

Traffic Collision Annual Report 2015
Selected Figures

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Selected Figures
Collisions on City Roads (excluding private property)
Transportation – Transportation Planning - Data
The City of Calgary
November 9, 2016

Quick Statistics

Statistic	2014	2015	% Change
Total City-wide Collisions	47,225	45,221	-4%
Total Road Network Collisions	37,015	36,805	-1%
Fatal Collisions	28	22	-21%
Injury Collisions	2,705	2,504	-7%
Property Damage Only Collisions	34,282	34,279	<-1%
Motor Vehicle Collisions <i>per capita</i> (1,000 pop.)	31	30	-3%
City Population	1,195,194	1,230,915	3%
Motor Vehicle Collisions per 1,000 Registered Vehicles	38	37	-3%
Registered Vehicles in Calgary	972,193	1,005,109	3%
Motor Vehicle Collisions per MEV	1.0	0.8	-20%
Intersection Collisions	23,575	23,212	-2%
Non-Intersection Collisions	13,440	13,593	1%
Motor Vehicle Collisions per MVKT	1.3	1.3	0%
Annual VKT	10,421,480,000	10,695,960,000	3%
Pedestrian Collisions	402	370	-8%
Pedestrian Fatal Collisions	7	7	0%
Pedestrian Injury Collisions	342	304	-11%
Pedestrian Collision Rate <i>per capita</i> (100,000 pop.)	34	30	-12%
Bicyclist Collisions	211	284	35%
Bicyclist Fatal Collision	0	0	0%
Bicyclist Injury Collisions	145	184	27%
Bicyclist Collision Rate <i>per capita</i> (100,000 pop.)	18	23	28%
Motorcyclist Collisions	225	235	5%
Motorcyclist Fatal Collisions	5	3	-40%
Motorcyclist Injury Collisions	105	119	13%
Motorcyclist Collision Rate <i>per capita</i> (100,000 pop.)	19	19	0%

- MEV, Million Entering Vehicles
- MVKT, Million Vehicle Kilometres Travelled
- VKT, Vehicle Kilometres Travelled

Figure 2.3 Road Network Collisions by Severity, 2006 to 2015

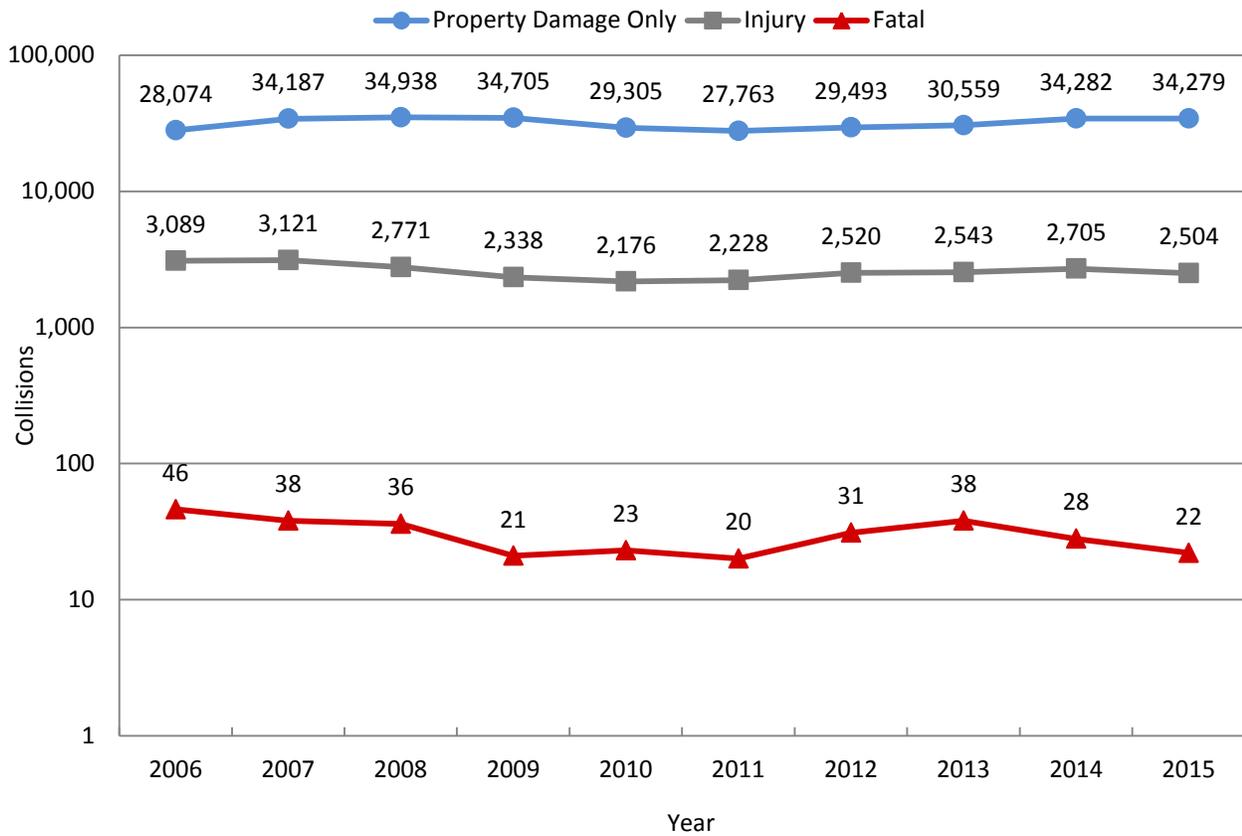
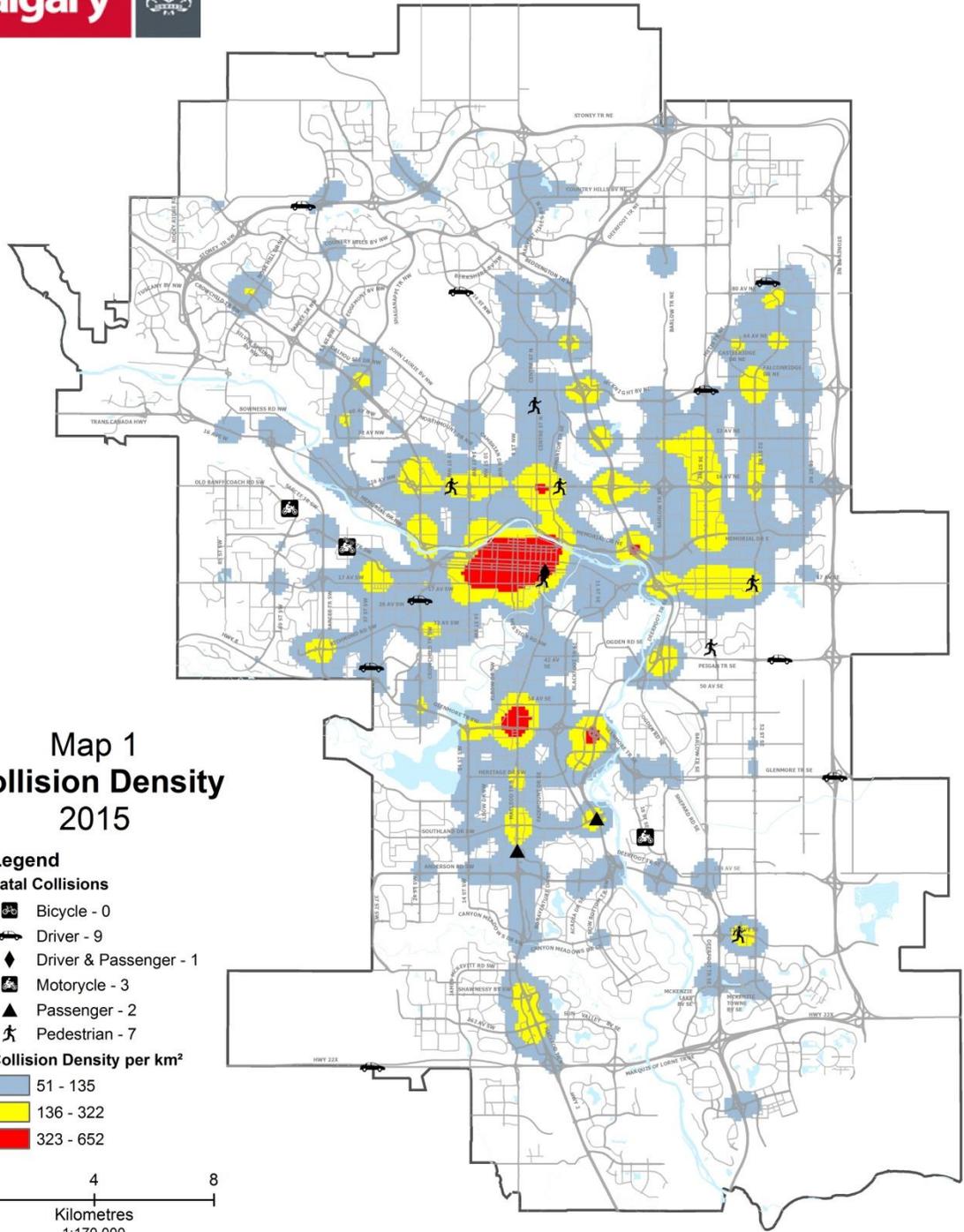
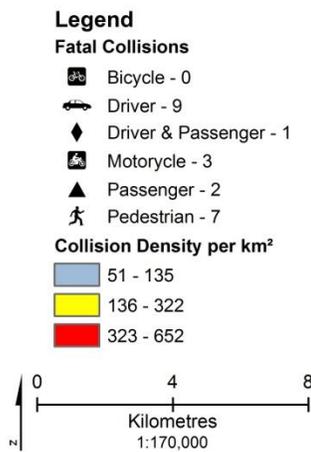
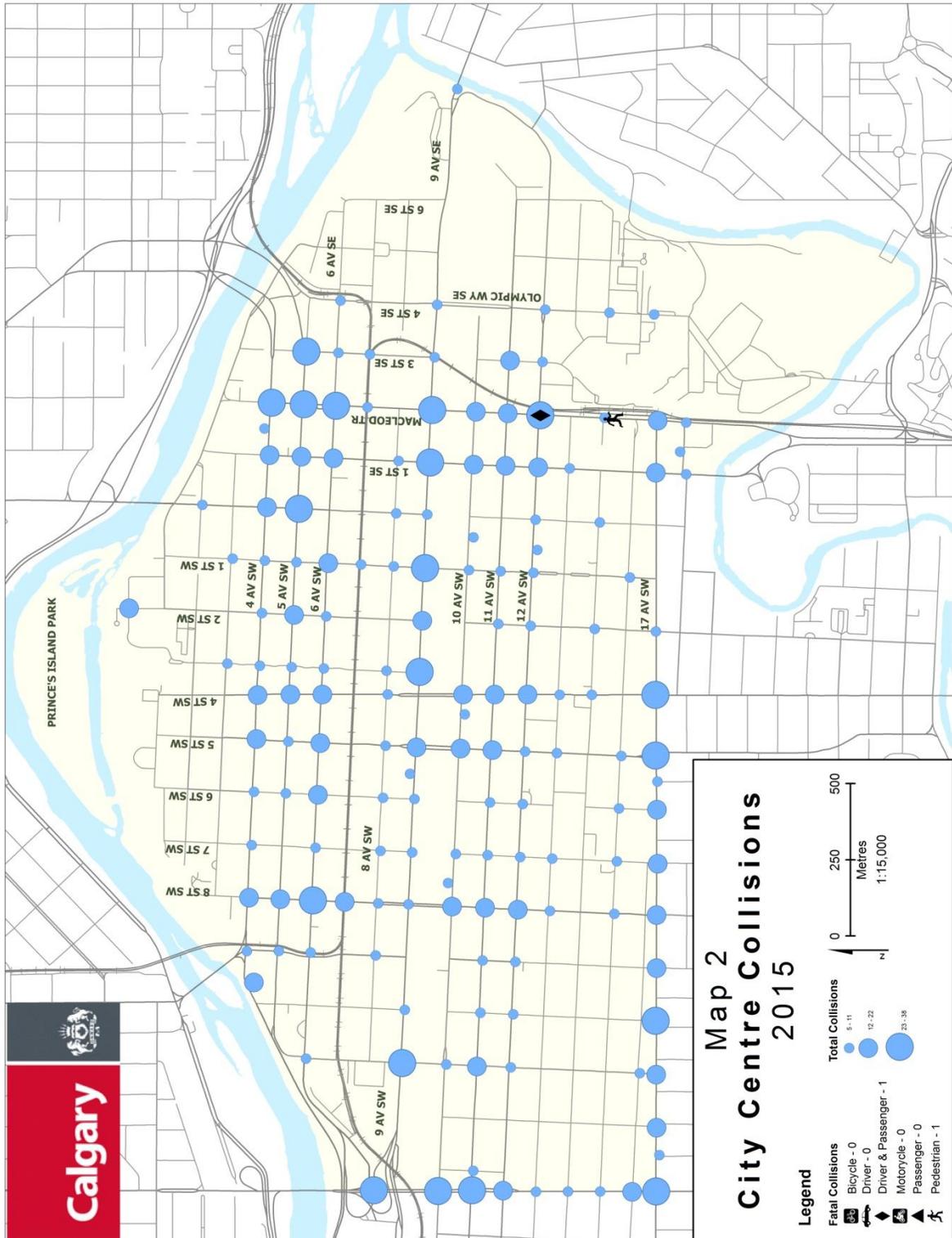


