



COLLISION STATISTICS 2021



2021 Red Deer Annual Motor Vehicle Collision Report

January 2026

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Glossary of Terms

Collisions	RCMP-reported collisions occurring on public roadways, alleys and public parking lots within the City of Red Deer's jurisdiction. Only those collisions are reported by public which result in a minimum of \$2,000 property damage or which result in injury or fatality. The collision must include at least one (1) motor vehicle. Non-vehicular collisions are not included in this report.
Public Roadway Collisions	Includes all collisions that occurred on any road or street within the City of Red Deer jurisdiction
Parking Lots Collisions	Includes all collisions that occurred on parking lots only within the City of Red Deer jurisdiction
Injury	Injuries noted by police on the collision report form. Injuries are classified as minor (scrapes, bruises, complaint of pain) or major (result in admission to hospital).
Fatality	On-scene fatalities, as well as those fatalities occurring within 30 days and which are related to the collision.
Automobile	Cars, trucks, and vans under 4,500 kilograms.
Truck	Tractor-trailers, trucks, and vans 4,500 kilograms and over.
Intersection	Defined as extending 10 metres past the legally defined limits of the outer crosswalk lines of an intersecting roadway.
Midblock	A section of roadway between two intersections.

Introduction

This report presents summary data on collisions that occurred from January 1, 2021, to December 31, 2021. It also provides the historical collisions and general statistics of 2020 and 2019 for comparison purpose. The collisions data includes a variety of collision characteristics such as the type of collisions, age, driver condition and safety equipment used, etc.

This report was prepared based on the collision data received by Engineering Services Department from Alberta Transportation as of January 2026. Statistics in this report do not include collisions that occurred in public parking lots and Unknown locations.

Significance of Collisions Statistics

The collision data is used to develop, establish, and implement systems for managing road safety. There are many major road safety-related tasks which cannot be initiated without collision data, such as:

- Developing road safety projects and programs such as education, enforcement, and communication campaigns;
- Identifying and investigating hazardous road safety situations and establishing counter-measures and priorities to correct the identified hazards or potential hazards;
- Identifying safety needs of special user groups, such as older drivers, pedestrians, bicyclists, motorcyclists, and commercial vehicles;
- Facilitating budget planning; and
- Determining collision reduction targets and hence developing road safety action plan targets.

Overview of Collision Statistics

Public Roadway Collisions: In 2021, there were 1444 reported motor vehicle collisions on public roadways in Red Deer. This figure is lower than 2020 which had 1,483 reported collisions on public roadways.

While 2021 considered a population decrease of 0.2 percent since 2019 (no census was conducted in 2020), collisions per 1,000 populations decreased from 15 to 14.

In 2021, public roadway collisions per 1,000 registered vehicles also decreased from 18 to 17.

In 2021, public roadway collisions (Intersection, Midblock, and Alley) have decreased by 2.6 percent compared to the 2020 figure.

In 2021, approximately 65.7 percent of the public roadway collisions occurred at intersections which is higher than the percentage of public roadway collisions that occurred at intersections in 2020 (65.1 percent) and 2019 (61.9 percent).

Injuries: In 2021 there were a total of 137 reported minor and major injuries; this is an approximate decrease of 12.7 percent over the 157 injuries reported in 2020. The 157 reported injuries in 2020 is an approximate decrease of 28.3 percent over the 219 injuries reported in 2019.

Fatalities: There were two road fatalities in 2021, compared to one in 2020 and two in 2019.

Pedestrians: In 2021 there were 21 reported pedestrian collisions resulting in 21 injuries and one fatality. In 2020 there were 17 pedestrian collisions resulting in 14 injuries. In 2019 there were 36 reported pedestrian collisions resulting in 30 injuries. Of the 21 pedestrian collisions in 2020, 10 pedestrians were recorded as crossing the road with the right of way, and 10 pedestrians were recorded as crossing the road without the right of way.

Bicyclists: In 2021 there were 18 reported bicycle collisions resulting in 16 injuries. In 2020 there were 16 reported bicycle collisions resulting in 13 injuries. In 2019 there were 21 reported bicycle collisions resulting in 16 injuries.

Month: In 2021, December was the leading month with 20.3 percent (293 total) of public roadway collisions; while July experienced the least number with 2.4 percent (34 total). See Figure 5.

Day: In 2021, Fridays had the highest percentage of collisions with 18.1 percent, while Sunday was the lowest with 9.1 percent. See Figure 6.

Hour: The hour from 1501 to 1600 accounted for 9.5 percent of all public roadway collisions, while each hour from 0001 to 0600 accounted for less than 1 percent. The periods of time with the highest number of collisions were from 1501 to 1600 on weekdays and 1301 to 1400 and 1401 to 1500 on weekends. See Figure 7 and Figure 8.

Holiday: Boxing Day recorded the highest total number of collisions. See Figure 9.

Types of Collisions: The most common collision type was “Rear-End,” and “Struck Object” was the second most common type of all public roadway collisions. The most frequently recorded improper driving action in collisions occurring on public roadways in 2021 was “Followed Too Closely”. See Table 4

Types of Collisions	2020	2021
Rear-End	468	455
Percentage of all public roadway collisions	31.6%	31.5%
Struck Object	251	298
Percentage of all public roadway collisions	16.9%	20.6%

Road Surface: 28.9 percent of collisions occurred when the road surface was covered with slush/snow/ice and 65.2 percent of collisions occurred when the road surface was dry.

Age: The age group with the highest number of collisions was “35-44”, second highest age group involved in a collision was “25-34” The “25-34” age group accounted for the highest percentage of collisions in 2020. See Table 8.

