

Motor Vehicle Related Crashes, Injuries and Fatalities 10-year Statistics for British Columbia 2009-2018 Research and Data Unit Policy, Research and Data Branch

Website: <u>www.gov.bc.ca/roadsafetybc</u> Twitter: <u>http://twitter.com/RoadSafetyBC</u>



Contents

Intro	oduction	3
Def	initions	4
1.	Road Safety Highlights	6
2.	Road Safety Key National Performance Indicators	7
3.	Factors Contributing to Motor Vehicle Fatalities	8
4.	Factors Contributing to Motor Vehicle Injuries	.11
5.	Factors Contributing to Motor Vehicle Crashes	.14
6.	Characteristics of Police-Reported Crashes Resulting in Fatalities	.15
7.	Population Demographics of Motor Vehicle Fatality Victims	.24
8.	Geographical Analysis of Motor Vehicle Fatalities	. 26
9.	Geographical Analysis – British Columbia	.28
10.	Geographical Analysis – Fraser Valley	.29
11.	Geographical Analysis – Greater Vancouver	.31
12.	Geographical Analysis – Northern Coastal	. 32
13.	Geographical Analysis – Southern Interior	. 34
14.	Geographical Analysis – Vancouver Island	. 37



Introduction

This report presents the preliminary police-reported data on motor vehicle crashes in British Columbia for the ten-year period 2009-2018. The report is updated every year and is valuable in measuring the Province's progress in working towards achieving Vision Zero for fatalities and injuries. Along with data produced by the Insurance Corporation of BC (ICBC), BC Coroners Service (BCCS) and other stakeholders, this information supports road safety programs, enforcement campaigns and policy development, and is used to evaluate various provincial road safety initiatives.

The main data source for this report is police-reported MV6020 forms completed by police soon after a motor vehicle crash and manually entered into the Traffic Accident System (TAS). Some data is taken from the Insurance Corporation ICBC's "loss event" database and some is from Transport Canada.

Crash data may also differ from ICBC crash claims data as police-reported TAS data only represents the most serious motor vehicle crashes, while ICBC crash claims data represents nearly all crashes involving British Columbia road users. In the ten-year period between 2009-2018, there were an average of 287,000 ICBC reported crashes per year. Police completed reports for approximately 13% of all motor vehicle crashes reported to ICBC from 2009-2017.

The total number of motor vehicle fatalities is also reconciled with BC Coroners Service data. Fatality data may differ between TAS and the Coroners Service due to definitions and the fact that Coroners Service data also includes fatalities that occur more than 30 days after an injury was sustained as a result of a motor vehicle crash. While police-reported data provides a timely snapshot of motor vehicle related injuries and fatalities, the contributing factors related to fatalities (Table 4) should be interpreted with caution as this does not take into consideration a Coroner's investigative findings supported by autopsy, toxicology, and other examinations.

The 2018 data is preliminary, and motor vehicle fatality and injury counts may change slightly should new or adjusted data be received after the publication of this report. Any amendments will be reflected in subsequent annual reports but are not expected to affect general trends. Police-reported crashes resulting in property damage only are still being entered into TAS for 2018. Crashes where a fatality and/or injury occurred are prioritized for manual data entry into TAS over crashes where a fatality and/or injury did not occur. Accordingly, the total number of police-reported crashes for 2018 is expected to increase significantly and stats such as crash rates are only being reported up to 2017.

Road safety data is affected by many factors, including legislative and policy changes, the cumulative number of vehicle kilometers driven, enforcement practices and policies, seasonal weather, random variation, road conditions and roadway characteristics and design.

Notes about the data:

- Data is as of July 12, 2019.
- When comparing this fatality report with editions published in a different year, counts may differ due to further development of data, rounding, late reporting or corrections.
- Long-term trends may differ from the 10-year trends presented on the graphs.
- Due to rounding, 5 and 10-year averages may not add up.