Table 2.1 Road Network Collisions by severity

	Collisions (2015)	Collision average (2006-2015)
Property Damage Only	34,279 (93%)	31,759 (92%)
Injury	2,504 (7%)	2,600 (8%)
Fatal	22 (0.06%)	30 (0.09%)
Total	36,805	34,388

**Map 1
Collision Density
2015**





Over the course of 2015, January, November, and December had the highest frequencies of collisions, though fatal collisions only occurred during spring and summer months (Figure 3.4). The increase in collision frequencies may be partially explained by adverse weather conditions.

Figure 3.4 Road Network Collisions by Severity and Month

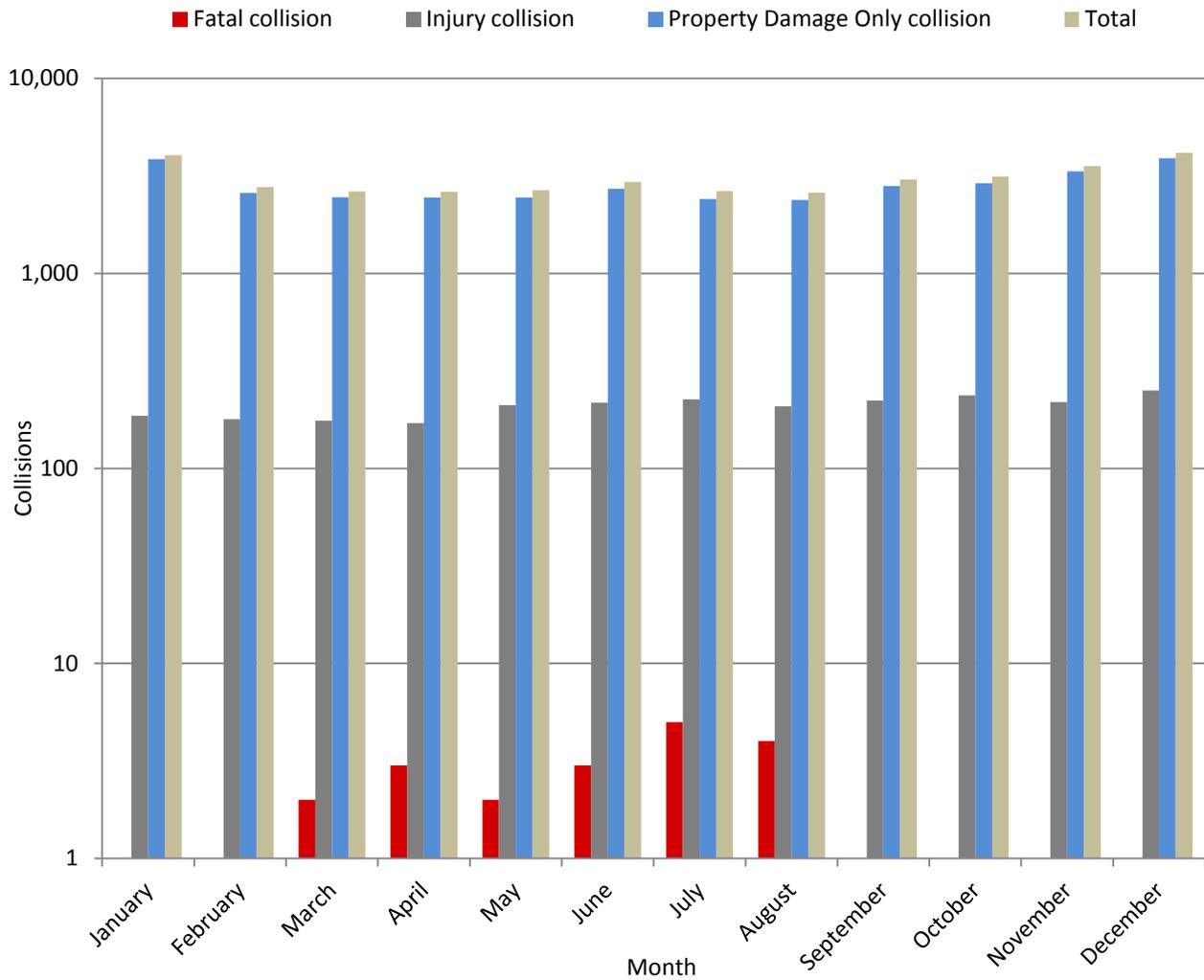
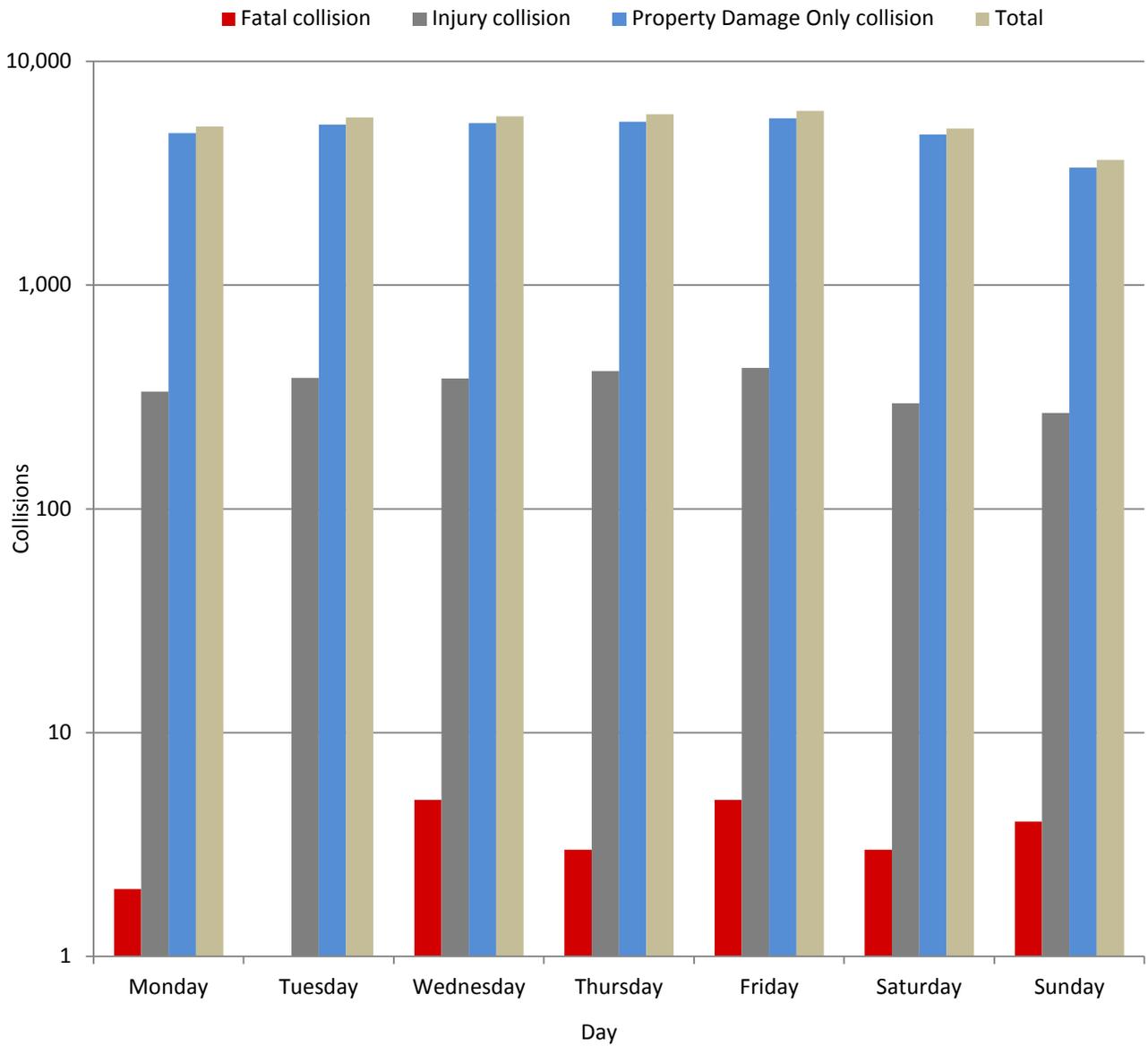