Age Group	2020	2021
35-44	462	469
Percentage of all public roadway collisions	16.3%	17.4%
25-34	479	431
Percentage of all public roadway collisions	16.9%	16.0%

Alcohol: In 2021, 20 drivers/pedestrians involved in collisions were impaired by alcohol while 16 drivers/pedestrians involved in collisions were impaired by alcohol in 2020. There were 2 injury collisions and 1 fatal collision related to alcohol in 2021.

Restraint Usage: In 2021, there were 36 drivers and 1 passenger involved in public roadway collisions recorded without wearing restraining devices which resulted in 5 injuries.

Motor Vehicle Types: Mini-Van/MPV/SUVs were involved in 34.3 percent of public roadway collisions in 2021 while passenger cars represented 28.6 percent and pick-up/van 19.3 percent.

Parking lots and Unknown locations Collisions: In 2021, there were 625 reported collisions in parking lots and unknown locations. In 2020 and 2019, the number of reported collisions on parking lots and unknown locations were 619 and 1077 collisions.

Table 1: Public Roadway Collisions Statistics 2019-2021

Statistics	2019	2020	2021
Public Roadways Collisions	2236	1483	1444
Collisions in Intersection	1384	966	949
Collisions in Midblock	785	490	456
Percentage Increase / Decrease	+3.5%	-33.7%	-2.6%
Fatal Collisions	2	1	2
Injury Collisions	176	133	112
Fatal and Injury Collisions	178	134	114
Property Damage Only Collisions	2058	1349	1330
Number of Injuries	219	157	137
Number of Fatalities	2	1	2
Pedestrian Collisions	36	17	21
Number of Pedestrian Injuries	30	14	21
Number of Pedestrian Fatalities	0	0	1
Bicycle Collisions	21	16	18
Number of Bicyclists Injuries	16	13	16
Number of Bicyclists Fatalities	0	0	0
Red Deer Population	101,992	101,992	100,844
Motor vehicles Registered in Red Deer Civic Address	85,721	83,801	84,098
Public Roadway Collisions/1000 Population	22	15	14
Public Roadway Collisions/1000 Registered Vehicles in Red Deer Civic Address	26	18	17

