



2020 Traffic Collision Summary

Transportation Data and Forecasting

Key Messages

In 2020, the COVID-19 pandemic and resulting public health restrictions changed how Calgarians used the transportation system. These changes not only impacted how much people travelled about the city, but also the number of collisions on Calgary roads. Some key findings from 2020 are as follows:

- Overall, collisions and collision rates have decreased across the city. This is likely due to a reduction in travel due to public health restrictions during the pandemic.
- Pedestrian, cyclist, and motorcycling collision rates also decreased.
- Casualty collisions (involving injury or death) have also decreased during the pandemic.

Quick Statistics

Statistic	2019	2020	% Change
Total City-wide Collisions	44,950	29,112	-35%
Total Road Network Collisions	37,789	21,543	-43%
City-wide per capita (1,000 pop.)	35	21	-40%
City-wide Collisions per 1,000 Registered Vehicles	44	29	-34%
Fatal Collisions	19	24	26%
Injury Collisions	2,377	1,697	-29%
Property Damage Only Collisions	35,393	19,822	-44%
Motor Vehicle Collisions per capita (1,000 pop.)	29	16	-45%
City Population	1,285,711	1,361,852	6%
Motor Vehicle Collisions per 1,000 Registered Vehicles	37	21	-43%
Registered Vehicles in Calgary	1,021,618	1,015,104	-1%
Intersection Collisions	22,144	13,604	-39%
Non-Intersection Collisions	10,639	6,508	-39%
Pedestrian Collisions	413	283	-31%
Pedestrian Fatal Collisions	3	4	33%
Pedestrian Injury Collisions	323	229	-29%
Pedestrian Collision Rate per capita (100,000 pop.)	32	21	-34%
Bicyclist Collisions	211	162	-23%
Bicyclist Fatal Collision	1	2	100%
Bicyclist Injury Collisions	133	105	-21%
Bicyclist Collision Rate per capita (100,000 pop.)	16	12	-25%
Motorcyclist Collisions	87	83	-5%
Motorcyclist Fatal Collisions	2	5	150%
Motorcyclist Injury Collisions	47	45	-4%
Motorcyclist Collision Rate per capita (100,000 pop.)	7	6	-14%

Background

The COVID-19 pandemic has affected every aspect of our lives, including traffic collisions occurring within Calgary. In response to the public health emergency, many city services were reduced, including traffic count studies. These studies collected traffic volumes that were used to determine collision rates per vehicle. In 2020, this information was not available, so per vehicle collision statistics have been excluded from this work.

Detailed Analysis

The total number of collisions in Calgary decreased by 35% in 2020 compared to 2019 (Figure 1). Casualty collisions (injury or fatal collisions) also showed decreases, except for motorcyclist casualty collisions which remained the same (Figure 2). This is likely due to the changes in travel habits due to public health restrictions.