1https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/road-safety-rules-and-consequences/publications-legislation-and-data/bccommunity-road-safety-toolkit



Definitions

Fatality: Refers to a road user who dies within 30 days after an injury sustained in a crash involving at least one motor vehicle on a 'highway' as defined in the *Motor Vehicle Act* (largely any public roadway). The *Motor Vehicle Act* does not apply to forest-service roads, industrial roads and private driveways. Fatal victims of off-road snowmobile crashes, homicides, and suicides are excluded from this report.

Crash Involving Fatalities: Refers to a single police-reported motor vehicle crash in which at least one fatality, as defined above, occurred. For example, a motor vehicle crash where three road users were fatally injured would be counted as one single crash involving fatalities.

Injury: Refers to a road user who has reported any injury, at any level of severity, resulting from a motor vehicle crash occurring on a 'public highway' as defined in the *Motor Vehicle Act*. This includes serious injuries where a road user was admitted to hospital for an overnight stay.

Crash Involving Injuries: Refers to a single police-reported motor vehicle crash in which at least one injury, as defined above, occurred. For example, a motor vehicle crash where three road users were injured would be counted as one single crash involving injuries.

Crash Fatality Rate: Refers to the proportion of all crashes where a fatality occurred. For example, there were a total of 37,616 police-reported crashes in 2017, 260 of which resulted in at least one fatality. This results in a crash fatality rate of 0.7% (260/37,616).

Crash Injury Rate: Refers to the proportion of all crashes where an injury occurred. For example, there were a total of 37,616 police-reported crashes in 2017, 15,303 of which resulted in at least one injury. This results in a crash injury rate of 40.6% (15,303/37,616).

Intersection: An intersection is defined by the police-reported MV6020 form, where the accident location (ACC_LOC) field is coded as "1 – at intersection". All other location codes are considered as occurring outside of an intersection. Intersections do not include motor vehicle crashes occurring between intersection exchanges, intersections of roads and driveways, alleys, bridges, ferries, docks, tunnels, parking lots, railroads, industrial roads or transit-express lanes and do not include highway exit /entrance lanes, or exit/entrance intersections or ramps. Motor vehicle crashes where the accident location was coded as "00 – Unknown" are excluded.

Road User: Refers to a driver, passenger, pedestrian or cyclist who is travelling on a 'highway' as defined in the *Motor Vehicle Act.*

Injury Density: Injury density, reported as being within a range of High, Medium and Low are relative terms, indicating overall density in specific locations relative to all other locations displayed within each map. The injury densities displayed in the maps only represent the areas where more injuries occurred, but do not display information regarding exposure levels or injury severity.

Averages: Unless stated otherwise, 5-year average refers to the average number of fatalities from 2014 to 2018 and 10-year average refers to the average number of fatalities from 2009 to 2018.



Group Definitions:

- Contributing Factors
 - Speeding: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: exceeding speed limit; excessive speed over 40 km/h; and, driving too fast for conditions.
 - Distracted Driving/Inattention: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: communication/video equipment; driver inattentive; and, driver internal/external distraction.
 - Impairment: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: ability impaired by alcohol; alcohol suspected; ability impaired by drugs; drugs suspected; and, ability impaired by medication.
 - Alcohol Impairment: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: ability impaired by alcohol; and, alcohol suspected.
 - Drug Impairment: Crashes where one or more of the following contributing factors was assigned to at least one of the entities involved in the crash: ability impaired by drugs; drugs suspected; and, ability impaired by medication.
 - Driver Error/Confusion: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: backing unsafely; failing to signal; improper passing; driving on wrong side of road; improper turning; failure to secure stopped vehicle; and, driver error/confusion.
 - Aggressive Driving: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: cutting in; failing to yield right-of-way; following too closely; ignoring traffic control device; and, ignoring officer/flagman/guard.
 - Environmental: Crashes where one or more of the following contributing factors was assigned to at least one of the individuals involved in the crash: road condition (ice, snow, slush, water); glare-artificial; glare-sunlight; and, environmental (fog, sleet, rain, snow).
- Motorcycles include: motorcycles.
- Heavy vehicles include: single unit truck / heavy; combination unit truck / light; comb unit truck / heavy; combination unit tractor / trailer; combination unit tractor/trailer & pup [4-wheel trailer]; log truck & pole trailer; tow truck; combination unit truck/pull trailer/5th wheeler; bus local transit; bus intercity; road construction (grader, paver, roller); general construction; mobile crane.