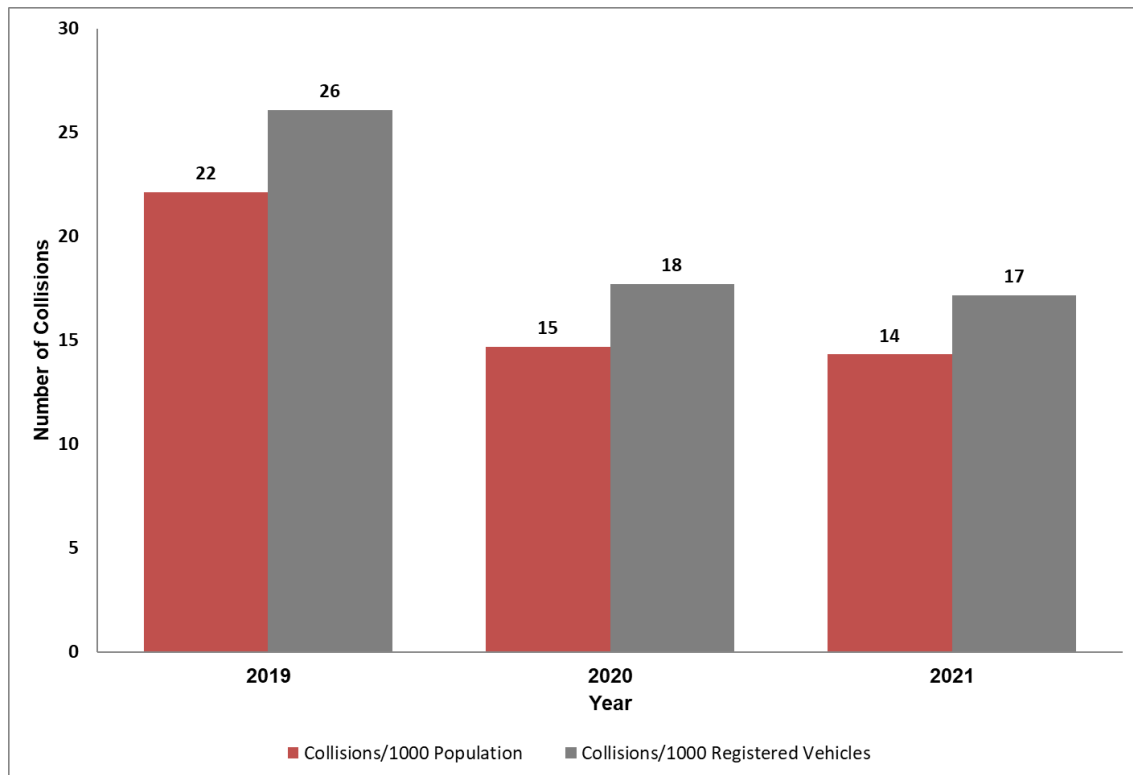


Figure 1: Public Roadway Collisions Rate Trend 2019-2021

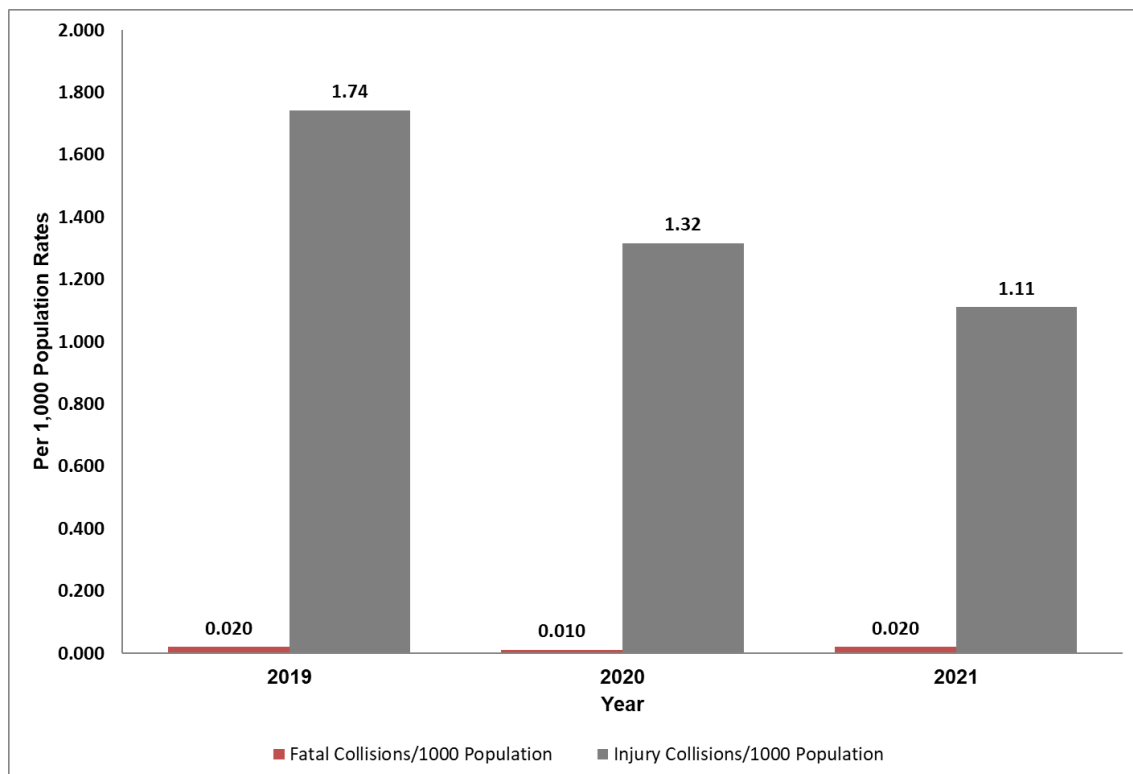


Figure 2: Fatal and Injury Collisions Rate Trend on Public Roadways 2019-2021

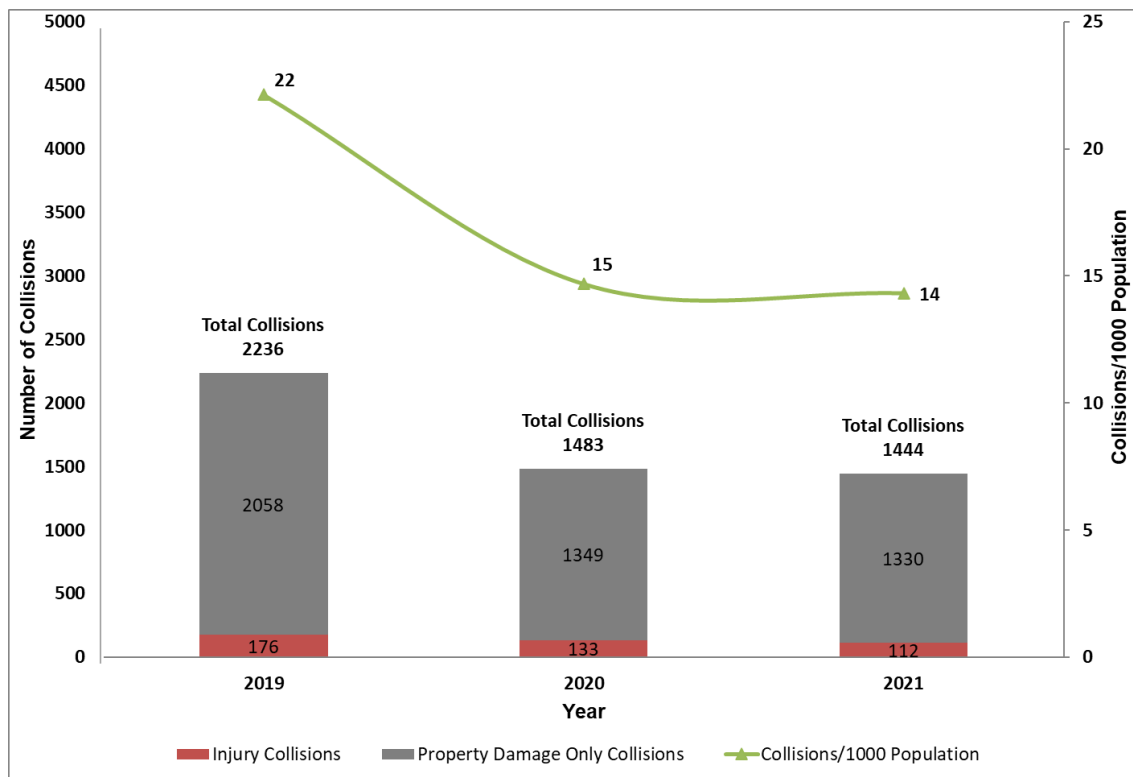


Figure 3: Public Roadway Collisions Trend 2019-2021

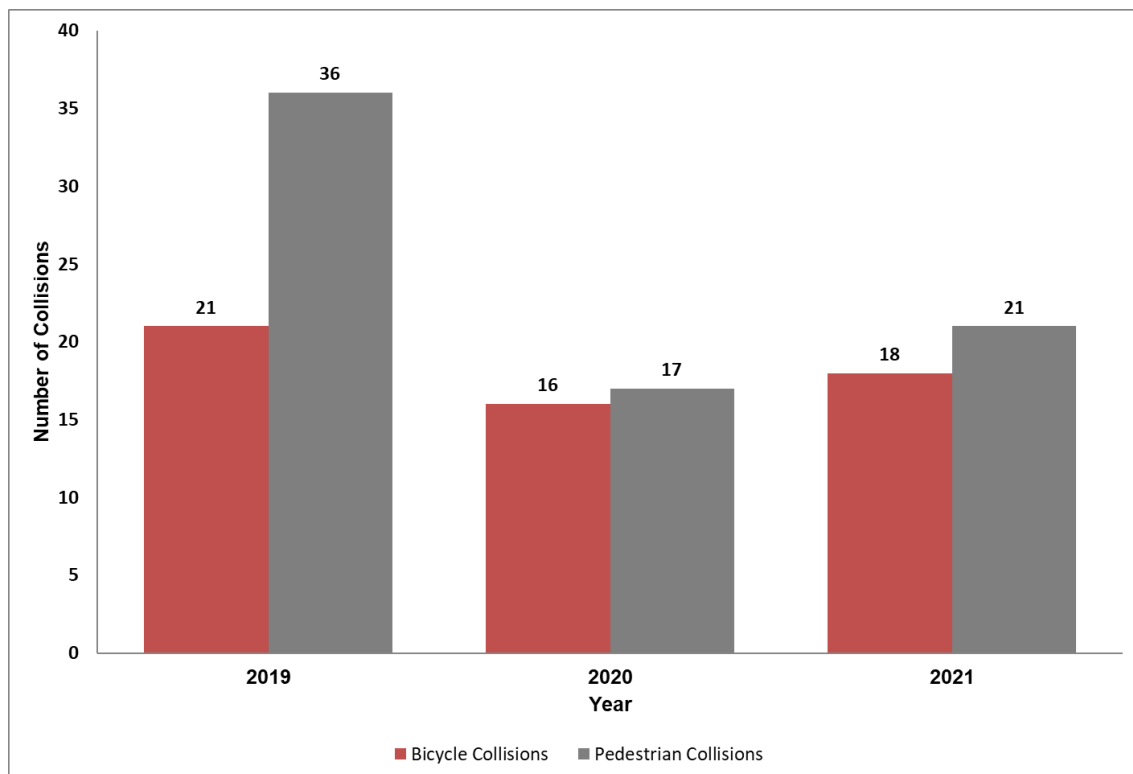


Figure 4: Pedestrian and Bicyclist Collisions on Public Roadways 2019-2021

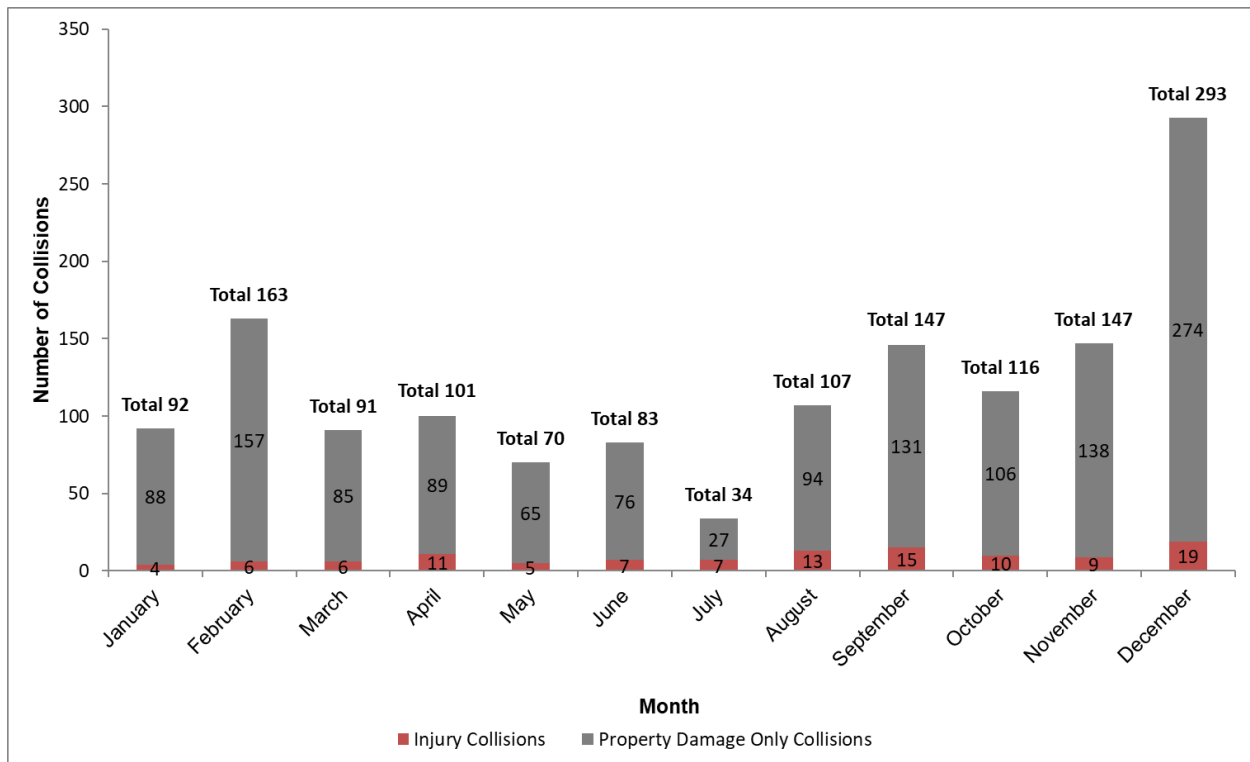


Figure 5 : 2021 Public Roadway Collisions by Month

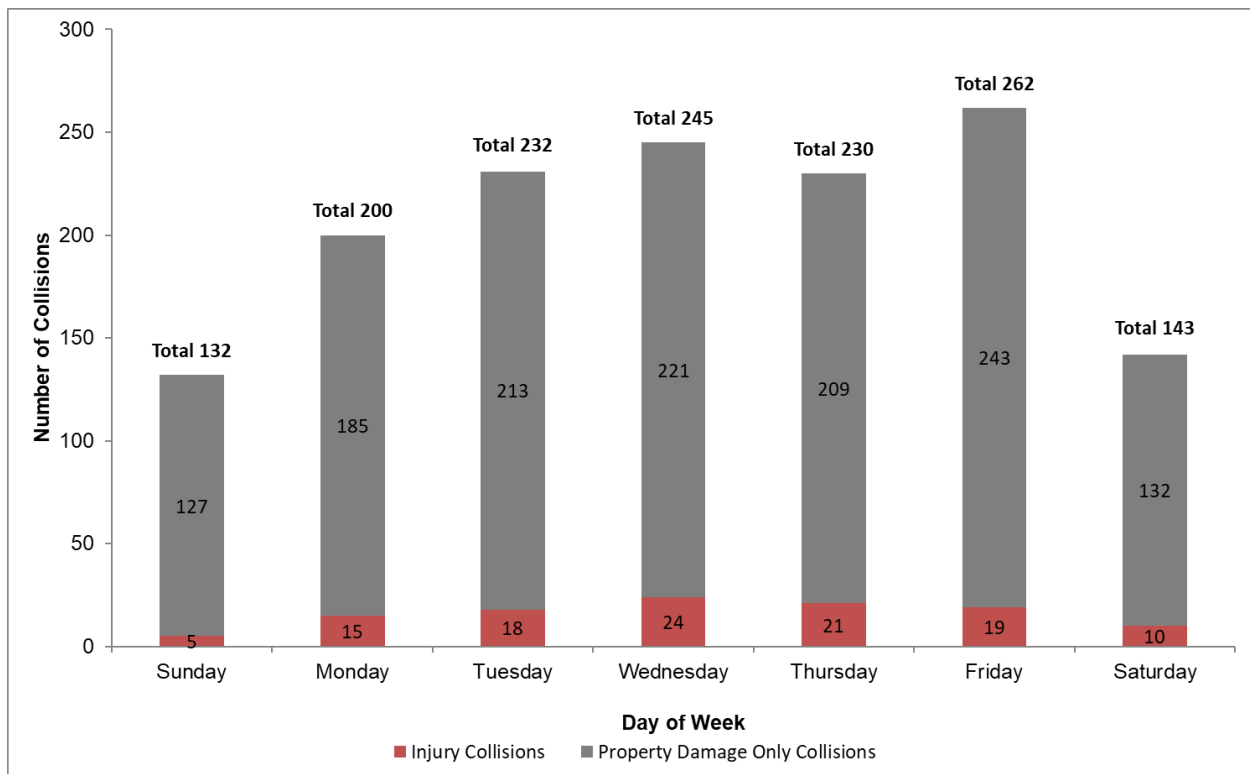


Figure 6: 2021 Public Roadway Collisions by Day of Week

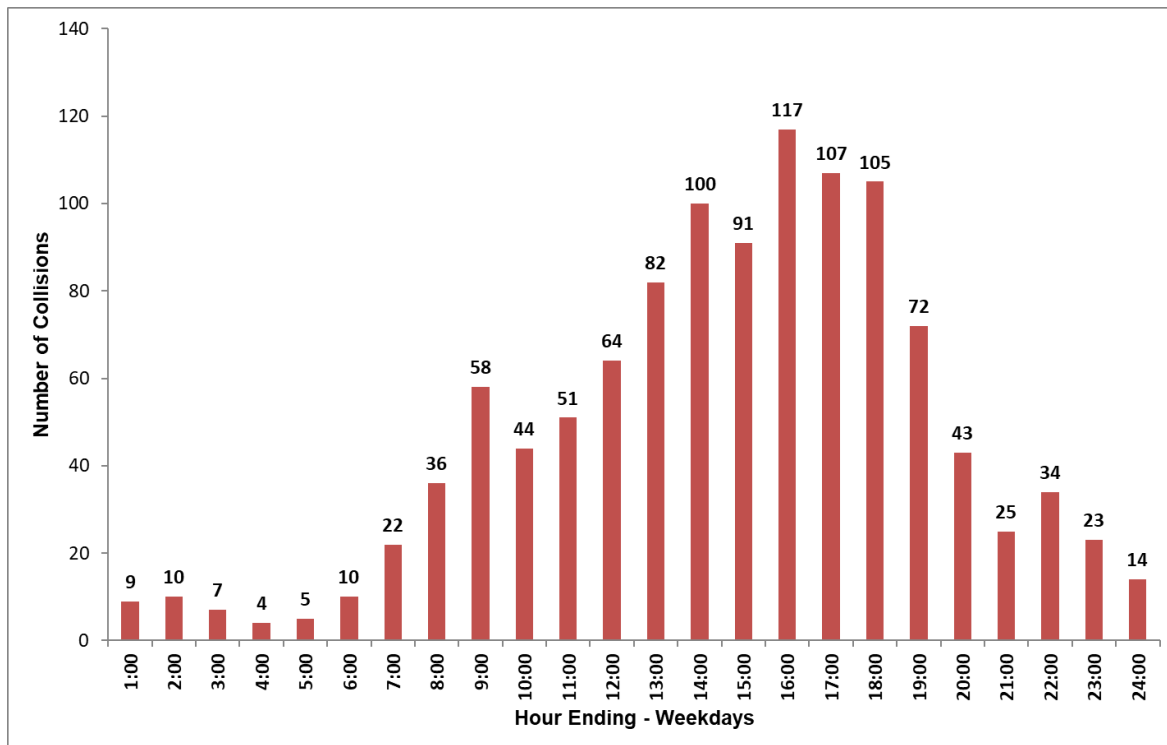


Figure 7: 2021 Public Roadway Collisions by Hour of Day (Weekdays)*

* 36 collisions occurred where time was unknown, was not given in the diagram

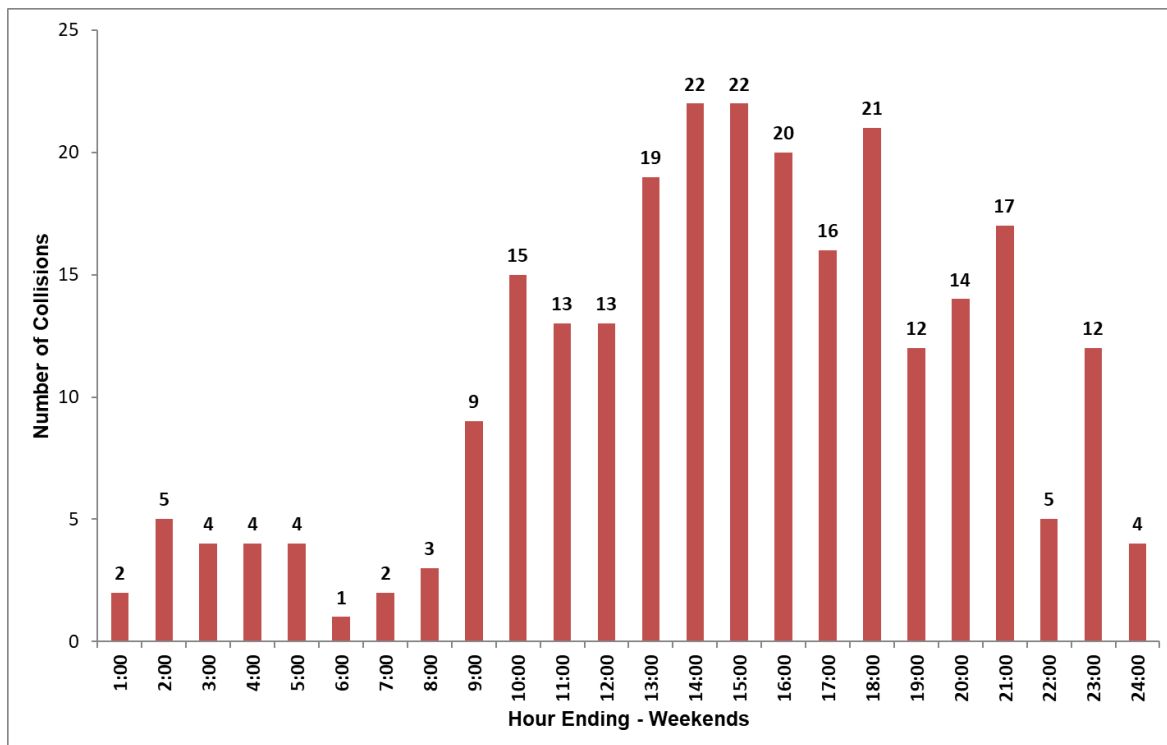