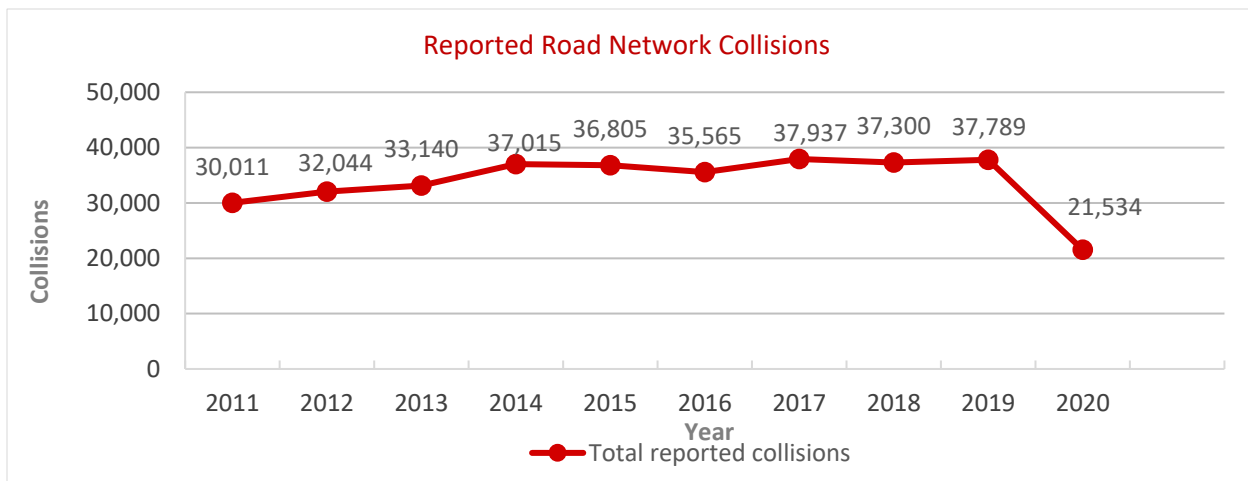


Figure 1 Reported Road Network Collisions

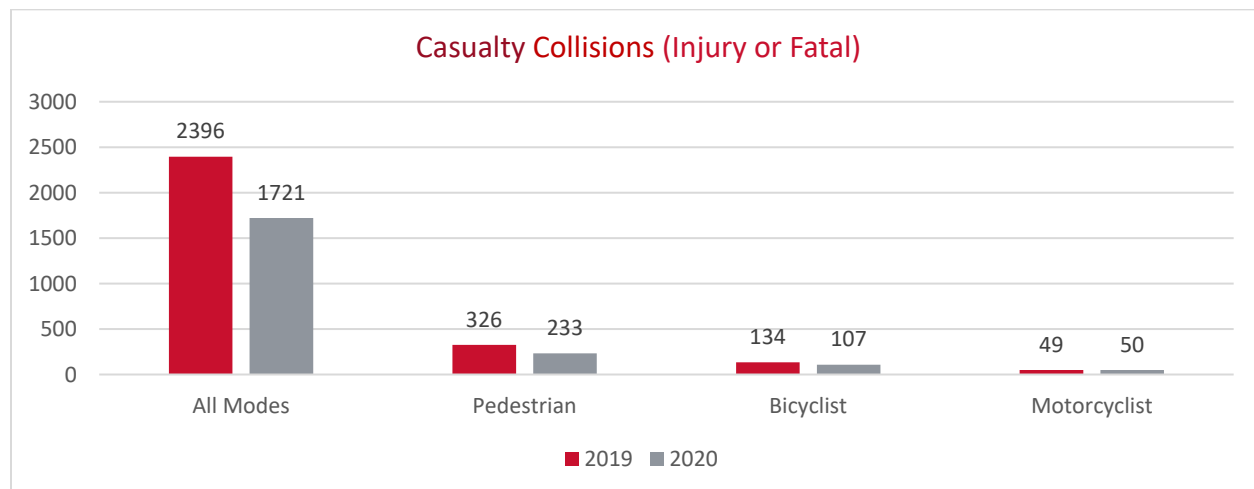


Figure 2 Casualty Collisions

The per capita and registered vehicle collision rates have also decreased when compared with 2019. Per capita severe casualty rates, which include fatal and major injury collisions, decreased in 2020, though not to the same degree as overall collision rates (Figure 3).