1. Road Safety Highlights

- In 2018 there were a total of 282 fatal victims of motor vehicle crashes in British Columbia, a decrease of approximately 22.3 percent since 2009.
- Observing trends in road safety as a proportion of the general population and population of drivers demonstrates an overall decline in the rate of fatalities; however this decline has slowed since 2011.
- Impairment and speeding were the contributing factors which had the highest rate of fatal victims per policereported crash. From 2008 to 2017, 2.1 percent of police-reported crashes involving impairment and 1.8 percent of police-reported crashes involving speeding resulted in at least one fatality.
- There were 50 fatalities in 2018 resulting from a crash where a motorcycle was involved, an increase of approximately 56.3 percent from 2017.
- The fatality rate per 100,000 population of each gender was 8.6 for males and 2.7 for females in 2018, compared to the rates 8.0 for males and 3.5 for females in 2017.
- Persons aged 15-34, 55-64 and 75+ were at a much higher risk of being a fatal victim of a motor vehicle crash than the rest of the population.

				Key Figures		
F	Fatalities	Injuries in Police-Reported Crashes ¹	Injuries in ICBC- Reported Crashes	Police-Reported Crashes ²	ICBC-Reported Crashes ³	% of ICBC-Reported Crashes with a Corresponding Police Report ¹²
2009	363	20,372	73,000	34,491	270,000	13%
2010	364	21,092	76,000	35,312	260,000	14%
2011	292	19,720	79,000	34,501	260,000	13%
2012	281	20,256	82,000	35,628	260,000	14%
2013	269	20,789	85,000	34,413	265,000	13%
2014	289	21,209	83,000	34,997	280,000	12%
2015	295	22,506	83,000	36,957	300,000	12%
2016	288	22,100	91,000	38,265	325,000	12%
2017	281	21,190	94,000	37,616	335,000	11%
2018	282	19,628	95,000	-	315,000	-

Table 1: Key Figures 2009 to 2018

Data for 2018 is preliminary and is subject to change as data settles.

Data does not include crashes on roads where the Motor Vehicle Act does not apply (such as forest-service roads, industrial roads and private driveways) and fatal victims of off-road snowmobile crashes; and homicides or suicides were excluded.

¹ Police-Reported Crash data and related % of claims with a corresponding police report for 2018 are omitted until 2019, when manual data entry will be finalized.

² Police-Reported Crashes is calculated as the total number of unique motor vehicle crashes recorded in TAS.

³ As of September 2019, multiple counting of a small number of crashes has been adjusted. Crash counts for years 2013 or later may be slightly lower than previously published.



2. Road Safety Key National Performance Indicators

	Per	100,000 Popula	tion	Per 10	0,000 licensed o	drivers	g
	Police	Police	Police	Police	Police	Police	
	Reported Fatalities ¹	Reported Injuries ¹	Reported Crashes ²	Reported Fatalities ¹	Reported Injuries ¹	Reported Crashes ²	8
2009	8.4	451.4	782.2	12.1	648.4	1109.8	7
2010	8.0	461.5	790.9	11.6	665.7	1123.6	
2011	6.4	426.3	766.5	9.2	615.0	1086.6	e
2012	6.2	444.5	780.3	8.8	629.1	1109.0	
2013	5.9	445.6	743.4	8.3	627.5	1056.7	5
2014	6.3	455.5	743.7	8.9	644.7	1067.0	
2015	6.3	478.9	774.0	8.8	669.5	1099.8	4
2016	6.1	463.0	787.7	8.5	644.1	1118.6	
2017	5.7	437.4	764.4	7.9	605.3	1079.8	วร
2018	5.7	393.3	-	8.0	555.2	-	