Figure 8: 2021 Public Roadway Collisions by Hour of Day (Weekends)*

* 16 collisions occurred where time was unknown, was not given in the diagram

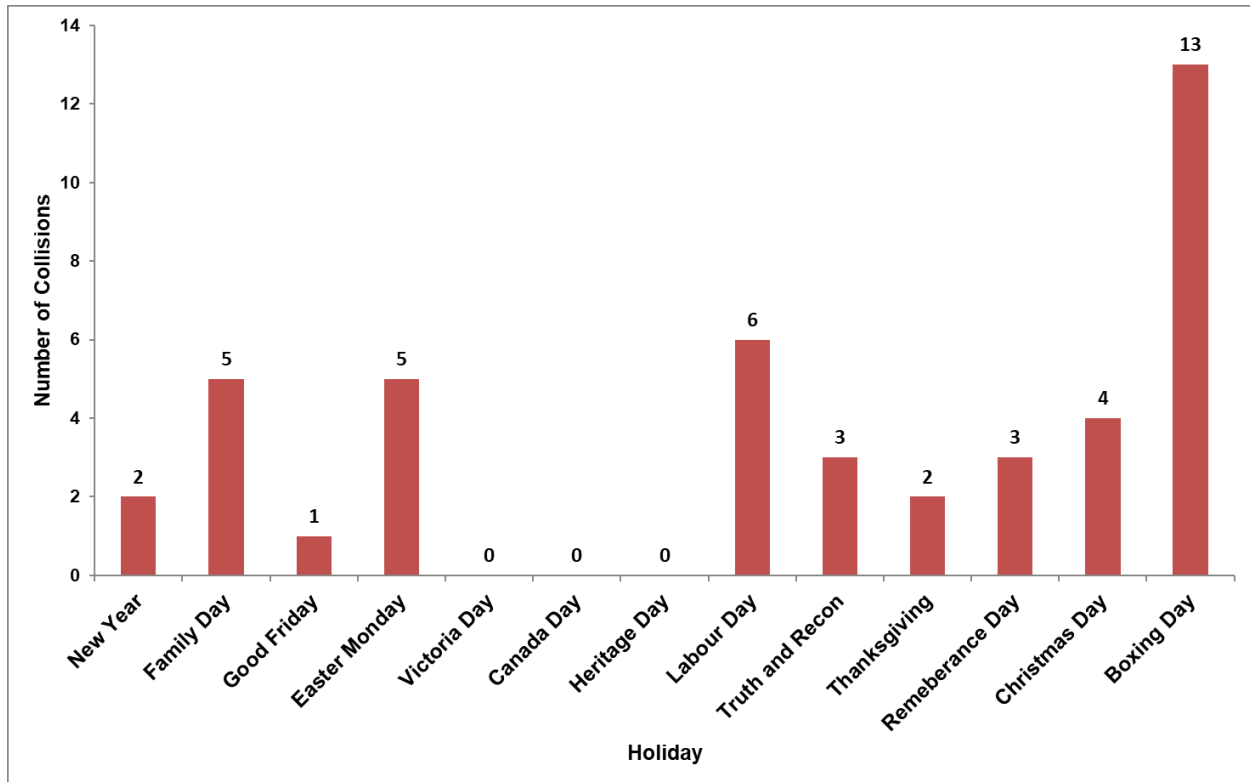


Figure 9: 2021 Public Roadway Collisions in Statutory Holidays

Public Roadway Collisions Summary

2021/01/01 TO 2021/12/31

Table 2 : Number of Collisions on Public Roadways in 2021

Statistics	2021
Motor Vehicle Collisions	1444
Motor Vehicles Involved	2797
Collisions Causing Fatalities	2
Fatalities Resulting	2
Collisions Causing Injury	112
Injuries Resulting	137
Property Damage Only Collisions	1330

Table 3: Fatalities and Injuries on Public Roadways in 2021

Travel Mode	Minor Injuries	Major Injuries	Fatal	Total
Vehicle Driver	68	13	0	81
Vehicle Passenger	11	1	0	12
Motorcyclist	2	0	1	3
Bicyclist	14	2	0	16
Pedestrian	14	7	1	22
Other, Unknown	5	0	0	5
