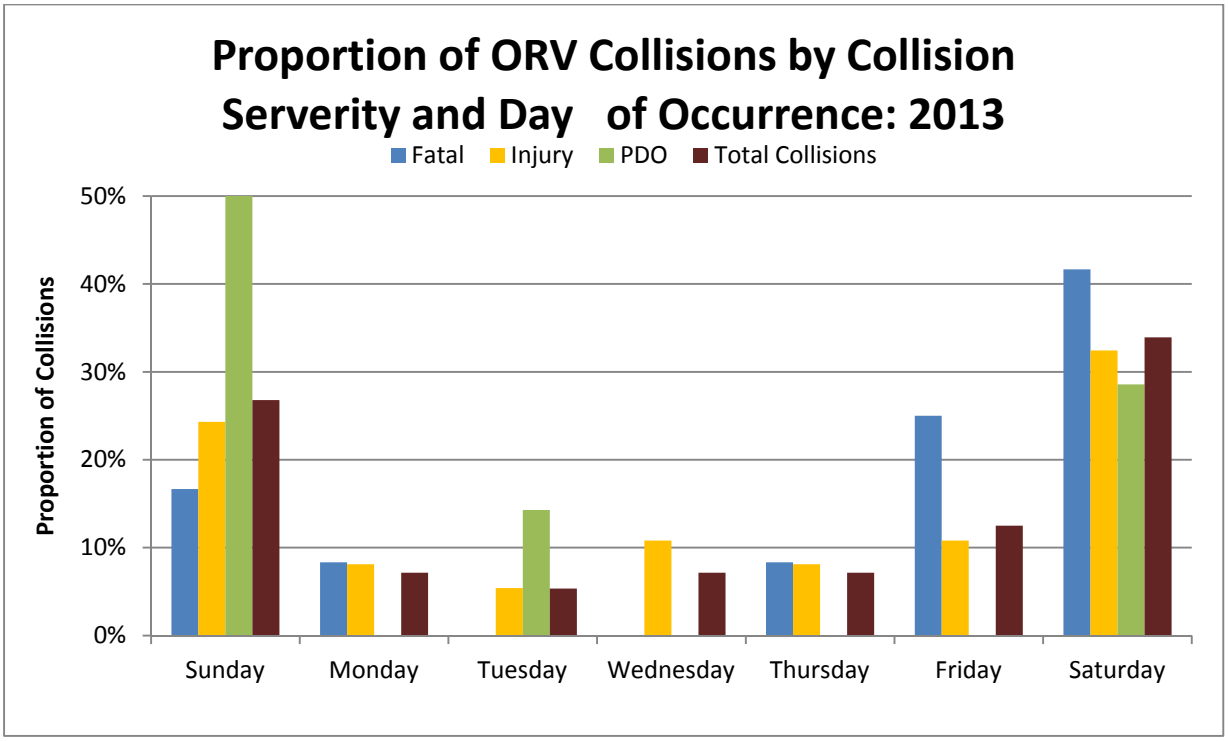


Table 11-7 Off-Road Vehicle Collisions by Time of Occurrence and Collision Severity

Table 11-7
ORV Collisions by Time of Occurrence and Collision Severity: 2013, 2008-2012 Average

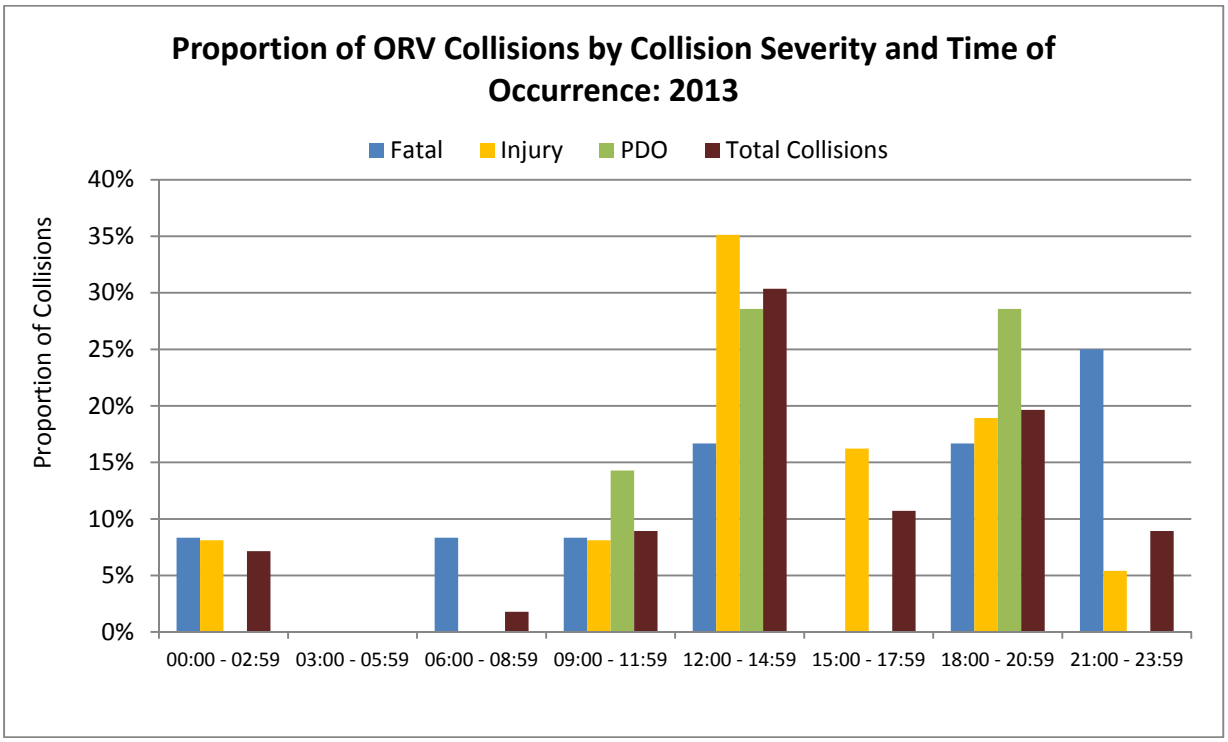
Time	Collision Severity						2013 Total	% of 2013 Total	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
00:00 - 02:59	1	8.3%	3	8.1%	0	-	**4**	**7.1%**	4	-9.1%
03:00 - 05:59	0	-	0	-	0	-	**0**	**-**	2	-100.0%
06:00 - 08:59	1	8.3%	0	-	0	-	**1**	**1.8%**	1	0.0%
09:00 - 11:59	1	8.3%	3	8.1%	1	14.3%	**5**	**8.9%**	9	-46.8%
12:00 - 14:59	2	16.7%	13	35.1%	2	28.6%	**17**	**30.4%**	23	-25.4%
15:00 - 17:59	0	-	6	16.2%	0	-	**6**	**10.7%**	23	-73.9%
18:00 - 20:59	2	16.7%	7	18.9%	2	28.6%	**11**	**19.6%**	21	-46.6%
21:00 - 23:59	3	25.0%	2	5.4%	0	-	**5**	**8.9%**	9	-41.9%
Not Stated	2	16.7%	3	8.1%	2	28.6%	**7**	**12.5%**	6	9.4%
Total	12	100%	37	100%	7	100%	**56**	**100%**	98	-42.7%

The majority of off-road collisions occur in the afternoon and early evening. In 2013, 61% of all ORV vehicle collisions occurred between noon and 9 p.m. (12:00 to 14:59 – 30%; 15:00 to 17:59 – 11%; 18:00 to 20:59 – 20%).

Comparing 2013 to the previous five year (2008 to 2012) annual average, there are small differences in the proportional distribution of ORV collisions by time of day.

- Morning (06:00 to 11:59) – 11% in 2013; 11% in the previous five years.
- Afternoon (12:00 to 17:59) – 41% in 2013; 47% in the previous five years.
- Evening (18:00 to 20:59) – 20% in 2013; 21% in the previous five years.
- Overnight (21:00 to 05:59) – 16% in 2013; 15% in the previous five years.

Figure 11-4 Proportion of Total ORV Collisions by Collision Severity and Time of Occurrence



In 2013, the number of ORV collisions rises throughout the day, beginning with very few collisions occurring between 3 a.m. and 9 a.m. and peaking at almost one-third (30%) of ORV collisions occurring between noon and 3 p.m. Another 30% ORV collisions occurred between 3 p.m. and 9 p.m. After 9 p.m. through 3 a.m., relatively few ORV collisions occurred (16%).

In 2013, the majority of fatal ORV collisions occurred between 6 p.m. and midnight (5 of 12 fatal collisions).

Table 11-8 Off-Road Vehicle Collisions by Light Condition and Collision Severity

Table 11-8
ORV Collisions by Light Condition and Collision Severity: 2013, 2008-2012 Average

Light Condition	Collision Severity						**2013 Total**	**% of 2013 Total**	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Day	4	33.3%	26	70.3%	5	71.4%	**35**	**62.5%**	64	-45.3%
Dawn	1	8.3%	0	-	0	-	**1**	**1.8%**	1	0.0%
Dusk	2	16.7%	1	2.7%	1	14.3%	**4**	**7.1%**	7	-42.9%
Dark	4	33.3%	8	21.6%	1	14.3%	**13**	**23.2%**	22	-39.8%
Artificial Light	0	-	0	-	0	-	**0**	**-**	1	-100.0%
Not Stated	1	8.3%	2	5.4%	0	-	**3**	**5.4%**	3	7.1%
Total	12	100%	37	100%	7	100%	**56**	**100%**	98	-42.7%

The majority of ORV collisions occur during daylight conditions, from a half hour after sunrise to a half hour before sunset. In 2013, daylight conditions account for 35 of 56 collisions (nearly 63% of the total). An additional 13 collisions (23%) occurred during darkness. Four ORV collisions (7%) occurred at dusk.

Table 11-9 ORV Collisions by Weather Condition and Collision Severity

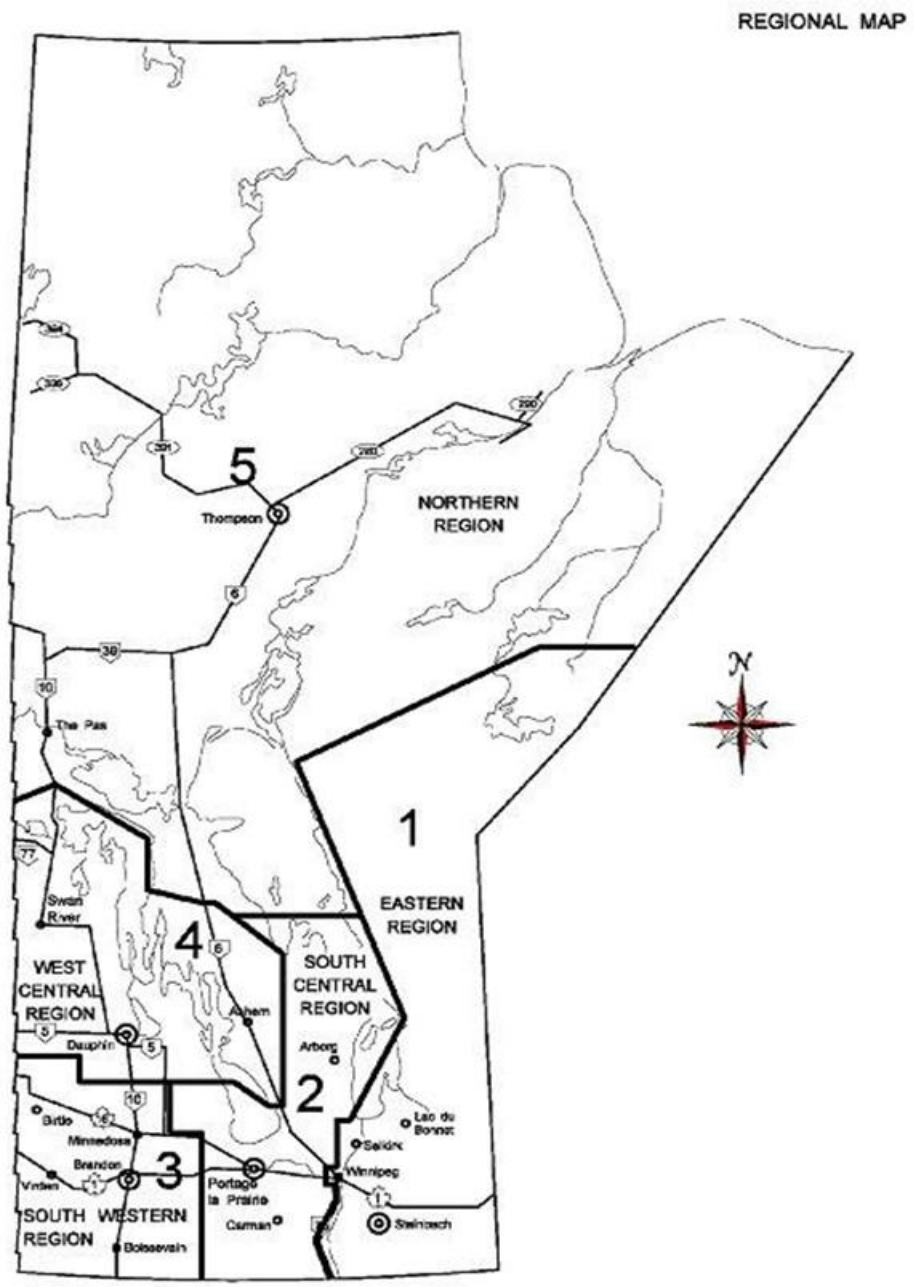
Table 11-9
ORV Collisions by Weather Condition and Collision Severity: 2013, 2008-2012 Average