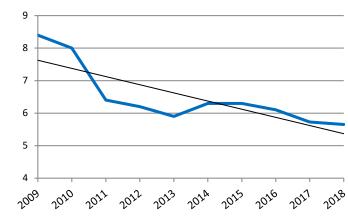


Figure 1: Fatalities per 100,000 Population

¹ Data from Transport Canada Annual Report: Canadian Motor Vehicle Traffic Crash Statistics (Excluding 2018, calculated using TAS fatality and injury counts and BC stats population data). ² Police-Reported Crash rate calculated using TAS data and BC Stats population data. Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized.

		Fatalities per	100,000 Population		Injuries per 100,000 Population						
	BC	Canada ¹	Ontario ¹	Sweden	BC	Canada ¹	Ontario ¹	Sweden			
2009	8.4	6.6	4.1	3.8	451.4	512.7	472.5	270.7			
2010	8.0	6.5	4.3	2.8	461.5	500.0	477.3	247.5			
2011	6.4	5.8	3.5	3.4	426.3	483.5	458.1	235.8			
2012	6.2	6.0	4.2	3.0	444.5	475.3	442.3	238.9			
2013	5.9	5.5	3.5	2.7	445.6	470.2	440.4	210.1			
2014	6.3	5.2	3.5	2.8	455.5	421.7	347.4	179.8			
2015	6.3	5.2	3.6	2.6	478.9	451.6	401.1	199.4			
2016	6.1	5.2	4.0	2.7	463.0	442.1	396.2	186.7			
2017	5.7	5.0	4.1	2.5	437.4	421.9	362.2	194.3			
2018	5.7	-	-	3.2	393.3	-	-	180.8			

Table 3: Fatality and Injury Rate Comparison with National Average, and with Provincial and Global Leaders

¹ Data from Transport Canada Annual Report: Canadian Motor Vehicle Traffic Crash Statistics (Excluding BC 2018, calculated using TAS fatality counts and BC stats population data). ² Rate calculated using official public fatality numbers and population and demographics statistics of Sweden.



3. Police Reported Factors Contributing to Fatal Motor Vehicle Crashes

Table 4: Top Factors Contributing to Fatalities in 2018 and Historically by Group

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year avg	10-year avg
Speeding	133	113	98	100	77	81	89	92	72	73	81	93
Inattention/Distracted Driving	99	102	79	80	77	66	89	80	73	68	75	81
Driver Error/Confusion	90	100	60	46	56	54	63	56	58	68	60	65
Impairment	106	127	75	57	64	65	72	67	72	59	67	76
Environmental	67	60	61	72	47	77	67	53	52	56	61	61
Provincial Total	363	364	292	281	269	289	295	288	281	282	287	300

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. Due to the nature of how contributing factors are assigned to each entity involved in a crash, it may be determined that a fatal victim's involvement in a crash was due to more than one factor; therefore, that victim would be counted in the totals for each related factor. Consequently, data on total fatalities may be lower than the totals for fatalities for each contributing factor. Detailed definitions of each contributing factor group are defined in the Definitions section.