Total	114	23	2	139

Roadway Summary

2021/01/01 TO 2021/12/31

Table 4: 2021 Collisions by Roadway Portion

Cause	Intersection	Midblock	Alley	At/Near Rail road crossing	Unknown	Total
Struck Object	92	195	10	0	1	298
Off Road Left	5	11	0	0	0	16
Right Angle	149	9	0	0	0	158
Passing-Left Turn	19	9	0	0	1	29
Left Turn- Across Path	100	3	2	0	0	105
Sideswipe - Opposite Direction	11	6	0	0	0	17
Other	5	13	5	0	11	34
Rear End	398	57	0	0	0	455
Off Road Right	7	11	0	0	0	18
Head On	7	4	0	0	0	11
Passing-Right Turn	10	7	1	0	0	18
Sideswipe - Same Direction	127	71	0	0	1	199
Backing	19	60	7	0	0	86
Total	949	456	25	0	14	1444

Table 5: 2021 Public Roadway Collisions by Month and Road Surface Condition

Month	Dry	Wet	Slush/Snow/Ice	Loose Surface Material	Other/ Unknown	Total
January	36	6	49	0	1	92
February	29	6	127	0	1	163
March	78	3	7	0	3	91
April	96	3	1	0	1	101
May	66	2	0	0	2	70