Weather Condition	Collision Severity						**2013 Total**	**% of 2013 Total**	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Clear	7	58.3%	26	70.3%	6	85.7%	**39**	**69.6%**	70	-44.4%
Cloudy	1	8.3%	5	13.5%	1	14.3%	**7**	**12.5%**	11	-36.4%
Raining	1	8.3%	1	2.7%	0	-	**2**	**3.6%**	2	-16.7%
Snowing	2	16.7%	2	5.4%	0	-	**4**	**7.1%**	4	5.3%
Fog/Mist	0	-	0	-	0	-	**0**	**-**	2	-100.0%
Smoke/Dust	0	-	0	-	0	-	**0**	**-**	<1	-100.0%
Drifting Snow	0	-	0	-	0	-	**0**	**-**	<1	-100.0%
Strong Winds	0	-	0	-	0	-	**0**	**-**	2	-100.0%
Not Stated	1	8.3%	3	8.1%	0	-	**4**	**7.1%**	5	-16.7%
Total	12	100%	37	100%	7	100%	**56**	**100%**	98	-42.7%

The majority of ORV collisions occur when weather conditions are clear. In 2013, 39 of 56 collisions (70% of the total) occur in clear weather conditions. Another 7 collisions (nearly 13%) occur in cloudy weather.

Compared to the previous five year (2008 to 2012) annual average, the proportion of ORV collisions happening in clear conditions is consistent (70% in 2013; 72% in the previous five years).

Map 11-1 Manitoba Infrastructure and Transportation (MIT) Regions



Source: Manitoba Infrastructure and Transportation, Traffic Engineering

This map shows the boundaries of Manitoba Infrastructure and Transportation (MIT) regions and regional office locations. Regional Offices are responsible for service delivery and management of MIT programs, as indicated in the department's annual report.[3] Off-road vehicle collisions are reported by location within these regions.

[3] 2007/2008 Annual Report for Manitoba Infrastructure and Transportation.

Table 11-10 ORV Collisions by MIT Regions and Collision Severity

Table 11-10
ORV Collisions by MIT Regions and Collision Severity: 2013, 2008-2012 Average

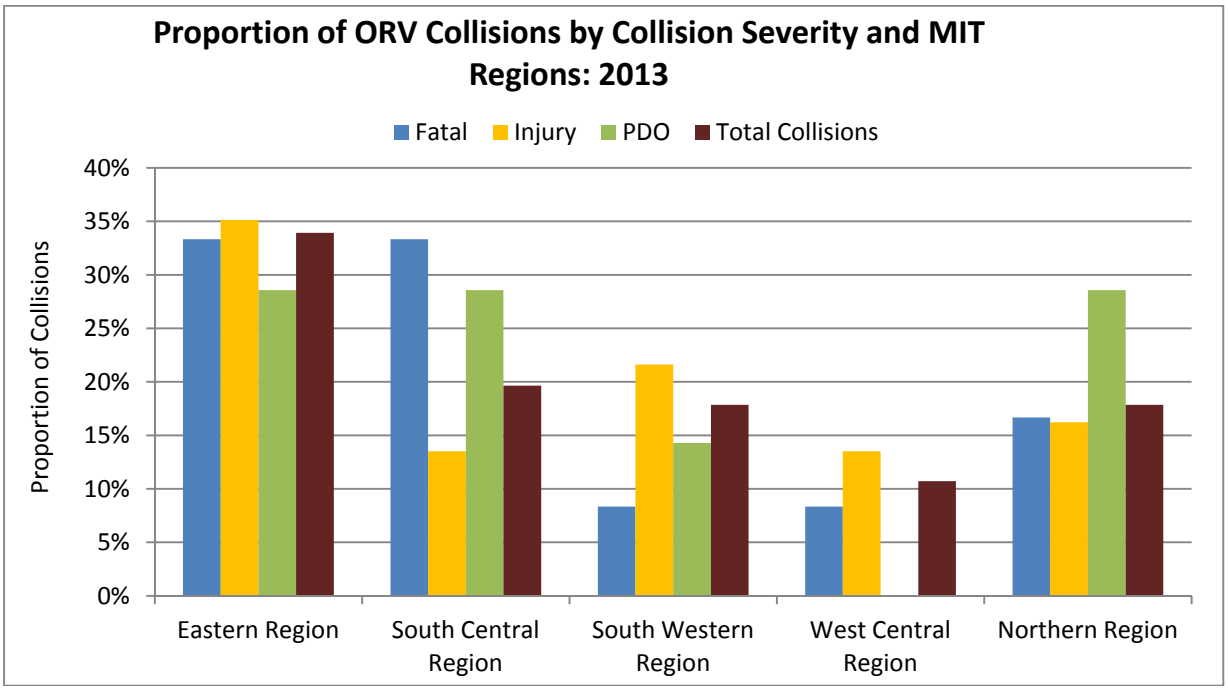
Region	Collision Severity						2013 Total	% of 2013 Total	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Eastern Region	4	33.3%	13	35.1%	2	28.6%	**19**	**33.9%**	44	-57.2%
South Central Region	4	33.3%	5	13.5%	2	28.6%	**11**	**19.6%**	12	-11.3%
South Western Region	1	8.3%	8	21.6%	1	14.3%	**10**	**17.9%**	8	19.0%
West Central Region	1	8.3%	5	13.5%	0	-	**6**	**10.7%**	16	-63.4%
Northern Region	2	16.7%	6	16.2%	2	28.6%	**10**	**17.9%**	13	-20.6%
Not Stated	0	-	0	-	0	-	**0**	**-**	4	-100.0%
Total	12	100%	37	100%	7	100%	**56**	**100%**	98	-42.7%

The Eastern Region of Manitoba historically accounts for a large share of off-road vehicle accidents. In 2013, 19 of 56 collisions (34% of the total) occurred in the Eastern Region. The South Central Region follows with 11 collisions (20%), while the South Western and Northern Regions had 10 collisions each (18%).

The overall count of ORV collisions in 2013 is down across all regions in Manitoba (compared to the 2008 to 2012 annual average). The proportional distribution of collisions by region has fluctuated in 2013.

- Eastern Region – 34% of ORV collisions in 2013; 45% in previous five years.
- South Central Region – 20% of ORV collisions in 2013; 13% in previous five years.
- South Western Region – 18% of ORV collisions in 2013; 9% in previous five years.
- West Central Region – 11% of ORV collisions in 2013; 17% in previous five years.
- Northern Region – 18% of ORV collisions in 2013; 13% in previous five years.

Figure 11-5 Proportion of ORV Collisions by Collision Severity and MIT Regions



Fatal ORV collisions in 2013 occur most often in the Eastern and South Central Region of Manitoba (4 of 12 fatal collisions each). The Northern Region accounts for 2 of 12 fatal collisions.

Table 11-11 Off-Road Vehicle Collisions by Location and Collision Severity

Table 11-11
ORV Collisions by Location and Collision Severity: 2013, 2008-2012 Average

Location	Collision Severity						**2013 Total**	**% of 2013 Total**	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Public Roadway	5	41.7%	19	51.4%	2	28.6%	**26**	**46.4%**	21	23.8%
Ditches	0	-	2	5.4%	0	-	**2**	**3.6%**	19	-89.5%
River/Lake	0	-	1	2.7%	1	14.3%	**2**	**3.6%**	8	-75.0%
Field	1	8.3%	0	-	0	-	**1**	**1.8%**	6	-84.4%
Farm Yard/Private Property	1	8.3%	3	8.1%	3	42.9%	**7**	**12.5%**	5	34.6%
Parking Lot	0	-	0	-	0	-	**0**	**-**	<1	-100.0%
Embankment	1	8.3%	0	-	0	-	**1**	**1.8%**	<1	66.7%
Gravel Road	1	8.3%	0	-	0	-	**1**	**1.8%**	2	-50.0%
Trail*	2	16.7%	11	29.7%	1	14.3%	**14**	**25.0%**	23	-38.6%
Other**	1	8.3%	0	-	0	-	**1**	**1.8%**	2	-44.4%
Not Stated	0	-	1	2.7%	0	-	**1**	**1.8%**	10	-90.2%
Total	12	100%	37	100%	7	100%	**56**	**100%**	98	-42.7%

*Includes marked groomed trail, bush trail/winter road, and snowmobile trail.
**Includes hill, railroad and floodway/diversion.
Note: Historical averages are rounded off to the nearest integer. Computations of percentage changes from the historical trend to the current year are based on actual averages and not on the rounded numbers presented in the table.

In 2013, “public roadway” was the most common location for ORV collisions (26 of 56 collisions; 46%) followed by “trail” (14 collisions; 25%).

The proportion of ORV collisions happening at specific locations in 2013 shows small differences when compared to the previous five year (2008 to 2012) annual average.

- “Public Roadway” – 46% in 2013; nearly 22% in the previous five years.
- “Trail” – 25% in 2013; 23% in the previous five years.
- “Farm Yard/Private Property” – nearly 13% in 2013; 5% in the previous five years.
- “Ditches” – 4% in 2013; 19% in the previous five years.
- “River/Lake” – 4% in 2013; 8% in the previous five years.

NOTE: For a detailed count of ORV collisions by location in each year from 2008 to 2013, please refer to “*Table 11-20 Historical Summary of ORV Collisions by Location*” at the end of this section.

Table 11-12 ORV Collision Victims by Age Group and Casualty Type

Table 11-12
ORV Collision Victims by Age Group and Casualty Type: 2013, 2008-2012 Average

Age Group	2013 Casualty Type				**2013 Total Victims**	**% of 2013 Total Victims**	2008-12 Average			
	Killed	% of Total Killed	Injured	% of Total Injured			Killed	Injured	Total Victims	% of Total Victims
0-4	0	-	0	-	**0**	**-**	0	<1	<1	0.2%
5-9	0	-	0	-	**0**	**-**	<1	2	2	2.3%
10-14	0	-	3	6.0%	**3**	**4.8%**	<1	5	6	7.0%
15-19	1	8.3%	8	16.0%	**9**	**14.5%**	2	14	16	18.4%
20-24	3	25.0%	9	18.0%	**12**	**19.4%**	1	10	11	13.1%
25-34	3	25.0%	11	22.0%	**14**	**22.6%**	<1	12	13	14.7%
35-44	0	-	6	12.0%	**6**	**9.7%**	1	13	14	16.3%
45-54	3	25.0%	6	12.0%	**9**	**14.5%**	3	9	12	14.0%
55-64	0	-	1	2.0%	**1**	**1.6%**	<1	4	5	5.6%
65+	2	16.7%	2	4.0%	**4**	**6.5%**	<1	3	3	3.5%
Not Stated	0	-	4	8.0%	**4**	**6.5%**	0	4	4	4.9%
Total	12	100%	50	100%	**62**	**100%**	10	76	86	100%

The majority of ORV collision victims are under the age of 45 (71% of all victims). In 2013, 19% of ORV collision victims are under the age of 20 while 19% are the 20-24 age group, 23% are the 25-34 age group and 10% are the 35-44 age group. Nearly one quarter of victims is 45 years old and older (nearly 15% age 45 to 54; 2% age 55 to 64; nearly 7% aged 65 and older).