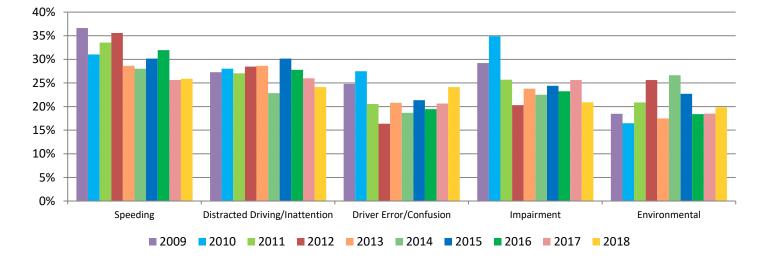


Figure 2: Proportion of all Fatalities by Police reported Contributing Factors - 2009 to 2018



Table 5: Proportion of Police-Reported Crashes Involving Top Factors Resulting in at Least One Fatality

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg²	10-year avg ³
50	Crashes	6474	5333	4952	4678	4639	4165	4394	4583	4911	4840	-	4579	4897
Speeding	Crashes with Fatalities	117	119	92	81	80	67	70	85	83	70	-	75	86
SF	Crash Fatality Rate	1.8%	2.2%	1.9%	1.7%	1.7%	1.6%	1.6%	1.9%	1.7%	1.4%	-	1.6%	1.8%
d ention	Crashes	13743	12804	14038	13640	14023	13715	13779	14599	14246	13384	-	13945	13797
Distracted ng/Inatter	Crashes with Fatalities	89	94	87	72	74	72	60	83	78	69	-	72	78
Distracted Driving/Inattention	Crash Fatality Rate	0.6%	0.7%	0.6%	0.5%	0.5%	0.5%	0.4%	0.6%	0.5%	0.5%	-	0.5%	0.6%
sion	Crashes	11349	8022	7801	7216	7037	6540	6723	7042	7126	7054	-	6897	7591
Driver Error/Confusion	Crashes with Fatalities	107	82	79	57	40	49	42	56	53	50	-	50	62
Error	Crash Fatality Rate	0.9%	1.0%	1.0%	0.8%	0.6%	0.7%	0.6%	0.8%	0.7%	0.7%	-	0.7%	0.8%
ŧ	Crashes	5079	4440	3798	3081	3150	3041	3091	3244	3250	3278	-	3181	3545
Impairment	Crashes with Fatalities	101	97	110	71	55	58	56	65	60	64	-	61	74
<u></u>	Crash Fatality Rate	2.0%	2.2%	2.9%	2.3%	1.7%	1.9%	1.8%	2.0%	1.8%	2.0%	-	1.9%	2.1%
ntal	Crashes	7900	6357	6233	6874	7119	5970	6454	5799	7216	7332	-	6554	6725
Environmental	Crashes with Fatalities	63	58	53	52	57	42	68	64	49	49	-	54	56
Envi	Crash Fatality Rate	0.8%	0.9%	0.9%	0.8%	0.8%	0.7%	1.1%	1.1%	0.7%	0.7%	-	0.8%	0.8%
otal	Crashes	39972	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	36450	36215
Provincial Total	Crashes with Fatalities	323	329	319	264	251	245	256	277	274	260	-	262	280
Provi	Crash Fatality Rate	0.8%	1.0%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	-	0.7%	0.8%

¹Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



Table 6: Fatalities Where Impairment was a Police Reported Contributing Factor by Impairment Type

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year avg	10-year avg
Alcohol Impairment	92	111	68	49	52	59	61	52	64	51	57	66
Drug Impairment	30	35	16	16	23	13	17	24	25	13	18	21
Impairment Total	106	127	75	57	64	65	72	67	72	59	67	76

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. Due to the nature of how contributing factors are assigned to each entity involved in a crash, it may be determined that a fatal victim's involvement in a crash was due to both alcohol impairment and drug impairment; therefore, that victim would be counted in the totals for each impairment type.

ICBC analysis of TAS 2014-2018 data found that roughly 10 fatalities per year are attributed to both alcohol and drug impairment.