Figure 3.5 Road Network Collisions by Severity and Day of Week



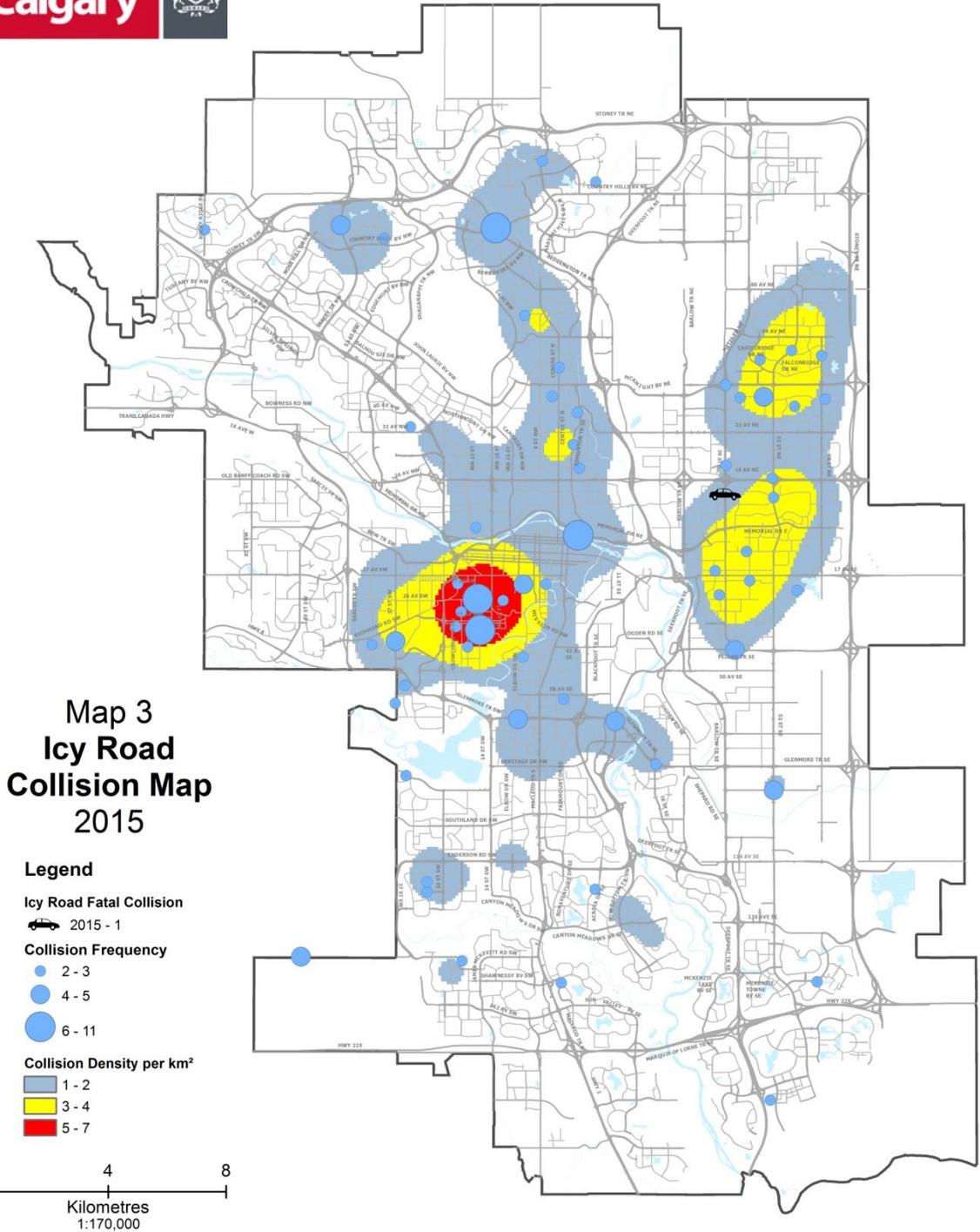
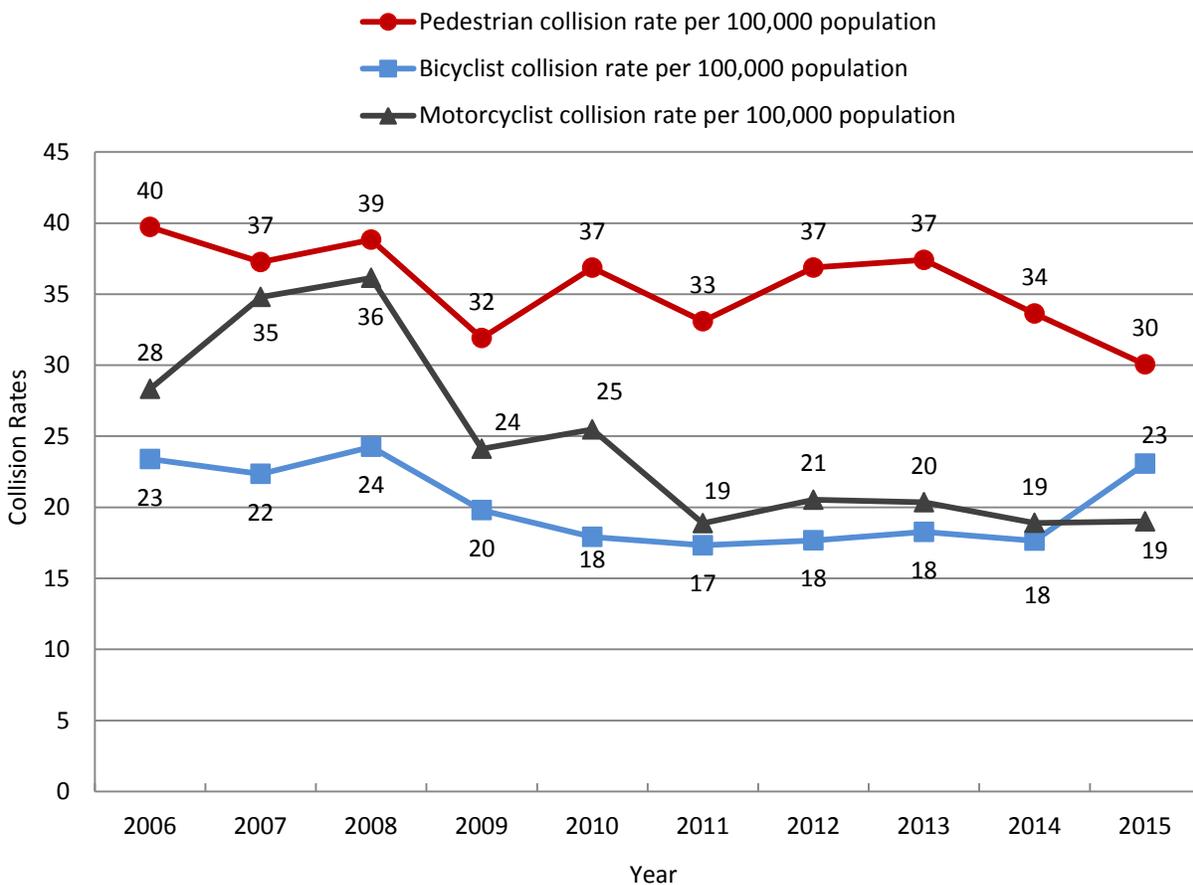


Figure 5.1 shows *per capita* vulnerable user collision rates. Pedestrian collision rates show a steady decrease since 2013. The motorcyclist collision rate remained unchanged in 2015 compared with 2014, though rates have been decreasing since 2012. The bicyclist collision rate shows a sharp increase in 2015 compared with 2014, and is the highest it has been since 2008.