ORV collision victims in 2013 are, for the most part, consistent in terms of overall age demographic when compared with the previous five year (2008 to 2012) annual average. In the previous five years:

- Persons under the age of 15 account for nearly 10% of all victims in ORV collisions, compared to 5% in 2013;
- Persons aged 15 to 44 account for nearly 63% of all victims in ORV collisions, compared to 66% in 2013;
- Persons aged 45 and above account for 23% of all victims in ORV collisions, compared to nearly 23% in 2013.

NOTE: The classification of victims is different from that of drivers (see Table 11-16) as victims may be of any age. Therefore, they are classified by a 5-year age cohort up to age 24. While drivers of off-road vehicles may not be required to be licensed, driver statistics are recorded consistent with other sections, and identified as under 16, 16 to19, and then using the same classifications for victims.

NOTE: For a detailed count of ORV collision victims by age group in each year from 2008 to 2013, please refer to "*Table 11-21 Historical Summary of ORV Collision Victims by Age Group*" at the end of this section.

Table 11-13 ORV Collision Victims by Gender and Casualty Type

Table 11-13
ORV Collision Victims by Gender and Casualty Type: 2013, 2008-2012 Average

Gender	2013 Casualty Type				**2013 Total Victims**	**% of 2013 Total Victims**	2008-12 Average			
	Killed	% of Total Killed	Injured	% of Total Injured			Killed	Injured	Total Victims	% of Total Victims
Male	11	91.7%	37	74.0%	**48**	**77.4%**	8	56	64	74.6%
Female	1	8.3%	13	26.0%	**14**	**22.6%**	1	21	22	25.4%
Total	12	100%	50	100%	**62**	**100%**	10	76	86	100%

The majority of people killed in ORV collisions in 2013 are male. Males account for 48 of 62 ORV collision victims (77% of all victims). This is consistent with the previous five year (2008 to 2012) annual average (75%).

Table 11-14 ORV Collision Victims by Safety Equipment Use and Casualty Type

Table 11-14
ORV Collision Victims by Safety Equipment Use and Casualty Type: 2013, 2008-2012 Average

Safety Equipment	2013 Casualty Type				**2013 Total Victims**	**% of 2013 Total Victims**	2008-12 Average				% Change 2013 to 2008-12 Average
	Killed	% of Total Killed	Injured	% of Total Injured			Killed	Injured	Total Victims	% of Total Victims	
Safety Helmet Worn	7	58.3%	18	36.0%	**25**	**40.3%**	3	32	35	41.3%	-29.4%
Safety Helmet Not Worn	3	25.0%	10	20.0%	**13**	**21.0%**	4	13	16	18.9%	-19.8%
Seat Belt Assembly Used	0	-	6	12.0%	**6**	**9.7%**	0	6	6	6.4%	9.1%
Seat Belt Assembly Not Used	0	-	0	-	**0**	**-**	<1	0	<1	0.6%	-100.0%
Not Stated	1	8.3%	12	24.0%	**13**	**21.0%**	1	19	20	22.8%	-33.7%
Not Applicable*	1	8.3%	4	8.0%	**5**	**8.1%**	1	11	12	14.2%	-59.0%
Total	12	100%	50	100%	**62**	**100%**	10	76	86	100.0%	-27.7%

* Victims who were not operators/passengers of off-road vehicles; therefore do not require a helmet.

In 2013, 25 victims (40%) in ORV collisions were wearing a safety helmet; 13 were not. This includes 7 people killed while wearing a helmet and 3 people killed while not wearing a helmet. The proportion of victims who were wearing a helmet in 2013 has remained fairly consistent at 40% compared to the previous five year annual average (2008 to 2012; 41%).

Table 11-15 ORV Victims Killed vs. Injured for Helmeted and Non-helmeted ORV Occupants

Table 11-15
ORV Victims Killed vs. Injured for Helmeted and Non-helmeted ORV Occupants (2008-2013)

	Helmet worn		Helmet not worn		Hemet Effectiveness
	Number	Percent	Number	Percent	(Ratio of % helmet not worn to % helmet worn)
Killed	24	11.9%	21	22.3%	1.88
Injured	178	88.1%	73	77.7%	0.88
Total	202	100%	94	100%	-

As the number of victims wearing helmets exceeds those not wearing helmets, a casual interpretation of the statistics may lead one to conclude that helmets contribute to fatalities and injuries in ORV collisions. However, it is likely that with a large majority of drivers and passengers wearing helmets, they have a high representation among collision victims.

Table 11-15 compares the proportion of people killed and injured for those wearing and not wearing helmets. Among people wearing helmets when they sustain an injury from an ORV collision, 12% are killed. Among people not wearing helmets when they sustain an injury from an ORV collision, 22% are killed. This indicates that an ORV collision victim is twice as likely to be killed if they are not wearing a helmet at the time of a collision.

Table 11-16 Drivers Involved in ORV Collisions by Age Group and Collision Severity

Table 11-16
Drivers Involved in ORV Collisions by Age Group and Collision Severity: 2013, 2008-2012 Average

Age Group	Collision Severity						**2013 Total**	**% of 2013 Total**	2008-12 Average	% Change 2013 to 2008-12 Average
	Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*				
<16	0	-	3	7.0%	0	-	**3**	**4.7%**	11	-73.2%
16-19	1	7.7%	6	14.0%	1	12.5%	**8**	**12.5%**	15	-48.1%
20-24	3	23.1%	8	18.6%	3	37.5%	**14**	**21.9%**	14	0.0%
25-34	4	30.8%	10	23.3%	3	37.5%	**17**	**26.6%**	21	-19.8%
35-44	1	7.7%	8	18.6%	1	12.5%	**10**	**15.6%**	20	-50.5%
45-54	2	15.4%	5	11.6%	0	-	**7**	**10.9%**	19	-62.8%
55-64	2	15.4%	3	7.0%	0	-	**5**	**7.8%**	8	-39.0%
65+	0	-	0	-	0	-	**0**	**-**	3	-100.0%
Not Stated	0	-	0	-	2	-	**2**	**-**	6	**-**
Total	13	100%	43	100%	10	100%	**66**	**100%**	118	-44.3%

*Percentage of the total does not include the "not stated" category.

In 2013, drivers under the age of 45 account for 81% of drivers involved in ORV collisions (<16 – 5%; 16 to 19 - nearly 13%; 20 to 24 – 22%; 25 to 34 – 27%; 35 to 44 – 16%), while drivers aged 45 and above account for 19% (45 to 54 – 11%; 55 to 64 – 8%; 65 and above – none).

Compared to previous five year (2008 to 2012) annual average, the 2013 distribution of drivers involved in ORV collisions are clustered more in the age groups of 20 to 24 and 25 to 34.

Table 11-17 ORV Collisions by Contributing Factors and Collision Severity

Table 11-17
Drivers Involved in ORV Collisions by Contributing Factors and Collision Severity: 2013

Contributing Factor	2013 Collision Severity						**2013 Total Drivers**	**% of 2013 Total Drivers**
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	1	7.7%	8	18.6%	2	20.0%	**11**	**16.7%**
Driver Action - Driving properly	0	-	1	2.3%	1	10.0%	**2**	**3.0%**
Any Driver Action	8	61.5%	11	25.6%	3	30.0%	**22**	**33.3%**
Follow too closely	0	-	0	-	0	-	**0**	**-**
Turning improperly	0	-	1	2.3%	0	-	**1**	**1.5%**
Passing improperly	0	-	0	-	0	-	**0**	**-**
Changing lanes improperly	0	-	0	-	0	-	**0**	**-**
Fail to yield right-of-way	0	-	1	2.3%	1	10.0%	**2**	**3.0%**
Disobey traffic control device/officer	0	-	0	-	0	-	**0**	**-**
Drive wrong way on roadway	0	-	0	-	0	-	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	1	2.3%	0	-	**1**	**1.5%**
Parking improperly	0	-	0	-	0	-	**0**	**-**
Lost control/Drive off road	1	7.7%	2	4.7%	1	10.0%	**4**	**6.1%**
Driverless vehicle ran out of control	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	0	-	0	-	0	-	**0**	**-**
Failed to signal	0	-	0	-	0	-	**0**	**-**
Take avoiding action	0	-	0	-	1	10.0%	**1**	**1.5%**
Driver inexperience	1	7.7%	2	4.7%	0	-	**3**	**4.5%**
Pedestrian error/confusion	0	-	0	-	0	-	**0**	**-**
NET Speed	6	46.2%	6	14.0%	0	-	**12**	**18.2%**
Exceeding speed limit	1	7.7%	1	2.3%	0	-	**2**	**3.0%**
Driving too fast for conditions	2	15.4%	2	4.7%	0	-	**4**	**6.1%**
Unsafe operating speed (Too fast or too slow)	3	23.1%	4	9.3%	0	-	**7**	**10.6%**
NET Distracted driving	1	7.7%	4	9.3%	0	-	**5**	**7.6%**
Careless Driving	1	7.7%	3	7.0%	0	-	**4**	**6.1%**
Distraction/Inattention	0	-	2	4.7%	0	-	**2**	**3.0%**

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Contributing Factor	2013 Collision Severity						2013 Total Drivers	% of 2013 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	7	53.8%	9	20.9%	2	20.0%	**18**	**27.3%**
Any Human Condition	3	23.1%	6	14.0%	1	10.0%	**10**	**15.2%**
Loss of consciousness/Blackout prior to collision	0	-	0	-	0	-	**0**	**-**
Extreme fatigue/Fell asleep	0	-	0	-	0	-	**0**	**-**
Defective eyesight	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	0	-	**0**	**-**
Physical disability	1	7.7%	0	-	0	-	**1**	**1.5%**
Mental disability	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	**0**	**-**
NET Impaired	2	15.4%	4	9.3%	1	10.0%	**7**	**10.6%**
Ability impaired alcohol	1	7.7%	2	4.7%	0	-	**3**	**4.5%**
Ability impaired drugs	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	1	7.7%	2	4.7%	1	10.0%	**4**	**6.1%**
No Apparent (Vehicle) Defect	11	84.6%	18	41.9%	3	30.0%	**32**	**48.5%**
Any Vehicle Defect	0	-	0	-	0	-	**0**	**-**
Defective brakes	0	-	0	-	0	-	**0**	**-**
Defective steering	0	-	0	-	0	-	**0**	**-**
Defective headlights	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	0	-	**0**	**-**
Jack-knife/trailer swing	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	**0**	**-**

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Contributing Factor	2013 Collision Severity						2013 Total Drivers	% of 2013 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Any Environmental Condition	2	15.4%	7	16.3%	0	-	**9**	**13.6%**
Animal action - Wild	1	7.7%	2	4.7%	0	-	**3**	**4.5%**
Animal action - Domestic	0	-	0	-	0	-	**0**	**-**
Slippery road surface	0	-	0	-	0	-	**0**	**-**
Snow drift	0	-	1	2.3%	0	-	**1**	**1.5%**
Obstruction/debris on roadway	1	7.7%	1	2.3%	0	-	**2**	**3.0%**
View obstructed/limited	0	-	0	-	0	-	**0**	**-**
Glare/reflection	0	-	0	-	0	-	**0**	**-**
Construction zone	0	-	0	-	0	-	**0**	**-**
Defective driving surface	0	-	2	4.7%	0	-	**2**	**3.0%**
Shoulders defective	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	**0**	**-**
Weather	1	7.7%	1	2.3%	0	-	**2**	**3.0%**
Pedestrian corridor in use	0	-	0	-	0	-	**0**	**-**
Uninvolved vehicle	0	-	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	0	-	0	-	0	-	**0**	**-**
Not Applicable/Not Stated	1	7.7%	0	-	0	-	**1**	**1.5%**
Total	13	100%	43	100%	10	100%	**66**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

In 2013, at least one driver action is recorded for 22 of the 66 drivers involved in ORV collisions (33%), including:

- 8 of 13 drivers involved in fatal collisions;
- 11 of 43 drivers involved in injury collisions; and,
- 3 of 10 drivers involved in PDO collisions.