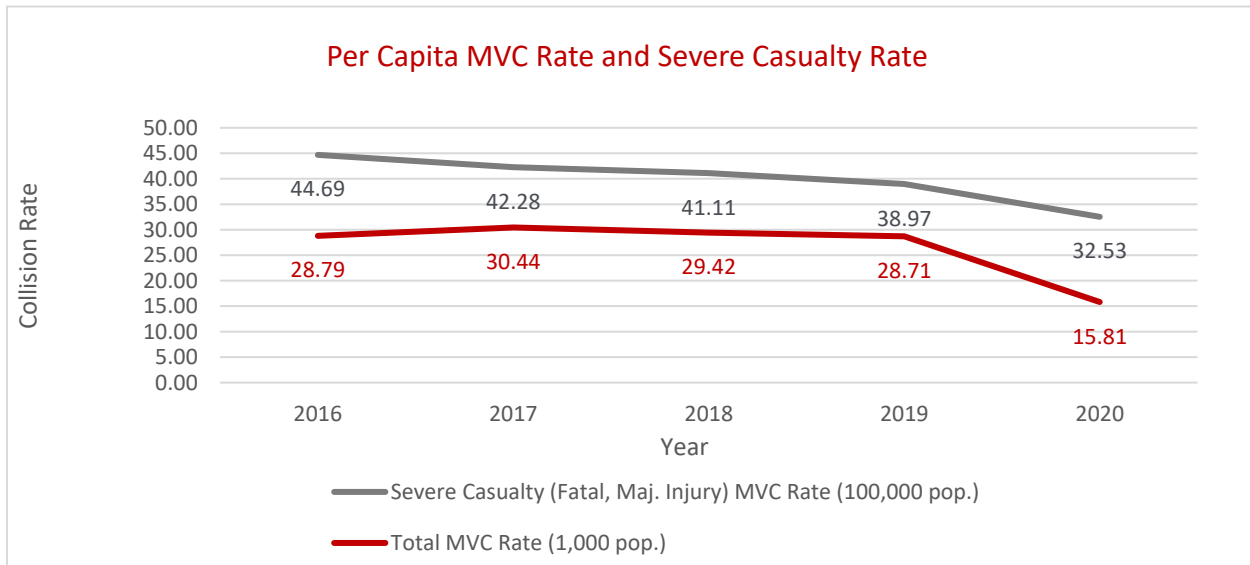


Figure 3 Per Capital Collision Rates

Pedestrian collisions decreased by 31% in 2020 from 413 last year to 283. Bicyclist collisions decreased by 23% from 211 to 162, and total motorcyclist collisions decreased by 5% from 87 to 83 over the same time period (Figure 4).

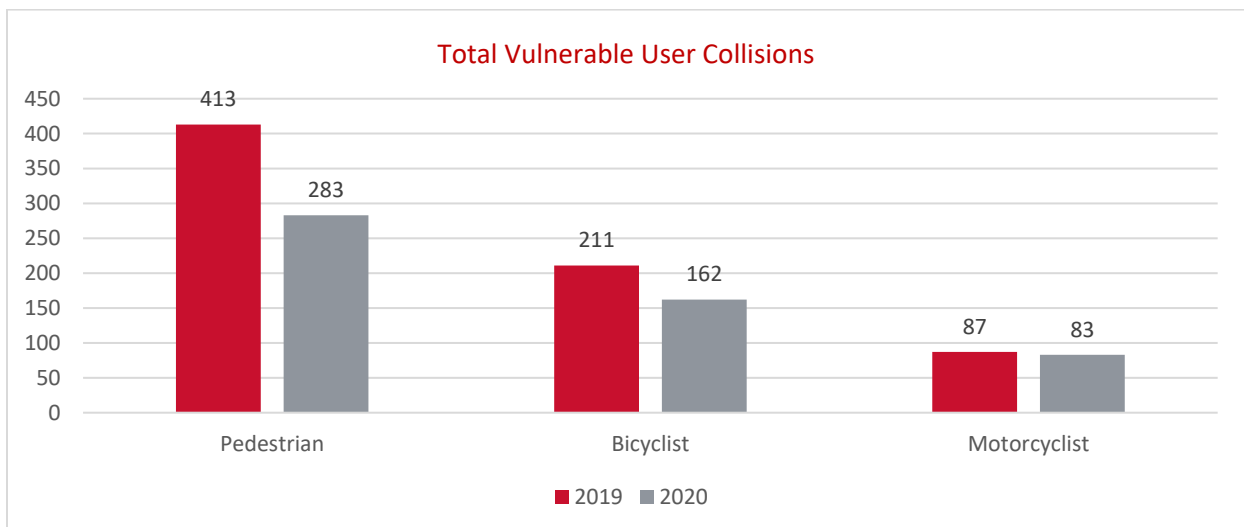


Figure 4 Total Vulnerable User MVC

Deerfoot TR E at Memorial DR E has the highest number of reported collisions in Calgary with 155. Ten of the top 20 collision frequency locations in Calgary have occurred on Deerfoot TR (Table 5). A map of these locations can be found in Appendix A.