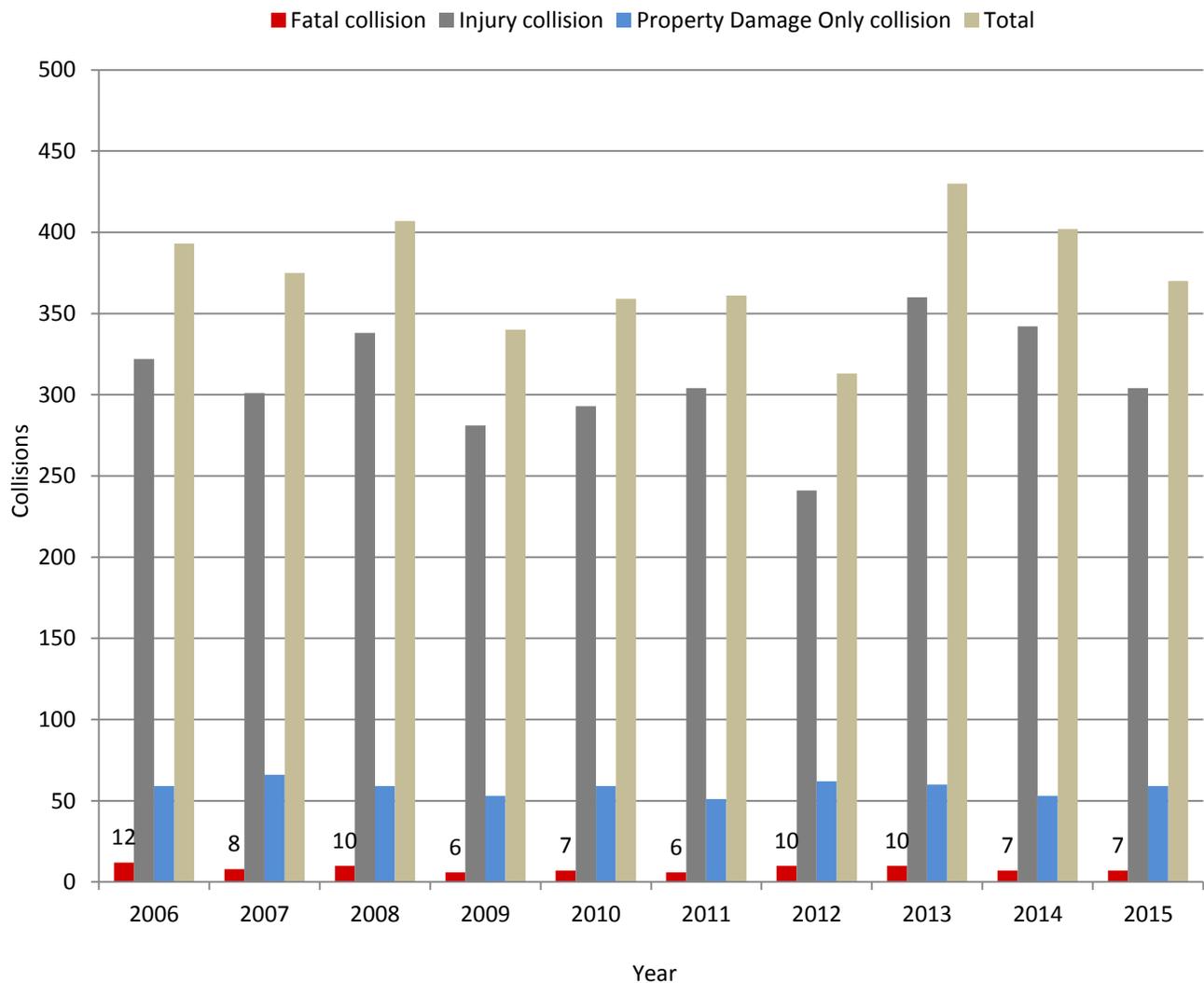
Figure 5.1 Vulnerable Users Involved Collision Rate, 2006 to 2015



Section 5a

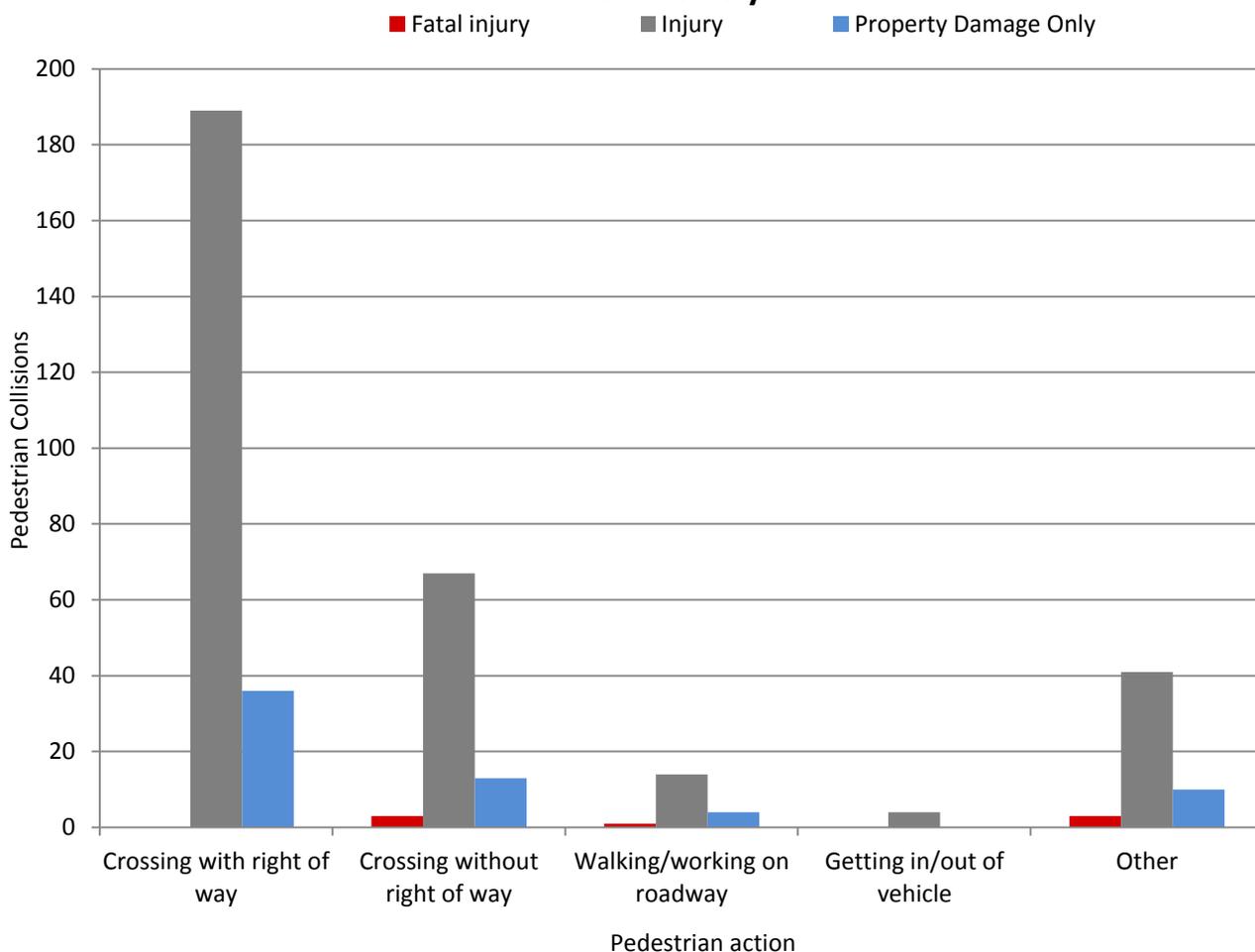
Pedestrian Collisions

Figure 5.2 Collisions Involving Pedestrians by Severity, 2006 to 2015



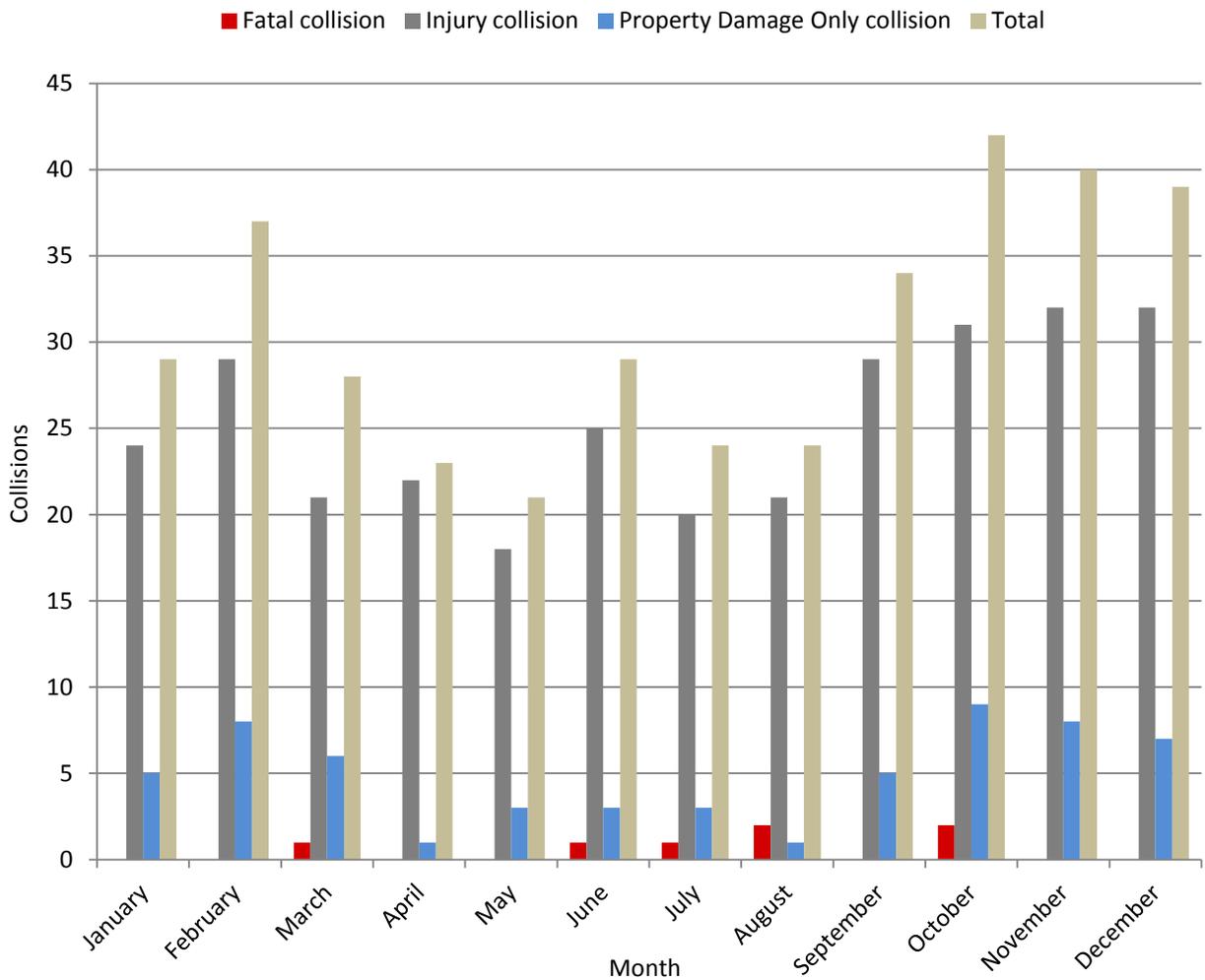
Pedestrians were generally Crossing With Right of Way at the time of the collision, though Crossing Without Right of Way was the second most common pedestrian action. Crossing Without Right of Way also included one of the highest frequencies of pedestrian fatalities.