The most prevalent driver actions include:

- Speed (including "exceeding speed limit", "driving too fast for conditions" and "unsafe operating speed") – 18% of the drivers involved;
- Distracted driving (including "careless driving' and "distraction/Inattention" – 8% of the drivers involved; and
- "Loss of control/drive off road" – 6% of the drivers involved.

Human conditions were recorded for 15% of the drivers involved in ORV collisions. The most prevalent of these include:

- Impaired (including "ability impaired by alcohol", "ability impaired by drugs" and "had been drinking/suspected alcohol use") – 11% of the drivers involved
- "Physical disability" – nearly 2% of the drivers involved.

Environmental conditions were recorded as contributing for 14% of the drivers involved in ORV collisions. The most prevalent of these include:

- "Animal action –Wild" – nearly 5% of the drivers involved.
- "Obstruction/debris on roadway" – 3% of the drivers involved.
- "Defective driving surface" – 3% of the drivers involved.
- "Weather" – 3% of the drivers involved.

None of the drivers involved in ORV collisions had a vehicle defect recorded as a contributing factor.

In the previous five year (2008 to 2012) annual average of the drivers involved in ORV collisions:

- 40% had a driver action recorded, with 15% being distracted ("careless driving" and "distraction/inattention"), 13% speed, and 10% "lost control/drive off road";
- 15% had a 'human condition' recorded, with the most common being impaired (8%);
- 24% had an environmental condition recorded, with the most common being "obstruction/debris on roadway" (6%), "snow drift" (5%), "defective driving surface" (5%), and "slippery road surface" (3%); and,
- 3% had a vehicle defect recorded as a contributing factor.

In 2013, 8 of 13 fatal collisions had a driver action and 3 of 13 had a human condition. The most common at-fault contributing factors recorded for drivers involved in fatal ORV collisions in 2013 include:

- Speed (including "exceeding speed limit", "driving too fast for conditions" and "unsafe operating speed") – 6 of 13 drivers; and
- Impaired (including "ability impaired by alcohol", "ability impaired by drugs" and "had been drinking/suspected alcohol use") – 2 of 14 drivers.

NOTE: For a detailed count of drivers involved in ORV collisions by the contributing factors recorded in each year from 2008 to 2013, please refer to "*Table 11-22 Historical Summary of Drivers Involved in ORV Collisions by Contributing Factors*" at the end of this section.

Table 11-18 Historical Summary of ORVs Involved in Collisions by Vehicle Type and Active Registration

Table 11-18
Summary of ORVs Involved in Collisions by Vehicle Type and Active Registration: 2008 to 2013

Vehicle Type	2008		2009		2010		2011		2012		**2013**	
	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**	**Active Registrations Involved**	**% Known to be Registered****
Snowmobile	74	79.7%	64	70.3%	63	74.6%	52	86.5%	22	63.6%	**25**	**56.0%**
ATV	51	56.9%	57	57.9%	39	64.1%	20	65.0%	23	47.8%	**27**	**48.1%**
Motorcycle	7	28.6%	6	50.0%	2	50.0%	3	33.3%	1	-	**4**	**-**
Other*	34	82.4%	26	80.8%	23	56.5%	25	56.0%	8	75.0%	**15**	**73.3%**
Total	166	71.1%	153	66.7%	127	67.7%	100	73.0%	54	57.4%	**71**	**53.5%**

* 'Other' includes: vehicles not registered as an off-road vehicle, dune /sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, and those listed under “not stated” category.
** The "% known to be registered" is calculated as active registrations as indicated on the TAR as a proportion of total ORVs in the category.

Table 11-19 Historical Summary of ORV Collisions by Month of Occurrence

Table 11-19
Summary of ORV Collisions by Month of Occurrence: 2008 to 2013

Month	2008 Total	% of 2008 Total	2009 Total	% of 2009 Total	2010 Total	% of 2010 Total	2011 Total	% of 2011 Total	2012 Total	% of 2012 Total	**2013 Total**	**% of 2013 Total**
January	20	14.6%	23	18.3%	31	29.0%	14	19.4%	2	4.3%	**5**	**8.9%**
February	24	17.5%	16	12.7%	12	11.2%	18	25.0%	2	4.3%	**7**	**12.5%**
March	18	13.1%	10	7.9%	14	13.1%	18	25.0%	1	2.1%	**7**	**12.5%**
April	2	1.5%	6	4.8%	13	12.1%	6	8.3%	2	4.3%	**1**	**1.8%**
May	15	10.9%	6	4.8%	1	0.9%	3	4.2%	2	4.3%	**6**	**10.7%**
June	9	6.6%	14	11.1%	8	7.5%	2	2.8%	8	17.0%	**9**	**16.1%**
July	10	7.3%	14	11.1%	3	2.8%	4	5.6%	3	6.4%	**4**	**7.1%**
August	12	8.8%	7	5.6%	4	3.7%	1	1.4%	2	4.3%	**2**	**3.6%**
September	3	2.2%	7	5.6%	6	5.6%	1	1.4%	5	10.6%	**3**	**5.4%**
October	3	2.2%	6	4.8%	2	1.9%	3	4.2%	2	4.3%	**5**	**8.9%**
November	5	3.6%	5	4.0%	1	0.9%	1	1.4%	7	14.9%	**2**	**3.6%**
December	16	11.7%	12	9.5%	12	11.2%	1	1.4%	11	23.4%	**5**	**8.9%**
Total	137	100%	126	100%	107	100%	72	100%	47	100%	**56**	**100%**

Table 11-20 Historical Summary of ORV Collisions by Location

Table 11-20
Summary of ORV Collisions by Location: 2008 to 2013

Location	2008 Total	% of 2008 Total	2009 Total	% of 2009 Total	2010 Total	% of 2010 Total	2011 Total	% of 2011 Total	2012 Total	% of 2012 Total	**2013 Total**	**% of 2013 Total**
Public Roadway	27	19.7%	23	18.3%	17	15.9%	22	30.6%	16	34.0%	**26**	**46.4%**
Ditches	30	21.9%	25	19.8%	22	20.6%	9	12.5%	9	19.1%	**2**	**3.6%**
River/Lake	19	13.9%	9	7.1%	4	3.7%	6	8.3%	2	4.3%	**2**	**3.6%**
Field	12	8.8%	4	3.2%	7	6.5%	6	8.3%	3	6.4%	**1**	**1.8%**
Farm Yard/Private Property	7	5.1%	8	6.3%	9	8.4%	0	-	2	4.3%	**7**	**12.5%**
Parking Lot	1	0.7%	0	-	2	1.9%	1	1.4%	0	-	**0**	**-**
Embankment	1	0.7%	0	-	1	0.9%	0	-	1	2.1%	**1**	**1.8%**
Gravel Road	2	1.5%	3	2.4%	3	2.8%	1	1.4%	1	2.1%	**1**	**1.8%**
Trail**	25	18.2%	36	28.6%	25	23.4%	23	31.9%	5	10.6%	**14**	**25.0%**
Other	0	-	2	1.6%	5	4.7%	1	1.4%	1	2.1%	**1**	**1.8%**
Not Stated	13	9.5%	16	12.7%	12	11.2%	3	4.2%	7	14.9%	**1**	**1.8%**
Total	137	100%	126	100%	107	100%	72	100%	47	100%	**56**	**100%**

Table 11-21 Historical Summary of ORV Collision Victims by Age Group

Table 11-21
Historical Summary of ORV Collision Victims by Age Group: 2008 to 2013

Age Group	2008 Total	% of 2008 Total	2009 Total	% of 2009 Total	2010 Total	% of 2010 Total	2011 Total	% of 2011 Total	2012 Total	% of 2012 Total	**2013 Total**	**% of 2013 Total**
0-4	0	-	1	1.0%	0	-	0	-	0	-	**0**	**-**
5-9	5	4.7%	3	2.9%	1	1.1%	1	1.3%	0	-	**0**	**-**
10-14	12	11.3%	5	4.9%	7	7.6%	4	5.3%	2	3.7%	**3**	**4.8%**
15-19	23	21.7%	20	19.6%	14	15.2%	14	18.7%	8	14.8%	**9**	**14.5%**
20-24	11	10.4%	16	15.7%	9	9.8%	9	12.0%	11	20.4%	**12**	**19.4%**
25-34	16	15.1%	13	12.7%	18	19.6%	8	10.7%	8	14.8%	**14**	**22.6%**
35-44	17	16.0%	15	14.7%	14	15.2%	13	17.3%	11	20.4%	**6**	**9.7%**
45-54	9	8.5%	15	14.7%	16	17.4%	13	17.3%	7	13.0%	**9**	**14.5%**
55-64	5	4.7%	4	3.9%	9	9.8%	4	5.3%	2	3.7%	**1**	**1.6%**
65+	2	1.9%	1	1.0%	2	2.2%	5	6.7%	5	9.3%	**4**	**6.5%**
Not Stated	6	5.7%	9	8.8%	2	2.2%	4	5.3%	0	-	**4**	**6.5%**
Total	106	100%	102	100%	92	100%	75	100%	54	100%	**62**	**100%**

Table 11-22 Historical Summary of ORV Collisions by Contributing Factors

Table 11-22
Historical Summary of Drivers Involved in ORV Collisions by Contributing Factors: 2008 to 2013

Contributing Factor	2008 Total Drivers	% of 2008 Total Drivers	2009 Total Drivers	% of 2009 Total Drivers	2010 Total Drivers	% of 2010 Total Drivers	2011 Total Drivers	% of 2011 Total Drivers	2012 Total Drivers	% of 2012 Total Drivers	**2013 Total Drivers**	**% of 2013 Total Drivers**
Driver Action - Driving Properly and Human Condition - Apparently Normal	59	36.9%	35	23.6%	27	21.3%	30	30.9%	8	14.8%	**11**	**16.7%**
Driver Action - Driving properly	5	3.1%	8	5.4%	9	7.1%	8	8.2%	3	5.6%	**2**	**3.0%**
Any Driver Action	92	57.5%	61	41.2%	36	28.3%	28	28.9%	16	29.6%	**22**	**33.3%**
Following too closely	3	1.9%	3	2.0%	0	-	0	-	1	1.9%	**0**	**-**
Turning improperly	1	0.6%	1	0.7%	1	0.8%	2	2.1%	0	-	**1**	**1.5%**
Passing improperly	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Changing lanes improperly	0	-	0	-	0	-	1	1.0%	0	-	**0**	**-**
Fail to yield right-of-way	4	2.5%	2	1.4%	2	1.6%	2	2.1%	0	-	**2**	**3.0%**
Disobey traffic control device/officer	1	0.6%	1	0.7%	0	-	1	1.0%	0	-	**0**	**-**
Drive wrong way on roadway	1	0.6%	2	1.4%	1	0.8%	0	-	0	-	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Back unsafely	1	0.6%	1	0.7%	1	0.8%	0	-	0	-	**1**	**1.5%**
Parking improperly	0	-	0	-	0	-	1	1.0%	0	-	**0**	**-**
Lost control/Drive off road	20	12.5%	22	14.9%	10	7.9%	6	6.2%	3	5.6%	**4**	**6.1%**
Driverless vehicle ran out of control	1	0.6%	0	-	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	0	-	0	-	0	-	1	1.0%	0	-	**0**	**-**
Failed to signal	0	-	0	-	1	0.8%	0	-	0	-	**0**	**-**
Take avoiding action	0	-	3	2.0%	1	0.8%	0	-	0	-	**1**	**1.5%**
Driver inexperience	8	5.0%	7	4.7%	6	4.7%	4	4.1%	6	11.1%	**3**	**4.5%**
Pedestrian error/confusion	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Speed	32	20.0%	19	12.8%	13	10.2%	6	6.2%	7	13.0%	**12**	**18.2%**
Exceeding speed limit	6	3.8%	1	0.7%	3	2.4%	1	1.0%	2	3.7%	**2**	**3.0%**
Driving too fast for conditions	14	8.8%	6	4.1%	6	4.7%	2	2.1%	2	3.7%	**4**	**6.1%**
Unsafe operating speed (Too fast or too slow)	12	7.5%	12	8.1%	5	3.9%	4	4.1%	4	7.4%	**7**	**10.6%**
NET Distracted driving	30	18.8%	26	17.6%	18	14.2%	11	11.3%	2	3.7%	**5**	**7.6%**
Careless Driving	21	13.1%	17	11.5%	12	9.4%	8	8.2%	1	1.9%	**4**	**6.1%**
Distraction/Inattention	12	7.5%	9	6.1%	7	5.5%	3	3.1%	1	1.9%	**2**	**3.0%**