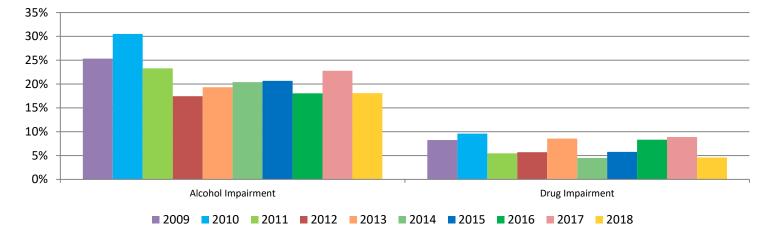


Figure 3: Proportion of all Fatalities Contributed to Impairment by Impairment Type - 2009 to 2018

Table 7: Proportion of Police-Reported Crashes Involving Impairment Resulting in at Least One Fatality

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
	Crashes	4723	4134	3440	2739	2824	2677	2684	2798	2737	2758	-	2731	3151
Alcohol	Crashes with Fatalities	93	85	95	65	47	49	51	55	46	56	-	51	64
	Crash Fatality Rate	2.0%	2.1%	2.8%	2.4%	1.7%	1.8%	1.9%	2.0%	1.7%	2.0%	-	1.9%	2.0%
	Crashes	581	497	538	500	477	532	557	604	672	706	-	614	566
Drugs	Crashes with Fatalities	19	26	31	15	15	19	11	16	21	22	-	18	20
	Crash Fatality Rate	3.3%	5.2%	5.8%	3.0%	3.1%	3.6%	2.0%	2.6%	3.1%	3.1%	-	2.9%	3.5%

Detailed definitions of each contributing factor group are defined in the Definitions section.

¹Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, crash fatality

and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



4. Factors Contributing to Motor Vehicle Injuries

stars Contributing to Dollar Departed Injuries in 2018 and Historically by Crown

lable 8:	I op Fact	ors Contr	ibuting to	o Police-F	Reported	Injuries	in 2018 a	nd Histor	rically by	Group		
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year	10-year
											avg	avg
Distracted Driving/Inattention	8280	9026	8607	8686	9101	9116	9744	9048	8345	7620	8775	8757
Aggressive Driving	6550	7221	6559	6599	7127	7183	7987	7575	7288	6589	7324	7068
Environmental	3878	3991	4040	4098	3699	4017	3735	4397	4209	3890	4050	3995
Driver Error/Confusion	4434	4233	3760	3513	3459	3678	3929	3816	3681	3650	3751	3815
Speeding	3561	3473	2997	3037	2880	2955	3116	3201	3240	2822	3067	3128
Provincial Total	20372	21092	19720	20256	20789	21209	22506	22100	21190	19628	21327	20886

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. Due to the nature of how contributing factors are assigned to each entity involved in a crash, it may be determined that a fatal victim's involvement in a crash was due to more than one factor; therefore, that victim would be counted in the totals for each related factor. Consequently, data on total fatalities may be lower than the totals for fatalities for each contributing factor. Detailed definitions of each contributing factor group are defined in the Notes section.

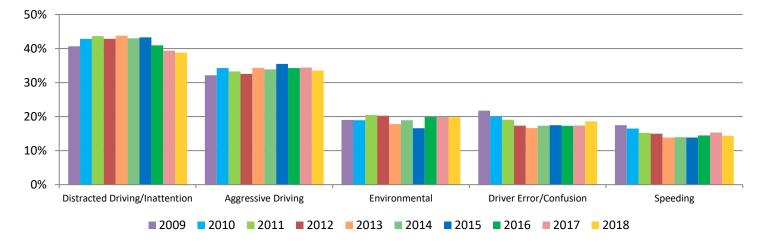


Figure 4: Proportion of all Police-Reported Injuries by Contributing Factors - 2009 to 2018



Table 9: Proportion of Police-Reported Crashes Involving Top Factors Resulting in at Least One Injury