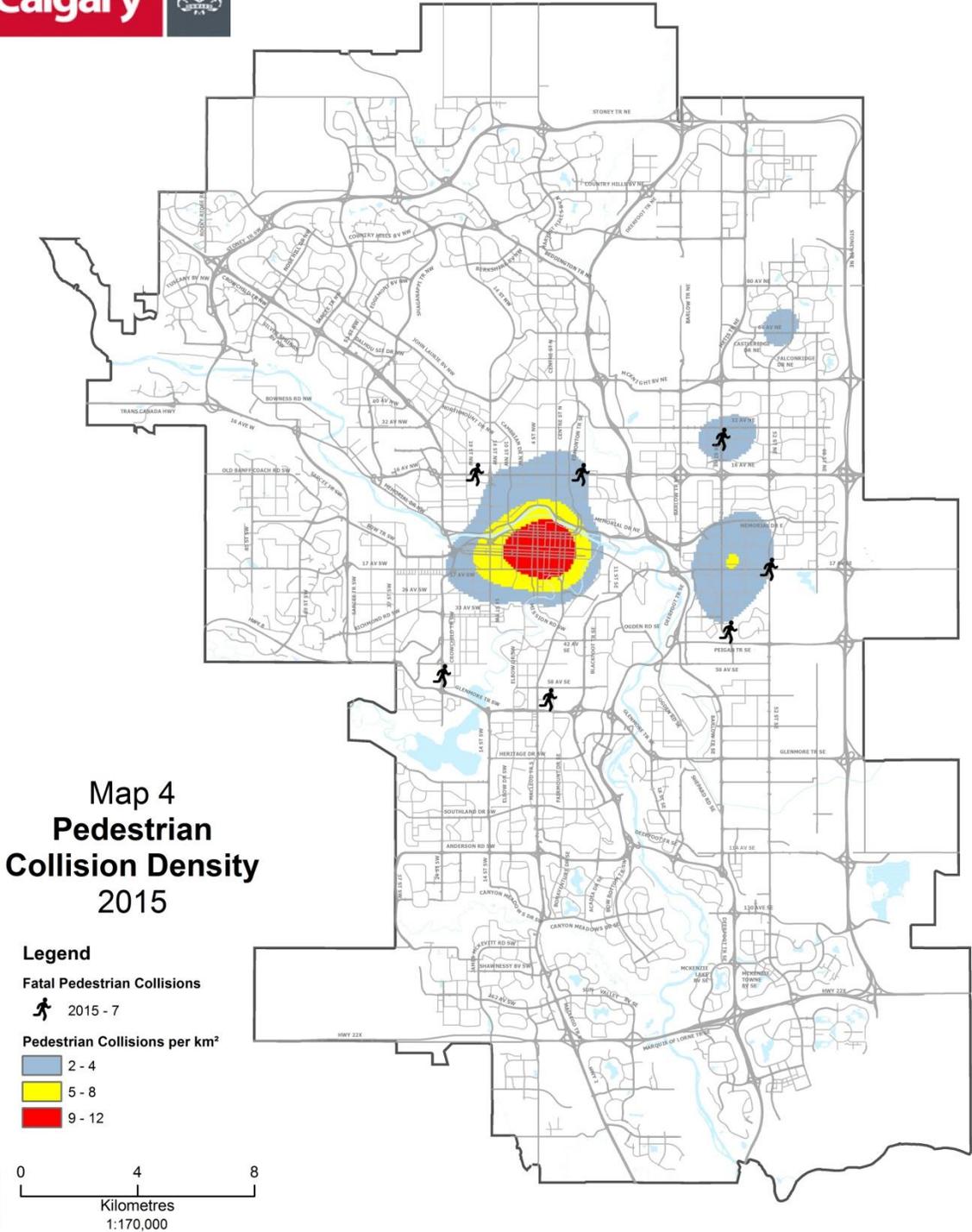
Figure 5.4 Pedestrians Involved in Collisions by Pedestrian Action and Severity

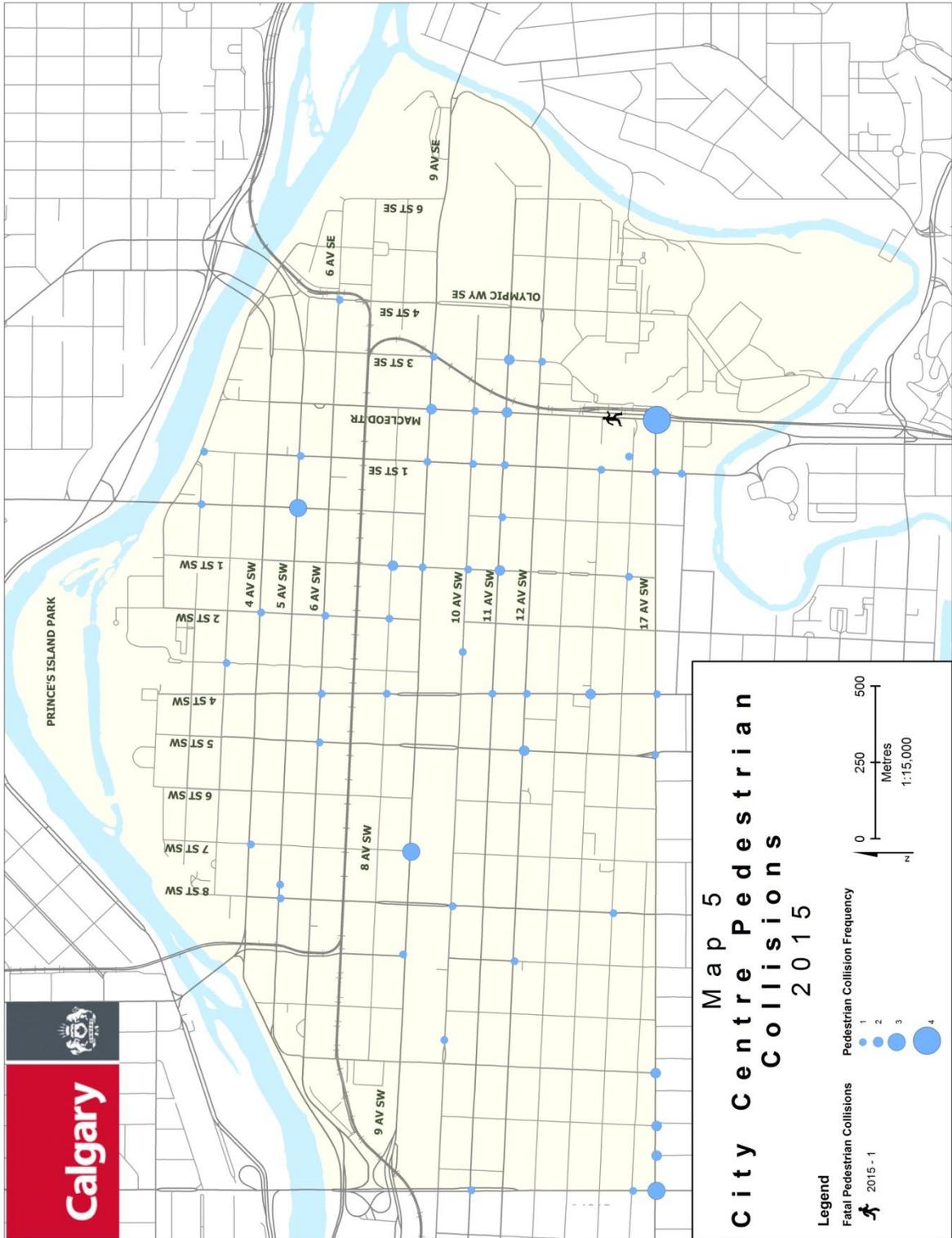


The highest frequencies for pedestrian collisions occurred in the winter and fall months including February, September, October, November, and December. However, no pedestrian fatal collisions occurred during these months.