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Contributing Factor	2008 Total Drivers	% of 2008 Total Drivers	2009 Total Drivers	% of 2009 Total Drivers	2010 Total Drivers	% of 2010 Total Drivers	2011 Total Drivers	% of 2011 Total Drivers	2012 Total Drivers	% of 2012 Total Drivers	**2013 Total Drivers**	**% of 2013 Total Drivers**
Human Condition - Apparently Normal	69	43.1%	26	17.6%	19	15.0%	12	12.4%	16	29.6%	**18**	**27.3%**
Any Human Condition	27	16.9%	22	14.9%	18	14.2%	7	7.2%	12	22.2%	**10**	**15.2%**
Loss of consciousness/Blackout prior to collision	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Extreme fatigue/Fell asleep	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective eyesight	0	-	1	0.7%	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Medical disability	1	0.6%	0	-	0	-	0	-	0	-	**0**	**-**
Physical disability	0	-	1	0.7%	0	-	0	-	0	-	**1**	**1.5%**
Mental disability	0	-	0	-	0	-	0	-	1	1.9%	**0**	**-**
Mental confusion/Inability to remember	3	1.9%	0	-	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	1	1.0%	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Impaired	11	6.9%	14	9.5%	11	8.7%	3	3.1%	10	18.5%	**7**	**10.6%**
Ability impaired alcohol	7	4.4%	7	4.7%	7	5.5%	2	2.1%	7	13.0%	**3**	**4.5%**
Ability impaired drugs	1	0.6%	1	0.7%	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	4	2.5%	6	4.1%	5	3.9%	1	1.0%	3	5.6%	**4**	**6.1%**
No Apparent (Vehicle) Defect	99	61.9%	63	42.6%	40	31.5%	45	46.4%	27	50.0%	**32**	**48.5%**
Any Vehicle Defect	10	6.3%	3	2.0%	2	1.6%	2	2.1%	1	1.9%	**0**	**-**
Defective brakes	1	0.6%	0	-	1	0.8%	0	-	0	-	**0**	**-**
Defective steering	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective headlights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	2	2.1%	0	-	**0**	**-**
Defective engine controls/drive train	4	2.5%	0	-	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	1	0.6%	1	0.7%	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	1	0.8%	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	1	0.7%	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	1	0.6%	0	-	0	-	0	-	0	-	**0**	**-**
Fire	3	1.9%	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	1	1.9%	**0**	**-**
Load shifted/spilled	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Jack-knife/trailer swing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	1	0.7%	0	-	0	-	0	-	**0**	**-**

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Contributing Factor	2008 Total Drivers	% of 2008 Total Drivers	2009 Total Drivers	% of 2009 Total Drivers	2010 Total Drivers	% of 2010 Total Drivers	2011 Total Drivers	% of 2011 Total Drivers	2012 Total Drivers	% of 2012 Total Drivers	**2013 Total Drivers**	**% of 2013 Total Drivers**
Any Environmental Condition	46	28.8%	30	20.3%	39	30.7%	15	15.5%	9	16.7%	**9**	**13.6%**
Animal action - Wild	2	1.3%	2	1.4%	1	0.8%	0	-	0	-	**3**	**4.5%**
Animal action - Domestic	0	-	1	0.7%	0	-	0	-	1	1.9%	**0**	**-**
Slippery road surface	7	4.4%	4	2.7%	4	3.1%	5	5.2%	0	-	**0**	**-**
Snow drift	12	7.5%	2	1.4%	10	7.9%	4	4.1%	1	1.9%	**1**	**1.5%**
Obstruction/debris on roadway	16	10.0%	11	7.4%	6	4.7%	2	2.1%	0	-	**2**	**3.0%**
View obstructed/limited	0	-	1	0.7%	6	4.7%	3	3.1%	4	7.4%	**0**	**-**
Glare/reflection	1	0.6%	1	0.7%	2	1.6%	1	1.0%	0	-	**0**	**-**
Construction zone	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective driving surface	5	3.1%	8	5.4%	11	8.7%	1	1.0%	3	5.6%	**2**	**3.0%**
Shoulders defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	2	1.6%	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	1	0.8%	0	-	0	-	**0**	**-**
Weather	2	1.3%	1	0.7%	6	4.7%	0	-	1	1.9%	**2**	**3.0%**
Pedestrian corridor in use	0	-	0	-	0	-	0	-	1	1.9%	**0**	**-**
Uninvolved vehicle	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	1	0.6%	0	-	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	3	1.9%	3	2.0%	7	5.5%	7	7.2%	5	9.3%	**0**	**-**
Not Applicable/Not Stated	0	-	5	3.4%	1	0.8%	1	1.0%	0	-	**1**	**1.5%**
Total	160	100%	148	100%	127	100%	97	100%	54	100%	**66**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

SECTION 12 - Alcohol-Related Criminal Code Convictions

Introduction

This section counts the number of drivers convicted of alcohol-related Criminal Code offences for the year 2012 by age at the time of the offence and includes historical statistics for the period 1993 to 2011. There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2012 is the most current year for which these statistics are available. Details are provided for "first", "second" and "third and subsequent" (i.e., third, fourth, fifth, etc. combined) offences and whether or not a youth was present in the vehicle at the time of the offence.

Key Highlights

In 2012, there are a total of 1,979 alcohol-related Criminal Code offence convictions, including:

- 1,180 convictions for driving with a blood alcohol concentration (BAC) over .08[4];
- 693 convictions for impaired driving[5]; and,
- 106 convictions for refusing to provide a breath or blood sample[6].

In the 20-year period from 1993 to 2012, the total alcohol-related Criminal Code convictions declined by nearly 39%, from 3,217 in 1993 to 1,979 in 2012. Total convictions in 2012 (1,979 convictions) are up slightly compared to 2011 (1,956 convictions) but down by 4% compared to the previous five year (2007 to 2011) annual average (2,067 convictions).

Over the past twenty years, alcohol-related Criminal Code convictions have declined in all age groups in Manitoba. Comparing the total number of convictions in 2012 to 1993 among drivers:

- Under 25 years of age, convictions declined by 33%;
- 25 to 44 years of age, convictions declined by 45%;
- 45 to 64 years of age, convictions declined by 22%; and,
- 65 years of age and older, convictions declined by 54%.

Licensed drivers up to the age of 44 are overrepresented in alcohol-related Criminal Code convictions.

- Licensed drivers under age 25 represented 14% of the licensed drivers in 2012, but accounted for 29% of convictions.
- Drivers between the ages of 25 to 44 represented nearly 34% of the licensed drivers in 2012, but accounted for 51% of convictions.

Rates of recidivism, indicated by second and third and subsequent offences, decreased substantially from 2002 to 2012. There was a 47% reduction in rate at which drivers are convicted of a second alcohol-related Criminal Code offence, and a 53% reduction in the rate for third and subsequent offences in 2012 compared to 2002.

Major Elements Examined

This section reports the number of drivers convicted of alcohol-related Criminal Code offences.

Convictions have been broken down by whether or not a passenger under the age of 16 was in the vehicle at the time the offence occurred (under columns designated by a trailing "C" in the statute number). In 2005, Manitoba added increased consequences to Criminal Code offences 253A, 253B and 254-5 when these offences are committed with a youth in the vehicle; 2007 represents the first year where these conviction categories are available for reporting.

Beginning in 2007, convictions for impaired driving offences originating in other provinces and the United States have been added to the counts reported here. Prior to that time, these "out-of-province" offences were not included in the annual counts.

"Relative involvement rates" in this section of the report are calculated as a rate per 1,000 licensed drivers to ensure consistency with other jurisdictions.

[4] Includes s.253B and s.253BC
[5] Includes s.253A, s.253AC, s.255-2 and s.255-3
[6] Includes s.254-5 and s.254-5C

In years past, the severity of the sanctions imposed by the courts in Manitoba took into account whether or not the offence involved a traffic collision. Until 2004, Driver Records noted whether the conviction was associated with a crash; that procedure has been discontinued and this report no longer includes a separate count for convictions occurring with or without a collision.

Terms and Definitions

"Blood alcohol concentration (BAC)"

- A measure of the concentration of alcohol in a person's blood. A measure of ".08 BAC" is equivalent of 80 milligrams of alcohol per 1,000 milligrams of blood, or 0.08%.

"Criminal Code 253A" and "Criminal Code 253B"[7]: Impaired driving

- Everyone commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,
  - (*a*) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
  - (*b*) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.
- For greater certainty, the reference to impairment by alcohol or a drug in paragraph (*a*) includes impairment by a combination of alcohol and a drug.
- "253AC" and "253BC" indicate a conviction when there was a youth in the vehicle.

"Criminal Code Statute 254-5": Refusing to comply with a request for sample

- If a peace officer has reasonable grounds to suspect that a person has alcohol or a drug in their body and that the person has, within the preceding three hours, operated a motor vehicle or vessel, operated or assisted in the operation of an aircraft or railway equipment or had the care or control of a motor vehicle, a vessel, an aircraft or railway equipment, whether it was in motion or not, the peace officer may, by demand, require the person to comply with paragraph (*a*), in the case of a drug, or with either or both of paragraphs (*a*) and (*b*), in the case of alcohol:
  - (*a*) to perform forthwith physical coordination tests … and, if necessary, to accompany the peace officer for that purpose; and
  - (*b*) to provide forthwith a sample of breath that, in the peace officer's opinion, will enable a proper analysis to be made by means of an approved screening device and, if necessary, to accompany the peace officer for that purpose.
- Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.
- "254-5C" indicates a conviction when there was a youth in the vehicle.

"Criminal Code Statute 255-2": Impaired driving/refusing to provide sample causing injury

- Everyone who commits an offence under paragraph 253(*a*) and causes bodily harm to another person as a result is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.

[7] Definitions for Criminal Code Statute 253, 254 and 255 are taken directly from the **Criminal Code (R.S., 1985, c. C-46)** of Canada, as posted on the Department of Justice website. (http://laws.justice.gc.ca/en/)

“Criminal Code Statute 255-3”: Impaired driving/refusing to provide sample causing death

- Everyone who commits an offence under paragraph 253(*a*) and causes the death of another person as a result is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in the death of another person is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in the death of another person, or in bodily harm to another person whose death ensues, is guilty of an indictable offence and liable to imprisonment for life.