Rank	Intersection	Collisions
1	DEERFOOT TR E & MEMORIAL DR E	155
2	DEERFOOT TR NE & 16 AV NE	153
3	DEERFOOT TR SE & GLENMORE TR SE	117
4	DEERFOOT TR SE & 17 AV SE	87
5	CROWCHILD TR SW & GLENMORE TR SW	80
6	DEERFOOT TR NE & 64 AV NE	73
7	36 ST NE & 16 AV NE	67
8	DEERFOOT TR SE & ANDERSON RD/BOW BOTTOM TR SW	63
9	DEERFOOT TR SE & PEIGAN/BARLOW TR SE	58
10	DEERFOOT TR NE & MCKNIGHT BV NE	56
11	19 ST NE & 16 AV NE	55
12	DEERFOOT TR NE & STONEY TR NE	50
13	BLACKFOOT TR SE & GLENMORE TR SE	47
14	12 ST NE & MCKNIGHT BV NE	45
15	SARCEE TR SW & BOW TR SW	45
16	52 ST NE & MCKNIGHT BV NE	41
17	MÉTIS TR NE & COUNTRY HILLS BV NE	40
18	MACLEOD TR SW & GLENMORE TR SW	40
19	DEERFOOT TR SE & 11 ST SE	39
20	36 ST NE & 32 AV NE	35

Figure 5 Top 20 Collision Frequency Locations

Rear End, Struck Object and Side Swipe collisions accounted for nearly three quarters of all reported collisions in Calgary in 2020 (Figure 6).

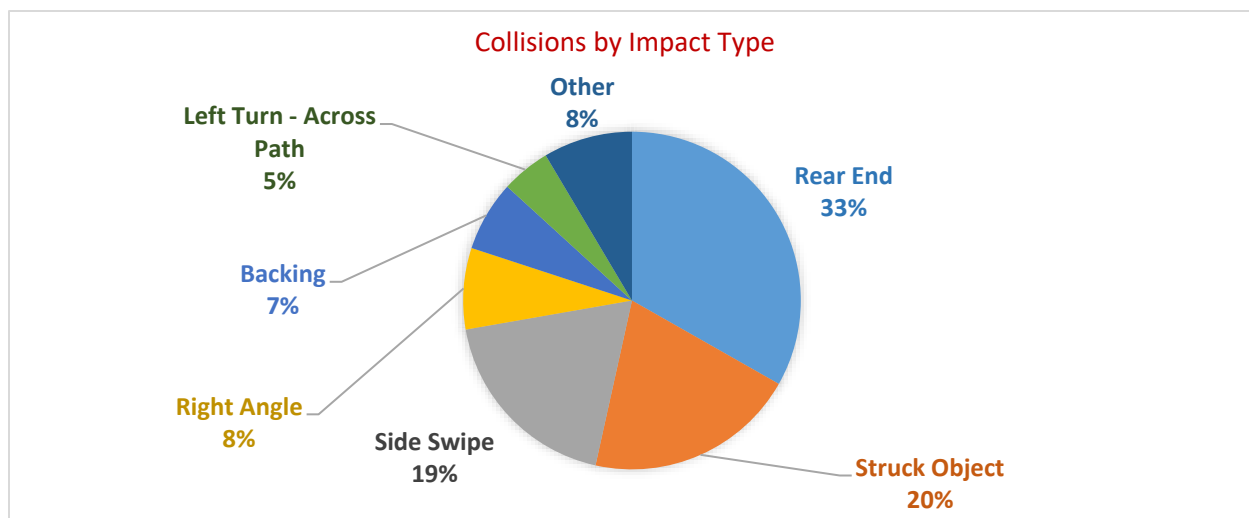
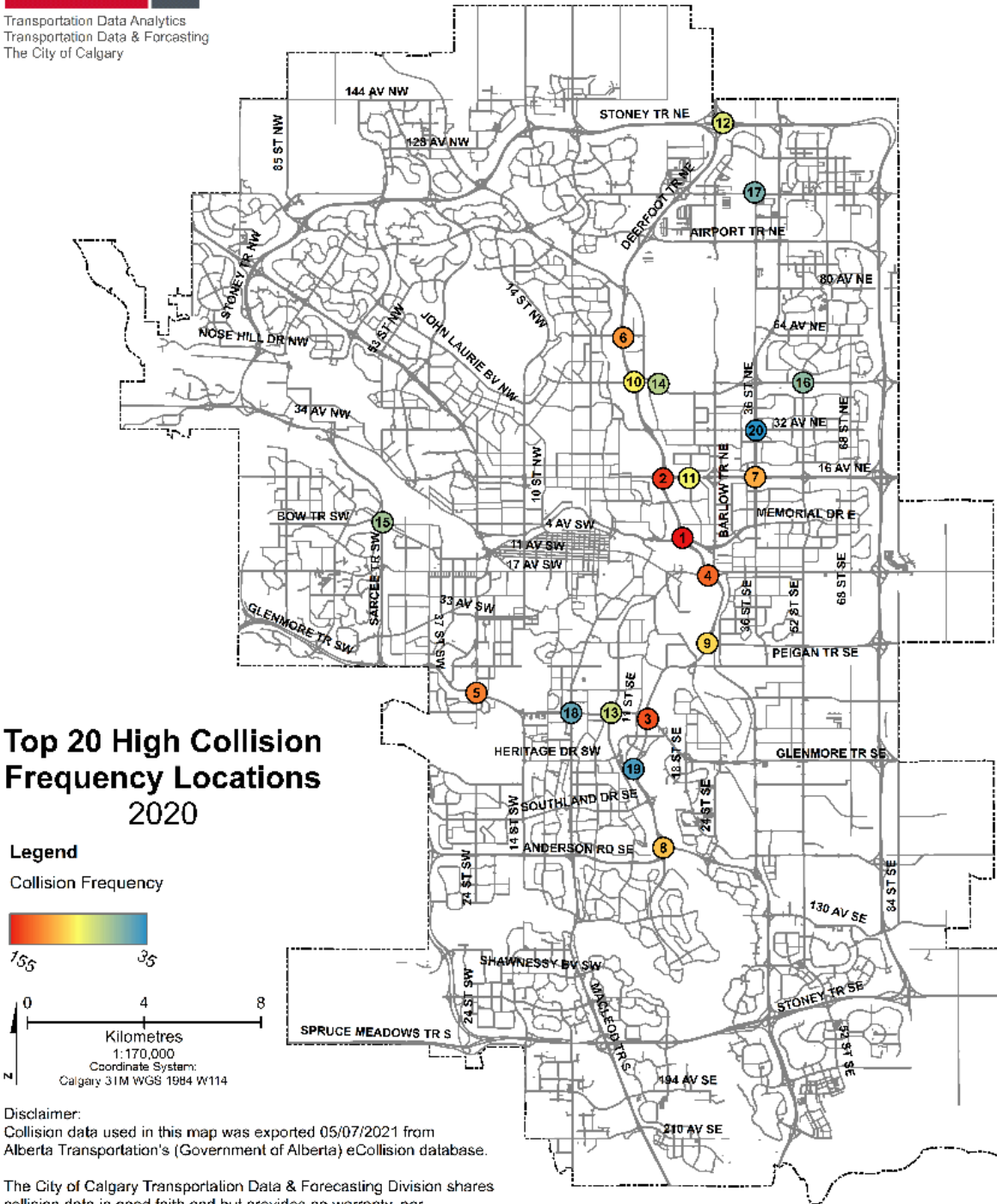