Figure 5.6 Collisions Involving Pedestrians by Month





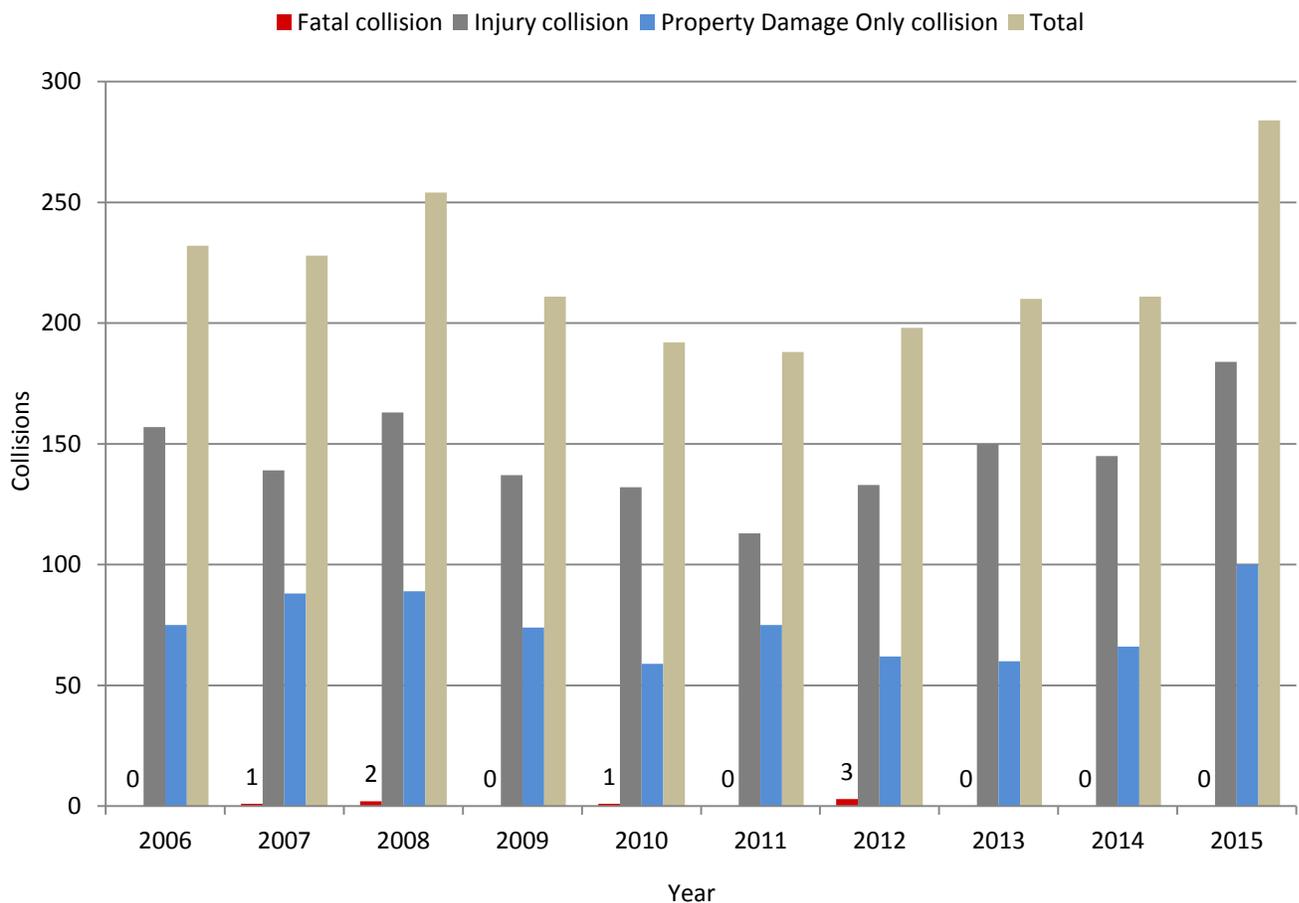


Section 5b

Bicyclist Collisions

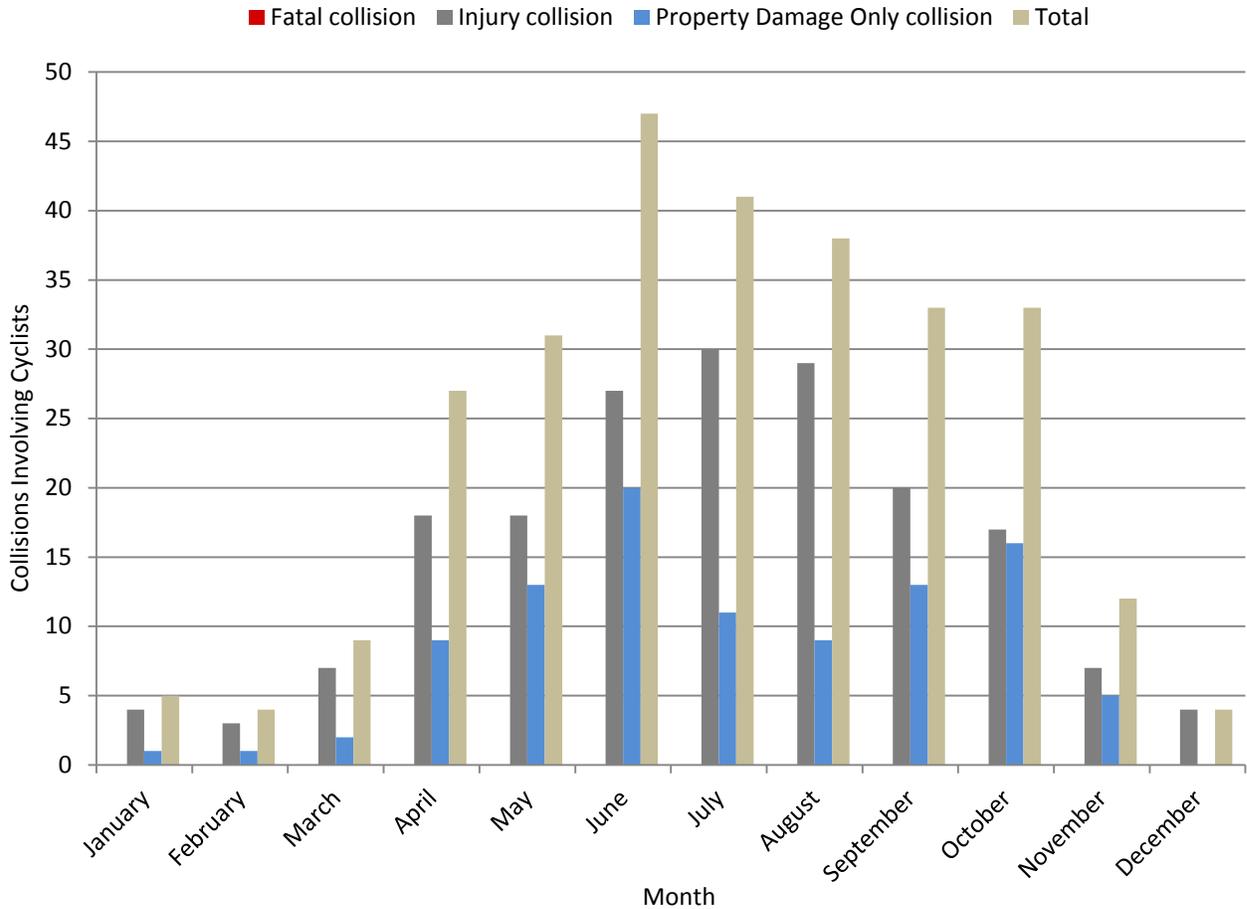
Figure 5.8 shows bicyclist-involved motor vehicle collisions over a ten year period. 2015 shows a sharp increase in frequency and has the highest value over this study period. The 2015 collision frequency is higher than expected based on the number of collisions in previous years (*Table D2*). However, 2008 has the highest *per capita* rate over this period (*Figure 5.1*).