Table 12-1: Total Alcohol-Related Criminal Code Convictions

Table 12-1
Total Alcohol-Related Criminal Code Convictions: 1993 to 2012*

Year	Alcohol Content Over .08		Impaired Driving		Impaired Driving Causing Injury/Death		Refuse Sample		Total
	253B	253BC	253A	253AC	255-2	255-3	254-5	254-5C	
1993	2,518	N/A	334	N/A	29	3	333	N/A	3,217
1994	2,516	N/A	405	N/A	34	2	362	N/A	3,319
1995	2,478	N/A	405	N/A	25	3	264	N/A	3,175
1996	2,267	N/A	334	N/A	24	0	250	N/A	2,875
1997	2,519	N/A	366	N/A	37	3	277	N/A	3,202
1998	2,487	N/A	404	N/A	36	1	291	N/A	3,219
1999	2,460	N/A	441	N/A	29	3	320	N/A	3,253
2000	1,959	N/A	493	N/A	34	4	245	N/A	2,735
2001	1,783	N/A	574	N/A	35	2	186	N/A	2,580
2002	1,655	N/A	611	N/A	20	4	143	N/A	2,433
2003	1,464	N/A	567	N/A	19	3	144	N/A	2,197
2004	1,316	N/A	486	N/A	19	4	97	N/A	1,922
2005	1,089	N/A	474	N/A	16	4	98	N/A	1,681
2006	1,270	N/A	478	N/A	12	4	67	N/A	1,831
2007	1,301	3	618	1	14	2	80	0	2,019
2008	1,324	5	593	5	15	3	89	0	2,034
2009	1,344	4	657	3	23	0	84	1	2,116
2010	1,424	3	663	6	23	2	90	0	2,211
2011	1,252	8	577	0	19	5	94	1	1,956
2012	**1,177**	**3**	**661**	**6**	**19**	**7**	**106**	**0**	**1,979**
2007-11 Average	1,329	5	622	3	19	2	87	<1	2,067
% Change 2011 to 2012	-6.0%	-62.5%	14.6%	-	0.0%	40.0%	12.8%	-	1.2%
% Change 2007-11 Average to 2012	-11.4%	-34.8%	6.3%	100.0%	1.1%	191.7%	21.3%	N/A	-4.3%
% Change 1993 to 2012	-53.3%	N/A	97.9%	N/A	-34.5%	133.3%	-68.2%	N/A	-38.5%

*There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2012 is the most current year for which these statistics are available.

NOTE: In 2005, Manitoba added increased consequences for Criminal Code offences 253A, 253B and 254-5 committed with a youth under the age of 16 in the vehicle. These convictions are denoted by a trailing "C" in the statute number.

NOTE: Counts and percentage change statistics that cannot be calculated due to fact that the specific conviction code or type did not exist in historical data are noted in the table as “N/A”. Changes to the previous year and to the previous five-year trend for convictions committed with a youth in the vehicle should be interpreted with caution due to small counts.

CAUTION: Beginning in 2007, convictions for impaired driving offences originating in other provinces and the United States have been added to the counts reported here. Prior to that time, these “out-of-province” offences were not included in the annual counts. The difference in convictions noted in 2008 compared to years prior to 2007 is affected by this change.

In 2012, the count of drivers convicted of alcohol-related Criminal Code offences (1,979) increased slightly (a count of 23; 1%) compared to 2011 (1,956) but was down by 4% compared to the previous five year (2007 to 2011) annual average (2,067).

Comparing 2012 to the previous five year (2007 to 2011) annual average:

- Convictions for “alcohol content over .08” decreased by nearly 12%;
- Convictions for “impaired driving” increased by 7%; and,
- Convictions for “refuse sample” increased by 21%.

There were 3 convictions for driving with a blood alcohol concentration (BAC) over .08 with a youth in the vehicle, 6 for impaired driving with a youth in the vehicle and none for refusing to provide a breath or blood sample with a youth in the vehicle in 2012. With 2012 being only the sixth year in which it was possible to be charged with these offences, it is difficult to determine any long term trends in these convictions. Counts of these convictions over the six year period have fluctuated dramatically due to their overall low frequency in any given year.

In the 20-year period from 1993 to 2012, total alcohol-related Criminal Code convictions declined by nearly 39%, from 3,217 in 1993 to 1,979 in 2012.

- Convictions for “alcohol content over .08” decreased by 53% (2,518 in 1993 to 1,180 in 2012).
- Convictions for “impaired driving” increased by 89% (366 in 1993 to 693 in 2012).
- Convictions for “refuse sample” decreased by 68% (333 in 1993 to 106 in 2012).

Table 12-2: Total Alcohol-Related Criminal Code Convictions by Age Group

Table 12-2
Total Alcohol-Related Criminal Code Convictions by Age Group: 1993 to 2012

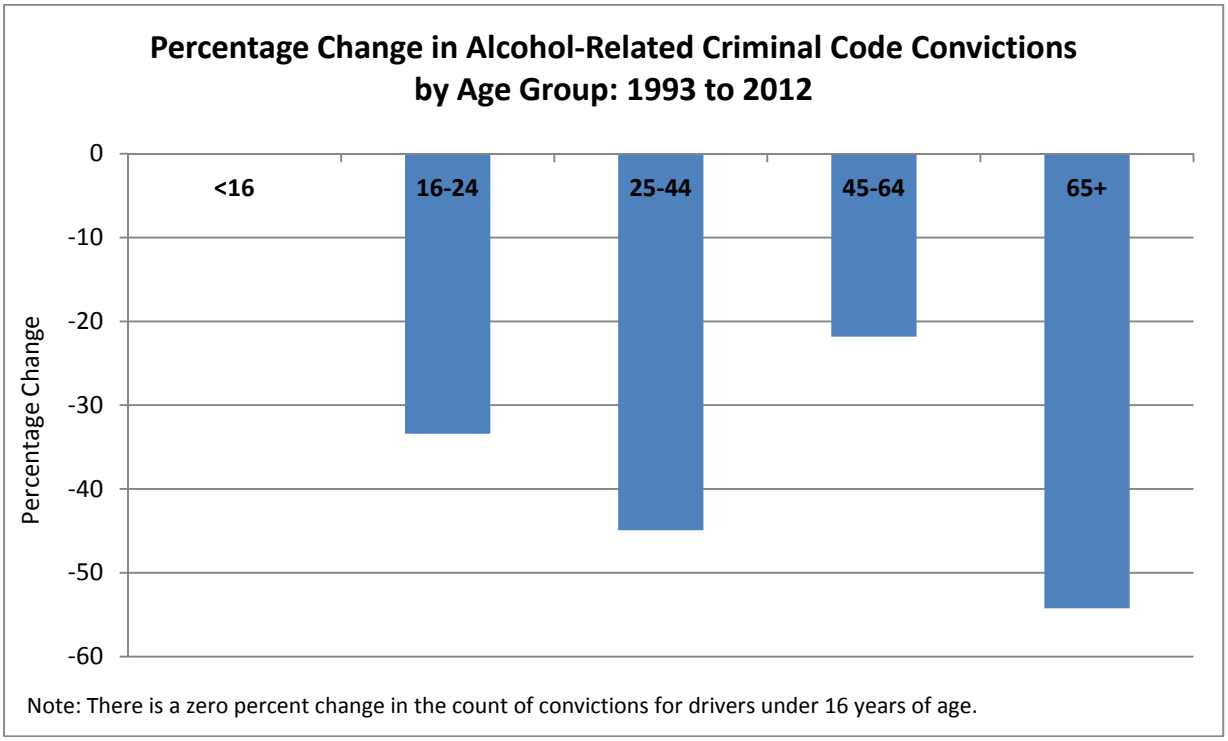
	<16	16-17	18-20	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total
1993	7	64	286	494	584	543	402	292	194	146	79	67	31	22	6	3,217
1994	5	49	363	473	553	566	435	288	205	138	88	86	42	24	4	3,319
1995	3	82	364	471	518	547	422	278	177	111	86	59	33	11	13	3,175
1996	7	66	366	388	447	394	387	267	208	151	71	66	32	10	15	2,875
1997	7	105	430	495	451	440	440	302	201	130	78	50	44	18	11	3,202
1998	7	109	349	448	495	459	455	306	227	163	82	49	39	25	6	3,219
1999	13	81	412	504	484	445	429	330	248	151	56	46	28	15	11	3,253
2000	12	75	345	430	396	368	354	298	198	102	66	42	23	14	12	2,735
2001	11	91	357	379	384	334	322	259	177	128	54	44	22	15	3	2,580
2002	11	85	333	338	359	309	277	282	175	102	78	39	24	10	11	2,433
2003	7	65	300	308	317	269	237	233	178	109	81	44	26	14	9	2,197
2004	5	55	282	273	251	235	209	232	150	83	63	46	21	13	4	1,922
2005	6	46	210	272	243	204	178	158	139	91	51	45	24	5	9	1,681
2006	8	58	259	298	264	222	173	178	168	82	60	35	16	5	5	1,831
2007	7	50	274	289	306	248	244	200	151	110	67	35	19	9	10	2,019
2008	4	59	234	320	312	245	196	201	197	117	74	43	21	8	3	2,034
2009	2	37	255	341	358	268	222	213	176	120	57	37	19	8	3	2,116
2010	8	43	286	356	353	241	250	198	169	133	76	55	33	7	3	2,211
2011	5	36	235	333	334	220	200	166	157	122	88	36	15	7	2	1,956
2012	**7**	**33**	**211**	**318**	**334**	**251**	**239**	**179**	**148**	**128**	**67**	**37**	**18**	**7**	**2**	**1,979**
2007-11 Average	5	45	257	328	333	244	222	196	170	120	72	41	21	8	4	2,067
% Change 2011 to 2012	40.0%	-8.3%	-10.2%	-4.5%	0.0%	14.1%	19.5%	7.8%	-5.7%	4.9%	-23.9%	2.8%	20.0%	0.0%	0.0%	1.2%
% Change 2007-11 Average to 2012	34.6%	-26.7%	-17.8%	-3.0%	0.4%	2.7%	7.5%	-8.5%	-12.9%	6.3%	-7.5%	-10.2%	-15.9%	-10.3%	-52.4%	-4.3%
% Change 1993 to 2012	0.0%	-48.4%	-26.2%	-35.6%	-42.8%	-53.8%	-40.5%	-38.7%	-23.7%	-12.3%	-15.2%	-44.8%	-41.9%	-68.2%	-66.7%	-38.5%

Caution: The count of convictions shown does not take into account the number of licensed drivers by age group.

Comparing 2012 to the previous five year (2007 to 2011) annual average:

- There are 4% fewer convictions in total (a difference of 88);
- Convictions among the youngest age group (under age 16) increased by a count of 2;
- Convictions among 16 to 24 year olds decreased by 11% (a count of 68);
- Convictions among 25 to 44 year olds increased by 1% (a count of 8);
- Convictions among 45 to 64 year olds decreased by 6% (a count of 24); and,
- Convictions among those aged 65 and older decreased by 19% (a count of 6).

Figure 12-1: Percentage Change in Alcohol-Related Criminal Code Convictions by Age Group



During the twenty-year period 1993 to 2012, all age groups experienced declines in alcohol-related Criminal Code convictions, with the exception of those drivers under the age of 16 which is unchanged. Convictions among drivers aged:

- 16 to 24 decreased by 33%;
- 25 to 44 decreased by 45%;
- 45 to 64 decreased by 22%; and,
- 65 and older decreased by 54%.

Table 12-3: Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type

Table 12-3
Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type: 2012

Age Group	Alcohol Content Over .08		Impaired Driving		Impaired Driving Causing Injury/Death		Refuse Sample		Total
	253B	253BC	253A	253AC	Injury	Death	254-5	254-5C	
<16	6	0	1	0	0	0	0	0	7
16-17	24	0	4	0	2	1	2	0	33
18-20	140	0	64	0	2	0	5	0	211
21-24	195	0	101	0	7	1	14	0	318
25-29	197	0	116	1	3	0	17	0	334
30-34	151	0	77	2	2	3	16	0	251
35-39	135	1	86	1	2	0	14	0	239
40-44	105	1	60	1	0	2	10	0	179
45-49	78	1	59	0	0	0	10	0	148
50-54	70	0	46	1	0	0	11	0	128
55-59	35	0	27	0	0	0	5	0	67
60-64	25	0	10	0	1	0	1	0	37
65-69	11	0	7	0	0	0	0	0	18
70-74	5	0	2	0	0	0	0	0	7
75+	0	0	1	0	0	0	1	0	2
Total	**1,177**	**3**	**661**	**6**	**19**	**7**	**106**	**0**	**1,979**

Caution: The count of convictions shown does not take into account population demographics by age group or the number of licensed drivers by age group.