June	79	3	0	0	1	83
July	31	2	0	0	1	34
August	97	8	0	0	2	107
September	139	4	0	0	4	147
October	109	5	0	0	2	116
November	125	7	6	2	7	147
December	56	6	228	0	3	293
Total	941	55	418	2	28	1444

Day/Time Summary

2021/01/01 TO 2021/12/31

Table 6: 2021 Public Roadway Collisions by Hour of Day and Day of Week

Hour Ending	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
1:00	2	1	0	0	3	5	0	11
2:00	3	2	2	4	1	1	2	15
3:00	2	0	1	5	0	1	2	11
4:00	1	1	1	1	1	0	3	8
5:00	3	1	0	3	0	1	1	9
6:00	1	3	3	1	1	2	0	11
7:00	1	7	4	6	3	2	1	24
8:00	2	7	5	10	7	7	1	39
9:00	7	13	12	13	11	9	2	67
10:00	8	9	9	7	10	9	7	59
11:00	3	10	10	14	8	9	10	64
12:00	6	10	16	20	8	10	7	77
13:00	9	10	14	20	22	16	10	101
14:00	12	16	24	14	14	32	10	122
15:00	11	15	16	14	24	22	11	113
16:00	10	18	23	32	26	18	10	137
17:00	10	13	21	21	23	29	6	123
18:00	9	20	24	17	18	26	12	126
19:00	4	14	16	11	17	14	8	84