Figure 5.8 Collisions Involving Bicyclists by Severity, 2006 to 2015

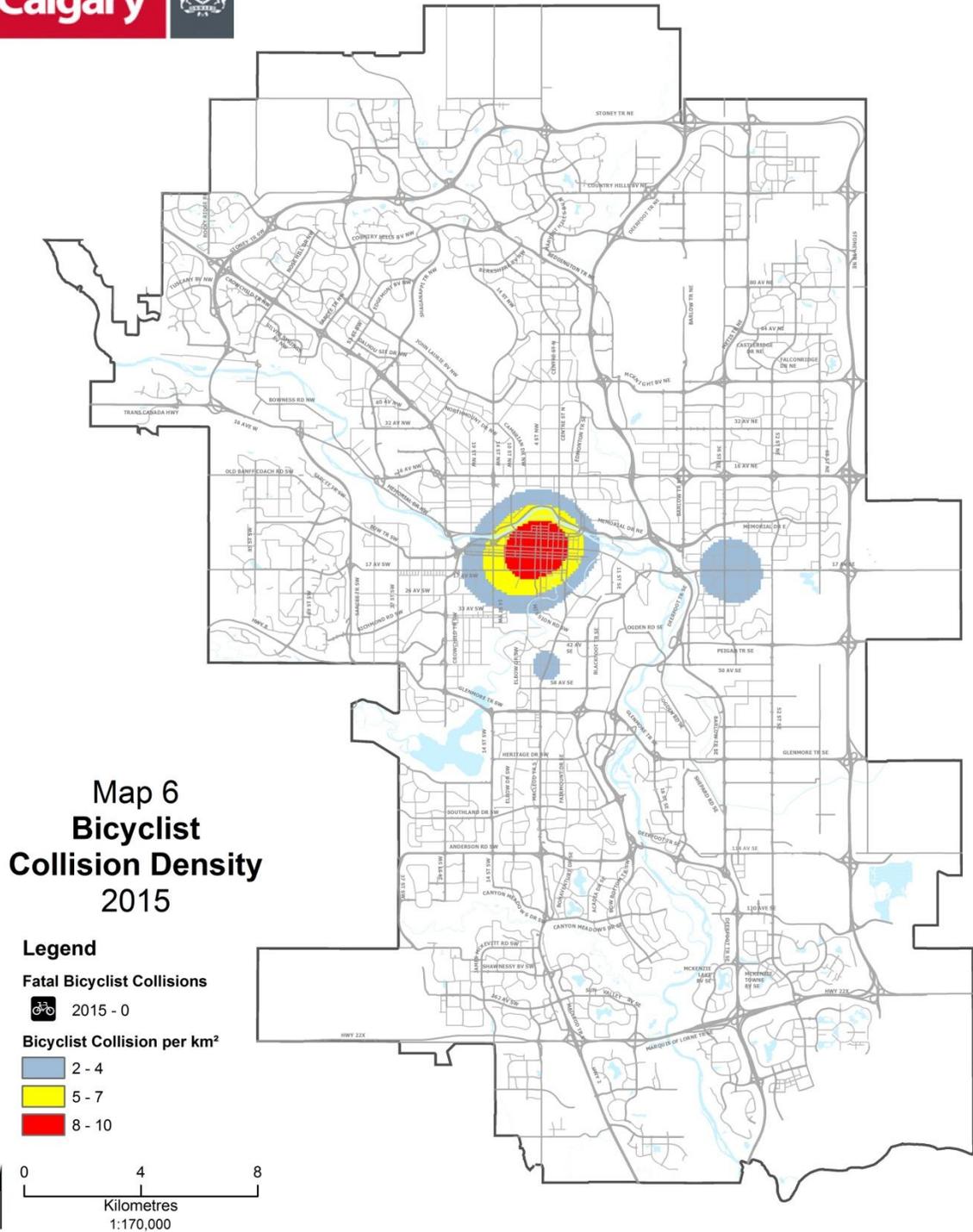


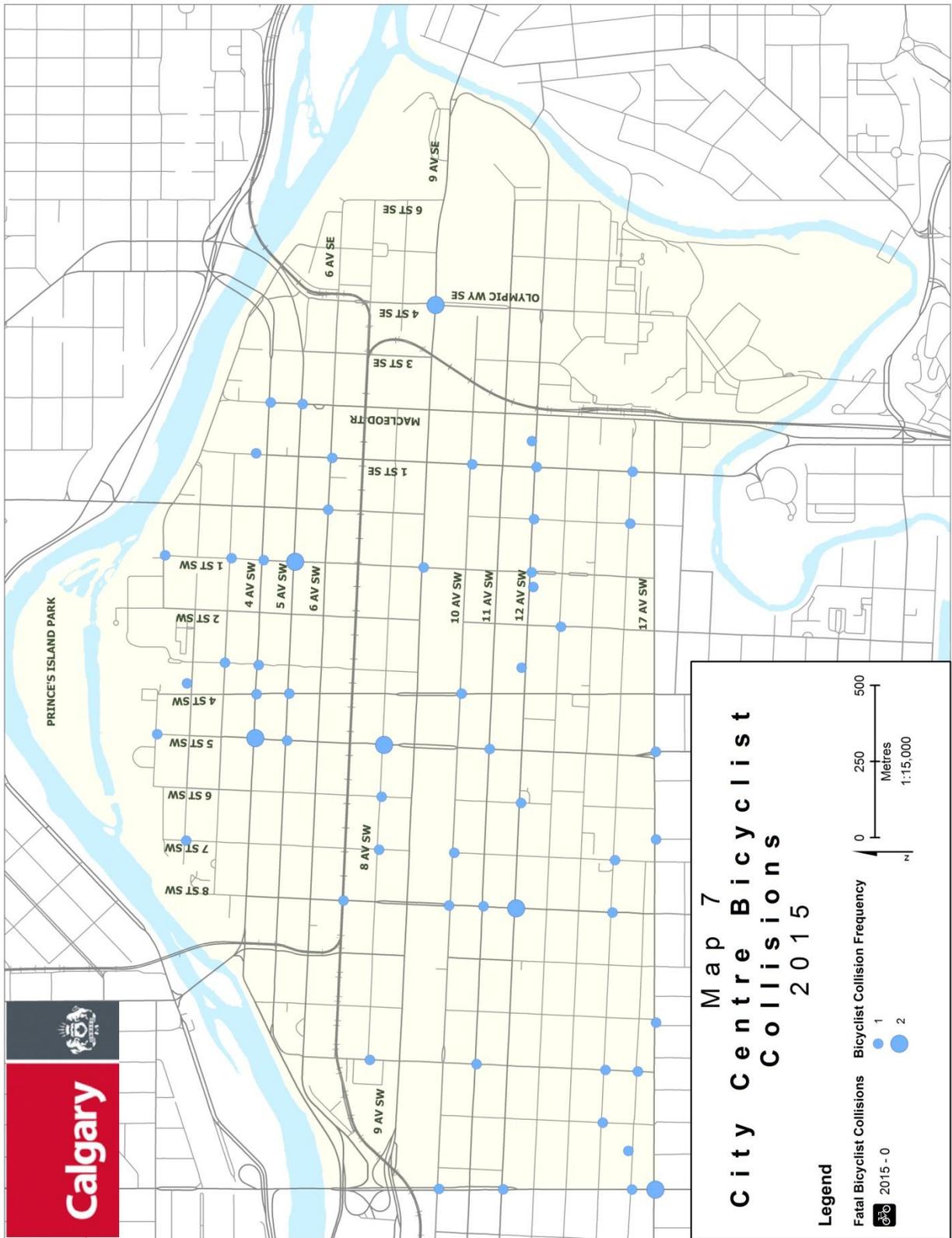
June saw the highest overall frequency of bicyclist involved motor vehicle collisions, followed by July and August. However, there were more reported bicyclist injuries in July and August than there were in June. There were no bicyclist fatalities in 2015.

Figure 5.10 Collisions Involving Bicyclists by Month



*No fatal bicyclist collisions in 2015.



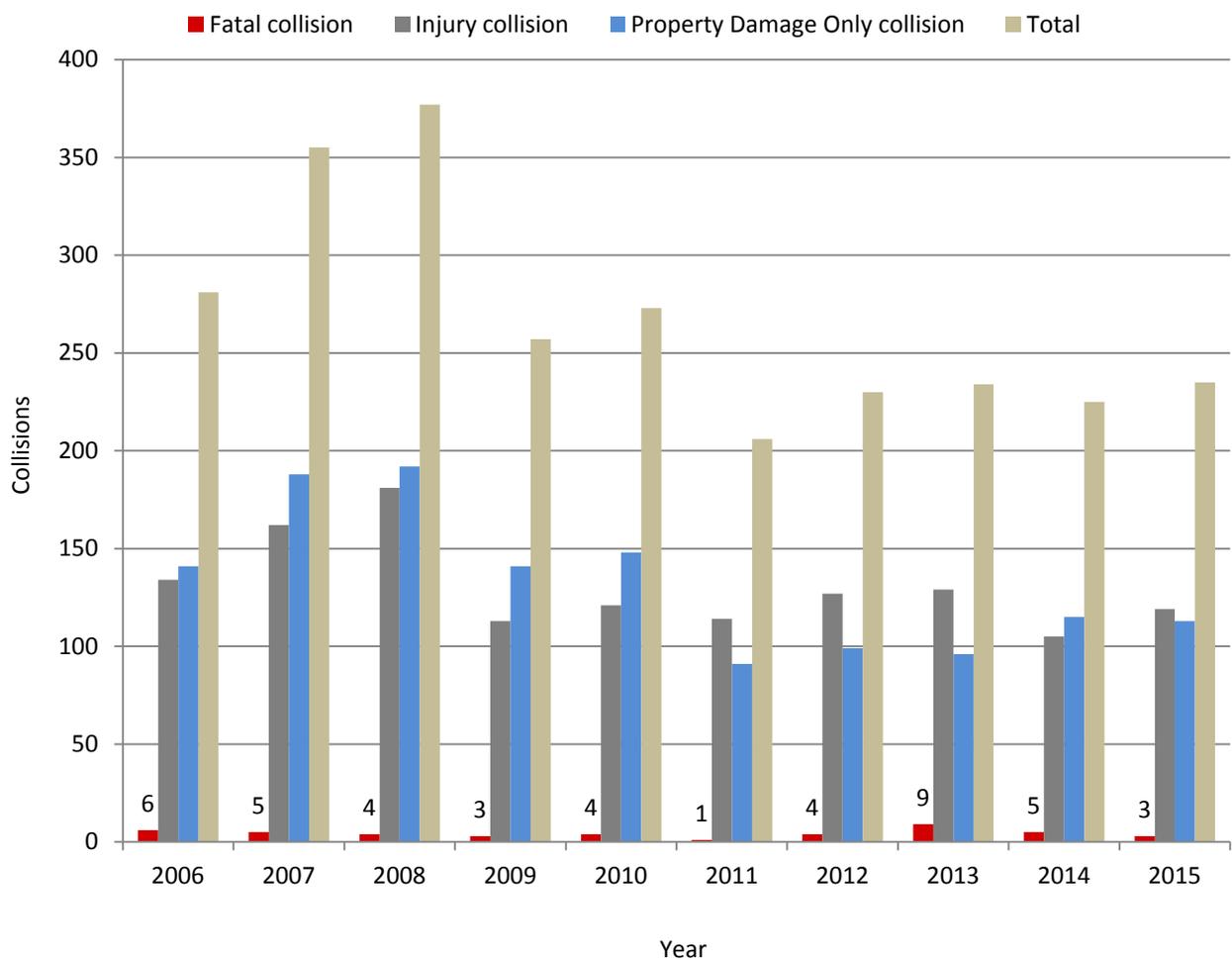


Section 5c

Motorcyclist Collisions

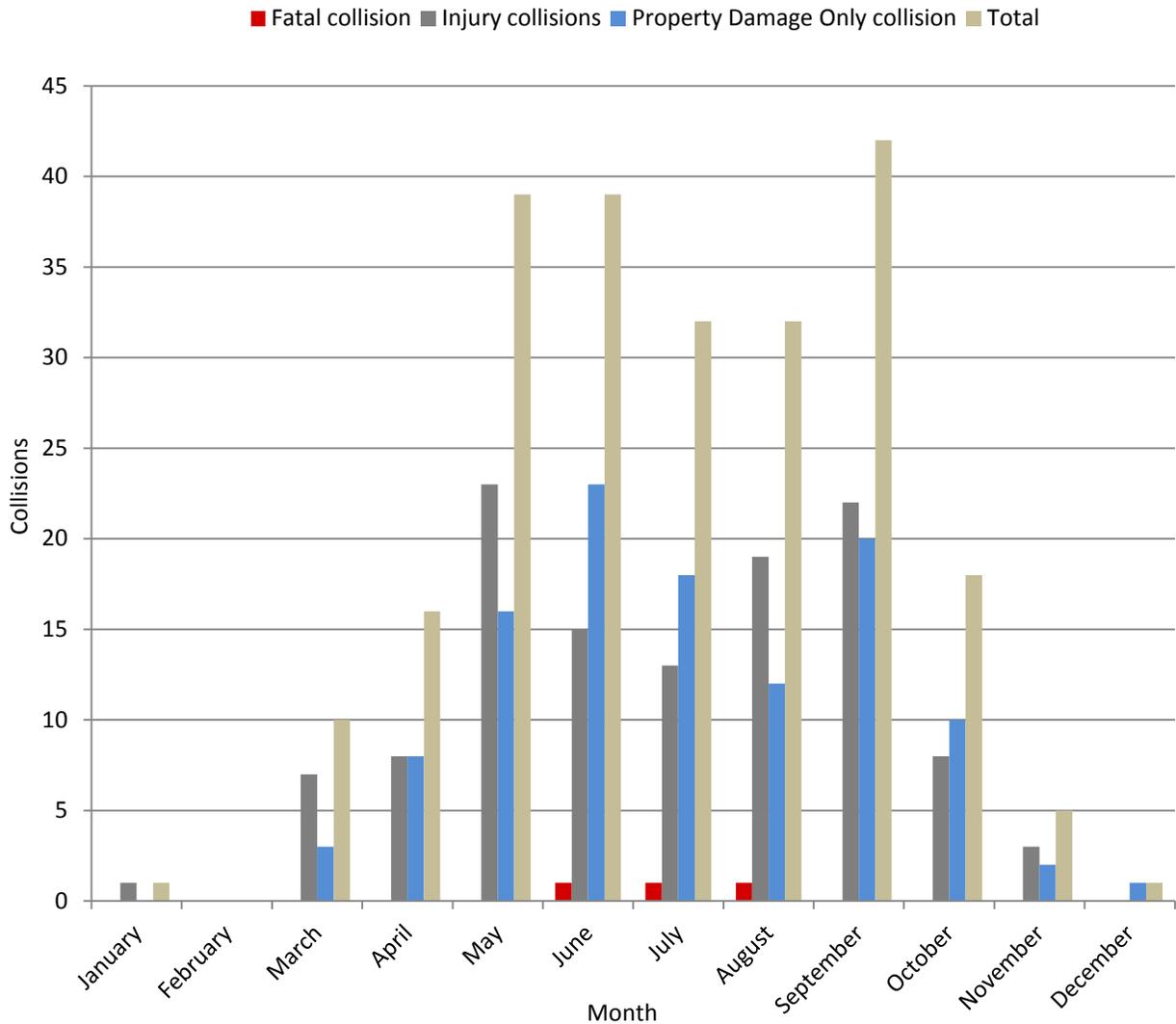
Motorcyclist collisions increased in 2015 compared with 2014 frequencies, particularly with collisions resulting in injury. However, fatal collisions have decreased steadily since 2013.