Table 12-4: Alcohol-Related Criminal Code Convictions by Active Licensed Drivers and Age Group

Table 12-4
Alcohol-Related Criminal Code Convictions by Active Licensed Drivers and Age Group: 2002, 2007 and 2012

Age Group	2002			2007			2012		
	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers
<16-24*	767	31.5%	14.7%	620	30.7%	14.2%	569	28.8%	14.4%
25-44	1,227	50.4%	38.3%	998	49.4%	34.5%	1,003	50.7%	33.6%
45-64	394	16.2%	32.4%	363	18.0%	36.1%	380	19.2%	35.6%
65+	45	1.8%	14.6%	38	1.9%	15.2%	27	1.4%	16.5%
Total	**2,433**	**100%**	**100%**	**2,019**	**100%**	**100%**	**1,979**	**100%**	**100%**

* Includes statistics for individuals under the age of 16 convicted of an alcohol-related Criminal Code offence, but who may not have been licensed at the time of offence.

Alcohol-related convictions decreased by 19% from 2002 (count of 2,433) to 2012 (count of 1,979).

<16 to 24 Age Group
Drivers up to the age of 24 continue to be overrepresented in alcohol-related Criminal Code convictions. Drivers up to the age of 24 accounted for 15% of all licensed drivers in 2002, but for nearly 32% of alcohol offence convictions. In 2012, these drivers represented 14% of the licensed drivers, but accounted for 29% of convictions.

25 to 44 Age Group
Drivers aged 25 to 44 also continue to be overrepresented in alcohol-related Criminal Code convictions. In the years 2002, 2007 and 2012, drivers in this group made up 38%, nearly 35% and 34% of licensed drivers, respectively. However, these drivers accounted for 50%, 49% and 51% of alcohol-related Criminal Code convictions in those years, respectively.

45 to 64 Age Group
Drivers aged 45 to 64 are underrepresented in alcohol-related Criminal Code convictions. In the years 2002, 2007 and 2012, drivers in this group made up 32%, 36% and 36%, respectively, of licensed drivers. At the same time, these drivers accounted for 16%, 18% and 19%, respectively, of alcohol-related Criminal Code convictions.

65 and Older Age Group
Older drivers are underrepresented in alcohol-related Criminal Code convictions. In the years 2002, 2007 and 2012, drivers 65 years of age and older made up nearly 15%, 15% and nearly 17% of licensed drivers, respectively, but accounted for only 2%, 2% and 1% of alcohol-related Criminal Code convictions, respectively.

Table 12-5: Driver Involvement in "First", "Second", and "Third and Subsequent" Alcohol-Related Criminal Code Convictions by Age Group

Table 12-5
Driver Involvement in "First", "Second', and "Third and Subsequent" Alcohol-Related Criminal Code Convictions by Age Group: 2002, 2007 and 2012

Age Group	2002			2007			2012		
	Alcohol* Convictions	Licensed Drivers	Rate /1,000	Alcohol Convictions	Licensed Drivers	Rate /1,000	Alcohol Convictions	Licensed Drivers	Rate /1,000
Total Alcohol-Related Criminal Code Convictions									
<16-24	767	102,709	7.5	620	106,514	5.8	569	120,540	4.7
25-44	1,227	268,120	4.6	997	259,874	3.8	1,003	281,413	3.6
45-64	394	227,192	1.7	364	271,555	1.3	380	298,335	1.3
65+	45	102,149	0.4	38	114,455	0.3	27	138,193	0.2
Total	**2,433**	**700,169**	**3.5**	**2,019**	**752,398**	**2.7**	**1,979**	**838,481**	**2.4**
First Occurrence									
<16-24	683	102,709	6.6	585	106,514	5.5	526	120,540	4.4
25-44	1,026	268,120	3.8	890	259,874	3.4	875	281,413	3.1
45-64	342	227,192	1.5	333	271,555	1.2	340	298,335	1.1
65+	40	102,149	0.4	33	114,455	0.3	26	138,193	0.2
Total	**2,091**	**700,169**	**3.0**	**1,841**	**752,398**	**2.4**	**1,767**	**838,481**	**2.1**
Second Occurrence									
<16-24	73	102,709	0.7	33	106,514	0.3	33	120,540	0.3
25-44	151	268,120	0.6	89	259,874	0.3	104	281,413	0.4
45-64	40	227,192	0.2	21	271,555	0.1	32	298,335	0.1
65+	3	102,149	<0.1	5	114,455	<0.1	1	138,193	<0.1
Total	**267**	**700,169**	**0.4**	**148**	**752,398**	**0.2**	**170**	**838,481**	**0.2**
Third and Subsequent Occurrence									
<16-24	11	102,709	0.1	2	106,514	<0.1	10	120,540	0.1
25-44	50	268,120	0.2	18	259,874	0.1	24	281,413	0.1
45-64	12	227,192	0.1	10	271,555	<0.1	8	298,335	<0.1
65+	2	102,149	<0.1	0	114,455	<0.1	0	138,193	<0.1
Total	**75**	**700,169**	**0.1**	**30**	**752,398**	**<0.1**	**42**	**838,481**	**0.1**

* For comparative purposes, the report assumes each alcohol-related Criminal Code conviction is for a single licensed driver although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year or specific incident.

Compared to ten years ago, the involvement rate of drivers in alcohol-related Criminal Code convictions has declined by 32% (3.5 per 1,000 licensed drivers in 2002; 2.4 per 1,000 licensed drivers in 2012).[8]

[8] Please note that due to the inclusion of only one decimal place in the figures displayed in Table 12-5 that some of the percentage changes in involvement rate noted will be different than those calculated using the figures from the table. The reported percentage change uses multiple decimal points in its calculation while the displayed figures have been rounded to one decimal.

<16 to 24 Age Group
For every 1,000 licensed drivers in this age group, there were 7.5, 5.8 and 4.7 alcohol-related Criminal Code convictions in 2002, 2007 and 2012, respectively. The 2012 rate for this age group is 37% below the 2002 rate.

25 to 44 Age Group
The relative involvement rate of drivers aged 25 to 44 in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 4.6 in 2002, 3.8 in 2007, and 3.6 in 2012. The 2012 rate for this age group is 22% below the 2002 rate.

45 to 64 Age Group
The relative involvement rate of drivers aged 45 to 64 in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 1.7 in 2002, 1.3 in 2007, and 1.3 in 2012. The 2012 rate for this age group is 27% below the 2002 rate.

65 and Older Age Group
The relative involvement rate of drivers aged 65 and older in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 0.4 in 2002, 0.3 in 2007, and 0.2 in 2012. The 2012 rate for this age group is 56% below the 2002 rate.

First Occurrence
In 2012, the number of drivers convicted of an alcohol-related Criminal Code offence for the **first** time has decreased by nearly 16% compared to ten years ago (2,091 in 2002; 1,767 in 2012).

Comparing the involvement rates (per 1,000 licensed drivers) for 2002 and 2012, first occurrence Criminal Code convictions decreased by 29% overall and in each age group individually.

- Age 24 and under – a 34% decrease in 2012 compared to 2002
- Age 25 to 44 – a 19% decrease in 2012 compared to 2002
- Age 45 to 64 – a 24% decrease in 2012 compared to 2002
- Age 65 and older – a 52% decrease in 2012 compared to 2002

Second Occurrence
In 2012, the number of drivers convicted of an alcohol-related Criminal Code offence for the **second** time has decreased by 36% compared to ten years ago (267 in 2002; 170 in 2012).

Comparing the involvement rates (per 1,000 licensed drivers) for 2002 and 2012, second occurrence Criminal Code convictions decreased by 47% overall and in each age group individually.

- Age 24 and under – a nearly 62% decrease in 2012 compared to 2002
- Age 25 to 44 – a 34% decrease in 2012 compared to 2002
- Age 45 to 64 – a 39% decrease in 2012 compared to 2002
- Age 65 and older – a count of 1 in 2012 compared to 3 in 2002

Third and Subsequent Occurrence
In 2012, the number of drivers convicted of an alcohol-related Criminal Code offence for the **third and subsequent** time has decreased by 44% compared to ten years ago (75 in 2002; 42 in 2012).

Comparing the involvement rates (per 1,000 licensed drivers) for 2002 and 2012, third and subsequent occurrence Criminal Code convictions decreased by 53% overall and in each age group individually.

- Age 24 and under – a count of 10 in 2012 compared to 11 in 2002; a nearly 23% decrease in the rate
- Age 25 to 44 – a count of 24 in 2012 compared to 50 in 2002; a 54% decrease in the rate
- Age 45 to 64 – a count of 8 in 2012 compared to 12 in 2002; a 49% decrease in the rate
- Age 65 and older – a count of 0 (none) in 2012 compared to 2 in 2002

CAUTION: Please interpret numbers of convictions for “second” and “third and subsequent” offences with care. Due to the small numbers of these convictions overall, small shifts in the counts can produce relatively large percentage change differences.

GLOSSARY – Terms & Definitions

Terms and Definitions

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

"Active Drivers"

- Drivers holding an active Manitoba Driver's Licence of any specific Licence Class

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"ATV"

- All Terrain Vehicle; includes vehicles with 3, 4 and 6 wheels.

"Blood alcohol concentration (BAC)"

- A measure of the concentration of alcohol in a person's blood. A measure of ".08 BAC" is equivalent of 80 milligrams of alcohol per 1,000 milligrams of blood, or 0.08%.

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"Criminal Code 253A" and "Criminal Code 253B"[9]: Impaired driving

- Every one commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,
  - (*a*) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
  - (*b*) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.
- For greater certainty, the reference to impairment by alcohol or a drug in paragraph (*a*) includes impairment by a combination of alcohol and a drug.
- "253AC" and "253BC" indicate a conviction when there was a youth in the vehicle.

[9] Definitions for Criminal Code Statute 253, 254 and 255 are taken directly from the **Criminal Code (R.S., 1985, c. C-46)** of Canada, as posted on the Department of Justice website. (http://laws.justice.gc.ca/en/)

"Criminal Code Statute 254-5": Refusing to comply with a request for sample

- If a peace officer has reasonable grounds to suspect that a person has alcohol or a drug in their body and that the person has, within the preceding three hours, operated a motor vehicle or vessel, operated or assisted in the operation of an aircraft or railway equipment or had the care or control of a motor vehicle, a vessel, an aircraft or railway equipment, whether it was in motion or not, the peace officer may, by demand, require the person to comply with paragraph (*a*), in the case of a drug, or with either or both of paragraphs (*a*) and (*b*), in the case of alcohol:
    - (*a*) to perform forthwith physical coordination tests … and, if necessary, to accompany the peace officer for that purpose; and
    - (*b*) to provide forthwith a sample of breath that, in the peace officer's opinion, will enable a proper analysis to be made by means of an approved screening device and, if necessary, to accompany the peace officer for that purpose.
- Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.
- "254-5C" indicates a conviction when there was a youth in the vehicle.

"Criminal Code Statute 255-2": Impaired driving/refusing to provide sample causing injury

- Everyone who commits an offence under paragraph 253(*a*) and causes bodily harm to another person as a result is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.