20:00	4	8	11	8	5	11	10	57
21:00	8	5	3	5	9	3	9	42
22:00	2	4	5	7	5	13	3	39
23:00	5	6	3	4	2	8	7	35
24:00	2	2	3	2	3	4	2	18
Unknown	7	5	6	6	9	10	9	52
Total	132	200	232	245	230	262	143	1444

Object Type Summary

2021/01/01 TO 2021/12/31

Table 7: Objects Involved in 2021 Motor Vehicle Collisions

Object Type	# Objects	Percentage
Passenger Car	922	28.59%
Pick-Up/Van <4500kg	621	19.26%
Mini-Van/MPV/SUV	1106	34.29%
Truck >4500kg	77	2.39%
Truck Tractor	9	0.28%
Motorcycle/Scooter	9	0.28%
Pedestrian	25	0.78%
Bicycle	18	0.56%
School Bus	5	0.16%
Transit Bus	10	0.31%
Intercity Bus	1	0.03%
Other Bus	1	0.03%
Fixed Object	99	3.07%
Train	0	0.00%
Animal	52	1.61%
Motorhome	4	0.12%
Construction Equipment	0	0.00%
Emergency Vehicle	4	0.12%
Farm Equipment	0	0.00%
Off-Highway Vehicle	5	0.16%
Motorized Snow Vehicle	0	0.00%
Moped	0	0.00%
Unknown	257	7.97%
Total	3225	100.0%