Figure 6 Collisions by Impact Type

Appendix A – High Collision Locations



Transportation Data Analytics
Transportation Data & Forecasting
The City of Calgary



Disclaimer

Data used in the 2020 Annual Traffic Collision Summary was exported on May 7th, 2021 from The City of Calgary's eCollisions Traffic Collision database. This database is supplied with collision records from the Calgary Police Service (CPS) via Alberta Transportation's eCollisions Traffic Collision Database. Data represented in this summary are accurate up to May 7, 2021. Collision reports are not included in eCollisions until active CPS investigations and records processing are complete.

The 2020 Annual Traffic Collision Summary consists of summary statistics associated with motor vehicle collisions within the city limits of Calgary. These summary statistics are used to perform road safety reviews, determine road safety audit locations, and monitor countermeasure and infrastructure performance. Collision data for non-engineering purposes may be acquired by contacting the Calgary Police Service.

Transportation Planning releases this annual summary in good faith; however, the City of Calgary provides no warranty, nor accepts any liability arising from any incorrect, incomplete, or misleading information or the improper use of this report.

References

Alberta Transportation (2021). *Alberta Vehicle Statistics: Number of Motorized Vehicles Registered in Alberta as of March 31*. Retrieved from: <https://open.alberta.ca/publications/number-of-motorized-vehicles-registered-in-alberta-as-of-march-31-years>

Government of Alberta (2021). *Alberta Population Estimates*. Retrieved from: <https://open.alberta.ca/dataset/alberta-population-estimates-data-tables>