"Criminal Code Statute 255-3": Impaired driving/refusing to provide sample causing death

- Everyone who commits an offence under paragraph 253(*a*) and causes the death of another person as a result is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in the death of another person is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in the death of another person, or in bodily harm to another person whose death ensues, is guilty of an indictable offence and liable to imprisonment for life.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This involvement rate does not take into account the number of vehicle kilometres driven by each driver group.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Graduated Driver Licensing (GDL)"

- A three-stage program designed to help new drivers, regardless of age, acquire the knowledge and skill needed to safely operate a motor vehicle. Each licence stage has specific rules and restrictions governing when and under what circumstances the holder is allowed to operate a motor vehicle, enabling novice drivers to gain more experience under a greater variety of driving conditions. Both Class 5 and Class 6 licences have a GDL stage associated with them.
- Three stages of GDL: Learner (5/L or 6/L); Intermediate (5/I or 6/I); and, Full (5/F or 6/F).
- To view a full discussion of the GDL program in Manitoba, please visit:
  - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGuide.pdf; ou en Français,
  - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGUIDEfr.pdf

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Injured"

- The casualty type "injured" indicates the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed.

"Involvement"

- A calculation of the number of collisions per specific unit of licensed drivers or registered vehicles. For the purposes of this report, involvement is calculated per 10,000 licensed drivers or registered vehicles.

"Killed"

- The casualty type "killed" indicates the victim involved in the traffic collision died as a result of their injuries within thirty (30) days of the collision occurrence.

"Licence Class"

- A Manitoba Driver's Licence of a specific level which permits the holder to operate vehicles within a specific Vehicle Class

"Licensed Drivers"

- A count of all Manitobans aged 16 and older who hold a valid licence within the licensing year including active and suspended drivers. (See *Section 2 Licensed Drivers* for more information)

"Light Condition"

- Describes the light conditions at the scene of the accident, including:
  - Day – the light conditions which normally occur between one half hour after sunrise and one half hour before sunset;
  - Dawn – the light conditions which normally occur between one half hour before sunrise and one half hour after sunrise;
  - Dusk – the light conditions which normally occur between one half hour before sunset and one half hour after sunset;
  - Dark – the light conditions which normally occur between one half hour after sunset and one half hour before sunrise; and,
  - Artificial lighting – artificial illumination devices were functioning at the accident site under light conditions which normally occur between one half hour after sunset and one half hour before sunrise.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4,500 kg and pick-up under 4,500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4,500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"Off-road Vehicle (ORV)"

- One of several vehicle types designed for off-road use. It includes snowmobiles, off-road motorcycles, all-terrain vehicles (ATVs), amphibious vehicles, dune/sport buggies, and 4-wheel drive vehicles operated off-road.

"Pedestrian Action"

- Refers to the actions taken by a pedestrian immediately prior to a collision (including: crossing at an intersection with or without the right-of-way, crossing between intersections, running into the roadway, walking on the roadway, lying on the roadway, playing on the roadway, etc.).

"Pedestrian Involvement Rate"

- A calculation of the number of pedestrians involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: http://www.gov.mb.ca/health/annstats/index.html

"Pre-collision activity"

- The action of a vehicle immediately prior to involvement in a collision. This is an indication of what the vehicle was doing prior to the accident or to the driver realizing that a collision may occur and does not include vehicle manoeuver to avoid the collision.

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"PSV Vehicles"

- Also known as 'public service vehicles', a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Other school vehicle", and "Emergency vehicles", including ambulance, fire and police vehicles.

"Public Roadway"

- A public roadway in Manitoba is considered to be any provincial road (PR), provincial trunk highway (PTH) or municipal road, including the entrances to and exits from these roadways. This excludes all off-road areas, parking lots, private property and First Nation Reserve roads (unless the road is a PR or PTH running through, across or on Reserve lands).

"Region"

- Manitoba Infrastructure and Transportation is served by 5 regional office locations, each responsible for a geographic region (for boundaries, see Map 11-1). "Regions" are used to indicate the region in which a collision occurred.

"Reportable Collision"

- Prior to a change in the Highway Traffic Account (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of $1,000 were required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completed a Traffic Accident Report for the collision.
- Amendments to the Highway Traffic Act (which received Royal Ascent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police report be made if the driver is aware, has reason to believe, or is later made aware, that a collision involves: a fatality; an injury requiring admittance to hospital for observation or treatment; another driver not having a valid driver's licence; another vehicle not validly registered; the driver of another vehicle not providing the required particulars; the driver of another vehicle not stopping at the scene of the accident; or, alcohol or another intoxicating substance as a factor in the accident.

- As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public Insurance.
- As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of $2,000 damage (all vehicles combined) is necessary for property damage only (PDO) collisions to be included in this report.
- This report deals with these reportable collisions and the TARs arising from them, regardless of whether the TAR is generated by law enforcement agencies or by Manitoba Public Insurance.

“Reportable ORV Collision”

- ORV collisions resulting in a fatality, injury or property damage in excess of $1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report (TAR) for the collision. This report deals with these reportable ORV collisions and the TARs arising from them.

“Road User Class”

- A classification based on how a person involved in a collision was using the road at the time of the collision. It includes: Drivers (of motor vehicles), Passengers (in motor vehicles), those Riding/Hanging On (to a motor vehicle), Motorcyclist (drivers and passengers), Moped (drivers and passengers), Bicyclist (drivers and passengers), and Pedestrians.

“Rural Location”

- Collisions occurring on primary highways, secondary highways and local roadways, including the Trans Canada Highway and excluding those that occur within the municipal boundaries of an urban area.

“Suspended drivers”

- Drivers holding a Manitoba Driver’s Licence of any specific Licence Class who have been disqualified from driving for some reason. Although the list is extensive, some possible suspensions could be for driving violations, medical conditions, administrative suspensions and criminal code convictions.

“Urban Location”

- Collisions occurring within the municipal boundaries of urban areas, including Winnipeg, Brandon, Portage la Prairie, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and others.

“Vehicle Class”

- Category of vehicles meeting specific designations and specifications
- Non-commercial vehicle classes are vehicles registered for private use and include:
    - Passenger - A motor vehicle classified by the manufacturer as a passenger car or which is designed, constructed or adapted for the principle purpose of transporting passengers and includes a delivery car, but does not include a motorcycle, moped or motor vehicle which is designed, constructed or adapted for the purpose of carrying goods or commodities.
    - Antique - A car, truck or motorcycle that is more than thirty years old at the time of application for registration. A motor vehicle registered as an antique car, truck or motorcycle can be driven only when: taking it to be repaired or serviced; displaying it to the public in a parade or procession and driving it to or from such a parade or procession; driving it to an antique car, truck or motorcycle rally as authorized by the Registrar of Motor Vehicles.
    - Motorcycle - A vehicle that has a steering handlebar completely constrained from rotating in relation to the axle of one wheel in contact with the ground, is designed to travel on not more than three wheels in contact with the ground, has a minimum unladen seat height of 650 millimetres, has a minimum wheel rim diameter of 250 millimetres, has a minimum wheelbase of 1,016 millimetres, and, has a maximum speed capability of more than 50 km/h but does not include a moped, power-assisted bicycle or tractor.

- Moped - A motor vehicle which has 2 tandem wheels or 3 wheels, each of which is more than 250 millimetres in diameter, has a seat or saddle having a minimum unladen height of 650 millimetres, when measured from the ground level to the top of the forward most part of the saddle, is capable of being driven at all times by pedals only if so equipped, by motor only or by both pedals and motor, and, the motor has a piston displacement of not more than 50 cubic centimetres, or is an electric motor neither of which is capable of enabling the moped to attain a speed greater than 50 km/h.
- Truck – see “Passenger”.
- Farm Truck - A motor vehicle classified as a “truck” at time of registration and is owned by a person engaged in farming.
- Snow Vehicle A vehicle that has a gross vehicle weight in exceeding 454 kilograms and is not equipped with wheels, but in place thereof is equipped with tractor treads alone or with tractor treads and skis, or with skis and a propeller, or is a toboggan equipped with tractor treads or a propeller, is designed primarily for operating over snow or ice, and is used primarily for that purpose, and is designed to be self-propelled.
- Trailer - A vehicle designed for carrying persons or chattels, and for being towed by a motor vehicle, and includes a farm trailer but does not include an implement of husbandry that is temporarily towed, propelled, or moved upon a highway.
- Tractor - A self-propelled vehicle that is designed primarily for traction purposes, and that is not itself constructed to carry a load other than the driver, and includes a farm tractor but does not include a truck tractor or a special mobile machine.

- Commercial vehicle classes are those involving vehicles registered to or for the use of a business and include:
  - Truck - A truck (or trailer) used to transport the registered owner’s (or lessee’s) own business goods: beyond a radius of 20 kilometres of the City of Winnipeg, where the registered owner’s business address is in the City of Winnipeg, beyond a radius of 30 kilometres of a city, town or village other than the City of Winnipeg, where the registered owner’s address is not in the City of Winnipeg.
  - Public Service Vehicles (PSV) - A motor vehicle or trailer operated by or on behalf of any person, for transportation for gain or compensation of persons or property upon a highway, and includes a semi-trailer truck; but does not include the passenger-carrying-motor vehicles of an electric, or steam railway or motor bus company operating on the streets of a city, or school buses, ambulances or hearses or motor vehicle operated for gain or compensation under *The Taxicab Act* or a municipal by-law in cities, towns, and villages.
  - Dealer - A person who carries on the business as principal or agent, or who holds himself or herself out as carrying on the business as principal or agent, (a) of buying motor vehicles or trailers; (b) of selling motor vehicles or trailers, whether or not in combination with leasing them; or (c) of buying and selling motor vehicles or trailers, whether or not in combination with leasing them.
  - Repairer - A person who maintains a garage for the purpose of rendering services therein upon motor vehicles and/or trailers, at a charge, price or consideration; or who owns and operates a fleet of five or more motor vehicles or trailers; or both, and maintains a facility for their repair, is permitted under The Highway Traffic Act to obtain “Repairer” licence plates to be used to transport motor vehicles for repair from place of origin to the repair facility and return, and the testing of the motor vehicle after the repair work has been completed.
  - Taxi - A motor vehicle had, kept, used, intended for use, or operated, for the transportation of persons for compensation, and includes such vehicles when garaged or under repair; but does not include a public service vehicle, a trolley bus or passenger-carrying motor vehicle or a public transportation system operating on the streets of a city, a school bus, an ambulance, a hearse, or a motor vehicle, or vehicle of a class of motor vehicles, that The Taxicab Board established under The Taxicab Act excludes from the definition of a taxicab under that Act.
  - Livery - A vehicle licenced under *The Highway Traffic Act* for the transportation of persons for compensation and is licensed to operate in the Province according to terms issued by the Motor Transport Board.
  - Trailers – see previous definition.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Vehicle Occupant"

- All those in the "Road User Class" of "Drivers" and "Passengers". It excludes "Motorcyclist", "Bicyclist", "Moped", those "Riding/Hanging On" to a vehicle and "Pedestrians".

"Vehicle Involvement Rate"

- A calculation of the number of vehicles involved in traffic collisions for every 10,000 vehicles registered in Manitoba. The total number of vehicles registered is based on a point-in-time observation of the number of vehicles registered in specific vehicle classes. More detail regarding the methodology used to count registered vehicles can be found in "*Section 3 Vehicle Registrations*" of this report.

"Victim Involvement Rate"

- A calculation of the number of victims or casualties involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: http://www.gov.mb.ca/health/annstats/index.html

"Weather Condition"

- Describes the weather conditions prevalent at the time of the accident, including:
  - Clear – bright conditions, without precipitation or airborne matter, are recorded as clear;
  - Cloudy – dull, overcast conditions, without precipitation or airborne matter, are recorded as cloudy;
  - Raining – raining (self explanatory);
  - Snowing – snowing (self explanatory);
  - Fog or Mist – airborne matter, of natural origin, which obscures visibility;
  - Smoke or Dust – airborne matter, of a natural or artificial origin, which obscures visibility;
  - Freezing Rain / Sleet / Hail – freezing rain, sleet or hail (self explanatory);
  - Drifting Snow – snow drifting on or above roadway, which obscures visibility of the roadway, road markings, traffic devices or roadway fixtures; and,
  - Strong Winds – used if wind was a contributing factor in the accident.