Drivers Summary

2021/01/01 TO 2021/12/31

Table 8: Age and Action of Drivers Involved in 2021 Public Roadway Collisions

Driver Action	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75+	Unknown	Total	% of Action
Driving Properly	1	70	99	226	237	185	176	82	47	3	1126	41.7%
Stop Sign Violation	0	5	2	6	4	9	1	4	2	0	33	1.2%
Yield Sign Violation	0	5	3	5	4	3	0	5	2	1	28	1.0%
Fail To Yield Right of way at Uncontrolled Intersection	0	2	1	8	1	3	1	1	2	0	19	0.7%
Fail To Yield Right of way to Pedestrian	0	2	0	1	1	1	1	0	2	0	8	0.3%
Followed Too Closely	1	54	54	68	83	32	46	31	8	5	382	14.2%
Parked Vehicle	0	0	0	0	0	0	0	0	0	0	0	0.0%
Backed Unsafely	0	5	8	13	11	8	10	13	3	5	76	2.8%
Left Turn Across Path	0	10	6	12	16	13	13	8	9	0	87	3.2%
Improper Lane Change	0	14	9	11	7	9	13	13	13	1	90	3.3%
Disobey Traffic Signal	0	4	11	10	12	15	9	6	1	0	68	2.5%
Ran Off Road	0	8	5	6	5	4	3	1	0	3	35	1.3%
Improper Turn	0	8	6	11	13	10	13	6	2	1	70	2.6%
Left of Centre	0	1	1	4	2	1	1	0	1	0	11	0.4%
Improper Passing	0	7	2	4	8	3	1	2	0	1	28	1.0%
Other, Unknown	0	21	28	46	65	22	28	15	15	398	638	23.6%
Total	2	216	235	431	469	318	316	187	95	430	2699	100%
% of Age	0.1%	8.0%	8.7%	16.0%	17.4%	11.8%	11.7%	6.9%	3.5%	15.9%	100%	

Condition/Safety Summary

2021/01/01 TO 2021/12/31

Table 9: Driver/Pedestrian Condition in 2021 Public Roadway Collisions

Driver/Pedestrian Condition	Drivers/Pedestrians #	Fatal Collisions	Injury Collisions	Property Damage Collisions
Had Been Drinking	12	1	1	10
Impaired by Alcohol	20	0	1	19
Impaired by Drugs	0	0	0	0
Fatigued/Asleep	6	0	0	6
Medical Defect	7	0	2	5
Unsafe Speed	108	1	9	98

Table 10: Safety Equipment Used in 2021 Public Roadway Collisions

Safety Equipment	Drivers #	Collision Severity				Passenger #	Collision Severity			
		None	Minor	Major	Fatal		None	Minor	Major	Fatal
Lap belt only	26	25	1	0	0	2	2	0	0	0
Lap/Shoulder belt assembly	2085	2035	45	5	0	183	174	9	0	0
Shoulder belt only	17	15	2	0	0	0	0	0	0	0
Lap/Shoulder with Air Bag	91	69	20	2	0	4	3	1	0	0
Airbag	23	17	2	4	0	2	1	0	1	0
None	36	31	3	2	0	1	0	0	0	0
Other/Specify	0	0	0	0	0	28	28	0	0	0
Unknown	393	384	8	1	0	6	5	1	0	0

Pedestrian Collisions

2021/01/01 TO 2021/12/31

Table 11: Pedestrian Collisions Summary in 2021 Public Roadways Collisions

Statistics	2021
Collisions Involving Pedestrian	21
Pedestrians Involved	25
Collisions resulting in Pedestrian Injury or Fatality	22
Pedestrian Injuries	21
Pedestrian Fatalities	1

Table 12: Age and Action of Pedestrians involved in 2021 Public Roadways Collisions

Pedestrian Action	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75+	Unknown	Total	% of Action
Crossing with Right of Way	0	1	2	0	0	1	1	1	2	2	0	0	10	40.0%
Crossing without Right of Way	0	0	0	0	0	7	0	0	1	0	0	2	10	40.0%
Walking/Working on Roadway	0	0	0	0	0	1	1	0	1	1	0	0	4	16.0%
Getting on/off vehicle	0	0	0	0	1	0	0	0	0	0	0	0	1	4.0%
Other, Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Total	0	1	2	0	1	9	2	1	4	3	0	2	25	100%
% of Age	0.0%	4.0%	8.0%	0.0%	4.0%	36.0%	8.0%	4.0%	16.0%	12.0%	0.0%	8.0%	100%	

Bicycle Collisions

2021/01/01 TO 2021/12/31

Table 13: Bicyclist Collisions Summary in 2021 Public Roadways Collisions

Statistics	2021
Bicyclist Collisions	18
Bicyclists Involved	18
Collisions resulting in Bicyclist Injury or Fatality	16
Bicyclist Injuries	16
Bicyclist Fatalities	0

Table 14: Age and Action of Bicyclists involved in 2021 Public Roadway Collisions

Bicyclist Action	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75+	Unknown	Total	% of Action
Driving Properly	0	1	1	1	0	2	1	0	1	0	0	0	7	38.9%
Stop Sign Violation	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Yield Sign Violation	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Fail To Yield Right of Way at Uncontrolled Intersection	0	0	0	0	0	0	1	0	0	0	0	0	1	5.6%
Fail To Yield Right of Way to Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Followed Too Closely	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Parked Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Backed Unsafely	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Left Turn Across Path	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Improper Lane Change	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Disobey Traffic Signal	0	0	1	0	1	0	0	0	0	0	0	0	2	11.1%
Ran Off Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Improper Passing	0	0	0	1	0	0	0	0	0	0	0	0	1	5.6%
Left of Centre	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Improper Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Other, Unknown	0	0	3	0	0	1	1	0	1	0	0	1	7	38.9%
Total	0	1	5	2	1	3	3	0	2	0	0	1	18	100%
% of Age	0.0%	5.6%	27.8%	11.1%	5.6%	16.7%	16.7%	0.0%	11.1%	0.0%	0.0%	5.6%	100%	