Figure 5.12 Collisions Involving Motorcyclists by Severity, 2006 to 2015



The highest frequency of motorcyclist-involved collisions occurred in May, June, and September, though high injury frequencies occurred in May, August, and September. Fatal collisions only occurred in summer months (June, July, and August).

Figure 5.14 Collisions Involving Motorcyclists by Month



Map 8 Motorcyclist Collision Density 2015

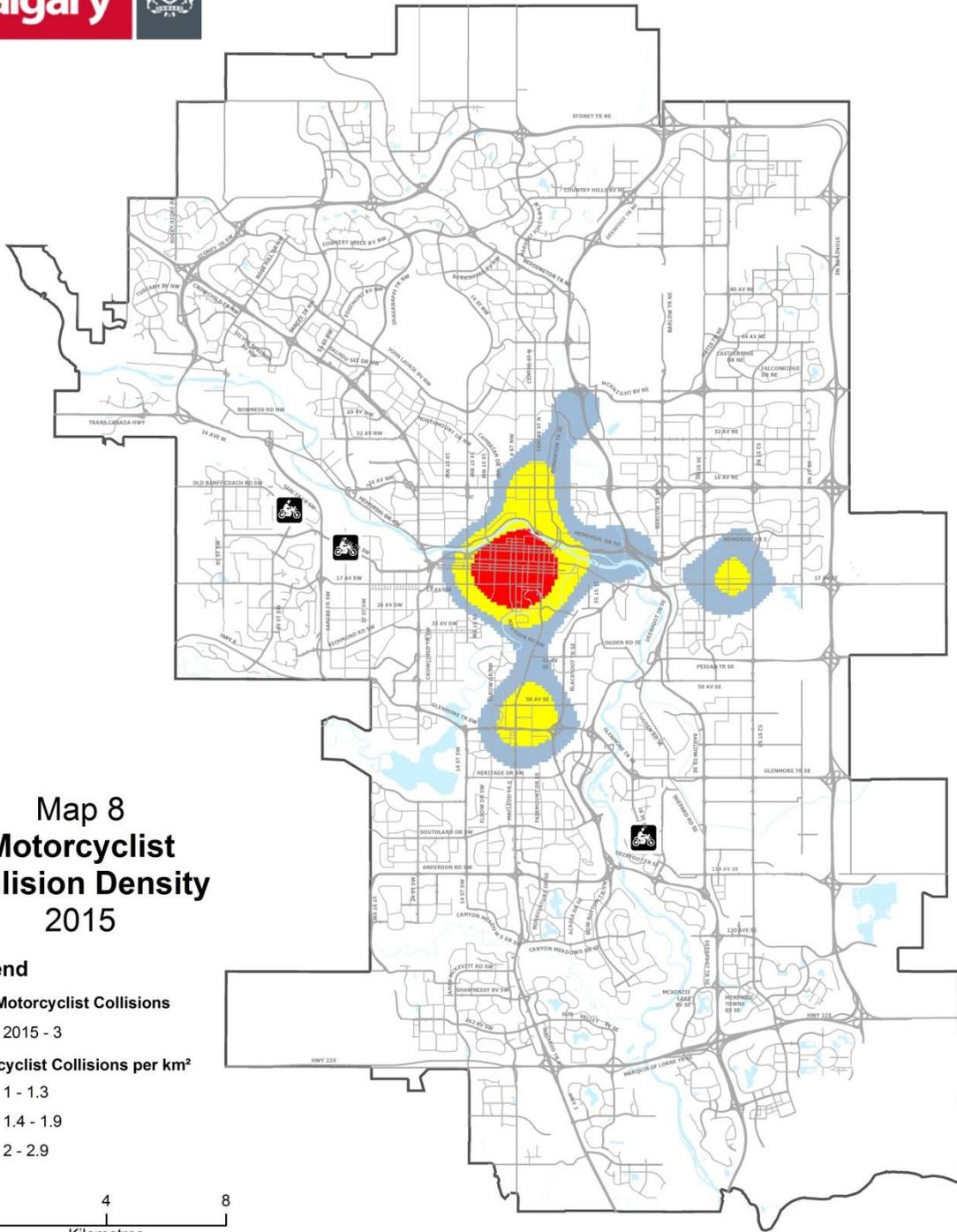
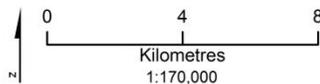
Legend

Fatal Motorcyclist Collisions

 2015 - 3

Motorcyclist Collisions per km²

 1 - 1.3
 1.4 - 1.9
 2 - 2.9



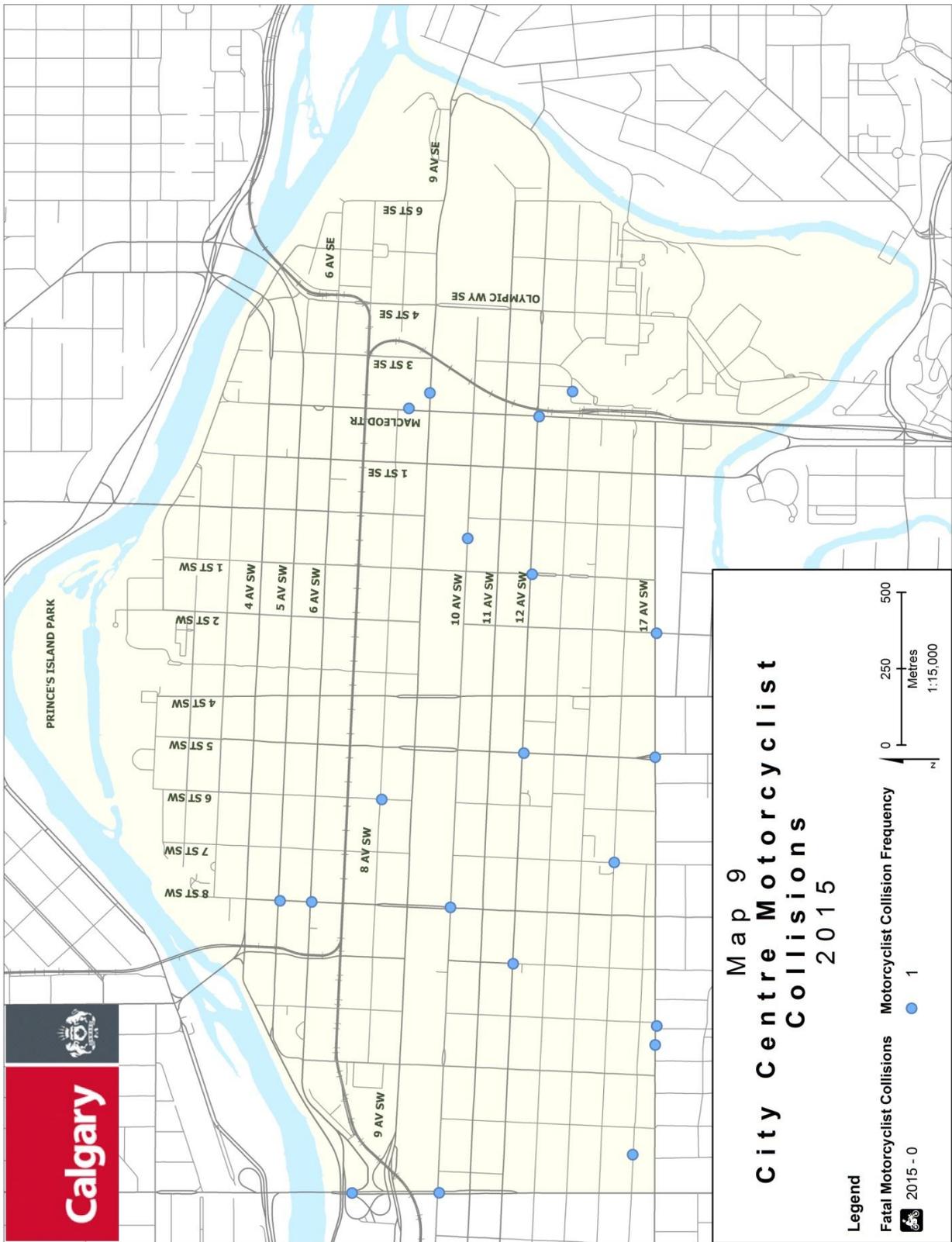


Table 6.1 City-Wide Intersection Collision Rate

Intersections with traffic volume data from 2011 – 2015	1,961
Intersections with collision data in 2015	4,391
Total intersections with collision and inbound volume data	1,211
Citywide intersection collision rate in 2015	1.1 collisions per one million entering vehicles.

Table 6.2 City-Wide Non-Intersection Collision Rate

Annual Vehicle Kilometres Travelled in 2015	10,695,960,000
Total reported non-intersection collisions in 2015	13,593
Non-intersection collision rate	1.3 collisions per one million vehicle kilometres travelled

Table 6.3 City-Wide Collisions Rates, 2011 to 2015

	2011	2012	2013	2014	2015	Average
Citywide intersection collision rates (MEV)	1.2	1.1	1.1	1.0	1.1	1.1
Citywide non-intersection collision rates (MVKT)	1.0	1.0	1.1	1.3	1.3	1.1

**Map 10
Top 20 High Collision
Frequency Locations
2015**