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
d intion	Crashes	13743	12804	14038	13640	14023	13715	13779	14599	14246	13384	-	13945	13797
Distracted Driving/Inattention	Crashes with Injuries	6147	5894	6426	6185	6312	6360	6386	6886	6387	5935	-	6391	6292
Drivin	Crash Injury Rate	44.7%	46.0%	45.8%	45.3%	45.0%	46.4%	46.3%	47.2%	44.8%	44.3%	-	45.8%	45.6%
riving	Crashes	9017	8567	9474	8534	8887	8911	9084	9911	9890	9546	-	9468	9182
Aggressive Driving	Crashes with Injuries	4614	4502	4967	4532	4612	4821	4957	5410	5212	4938	-	5068	4857
Aggre	Crash Injury Rate	51.2%	52.6%	52.4%	53.1%	51.9%	54.1%	54.6%	54.6%	52.7%	51.7%	-	53.5%	52.9%
ntal	Crashes	7900	6357	6233	6874	7119	5970	6454	5799	7216	7332	-	6554	6725
Environmental	Crashes with Injuries	3230	2830	2859	2959	3037	2681	2966	2736	3173	3058	-	2923	2953
Env	Crash Injury Rate	40.9%	44.5%	45.9%	43.0%	42.7%	44.9%	46.0%	47.2%	44.0%	41.7%	-	44.7%	44.1%
noisu	Crashes	11349	8022	7801	7216	7037	6540	6723	7042	7126	7054	-	6897	7591
Driver Error/Confusion	Crashes with Injuries	4366	3131	3035	2684	2558	2479	2557	2740	2672	2616	-	2613	2884
Error	Crash Injury Rate	38.5%	39.0%	38.9%	37.2%	36.4%	37.9%	38.0%	38.9%	37.5%	37.1%	-	37.9%	37.9%
b0	Crashes	6474	5333	4952	4678	4639	4165	4394	4583	4911	4840	-	4579	4897
Speeding	Crashes with Injuries	2839	2417	2354	2081	2133	1910	2036	2125	2178	2171	-	2084	2224
S	Crash Injury Rate	43.9%	45.3%	47.5%	44.5%	46.0%	45.9%	46.3%	46.4%	44.3%	44.9%	-	45.6%	45.5%
otal	Crashes	39972	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	36450	36215
Provincial Total	Crashes with Injuries	16112	14809	15372	14488	15051	14914	15372	16253	16026	15303	-	15574	15370
Prov	Crash Injury Rate	40.3%	42.9%	43.5%	42.0%	42.2%	43.3%	43.9%	44.0%	41.9%	40.7%	-	42.8%	42.5%

¹Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2009 to 2017.



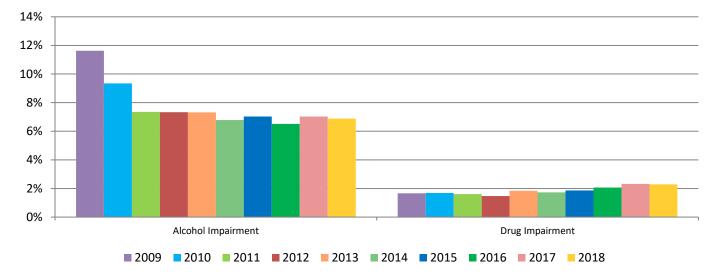


Figure 5: Proportion of all Police-Reported Injuries Attributed to Impairment by Impairment Type - 2009 to 2018

Table 10: Proportion of Police-Reported Crashes Involving Impairment Resulting in at Least One Injury

							-			-				
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
_	Crashes	4723	4134	3440	2739	2824	2677	2684	2798	2737	2758	-	2731	3151
Alcohol	Crashes with Injuries	1897	1640	1376	1034	1086	1046	1020	1133	1047	1047	-	1059	1233
1	Crash Injury Rate	40.2%	39.7%	40.0%	37.8%	38.5%	39.1%	38.0%	40.5%	38.3%	38.0%	-	38.8%	39.0%
	Crashes	581	497	538	500	477	532	557	604	672	706	-	614	566
Drugs	Crashes with Injuries	287	240	270	220	222	265	269	304	328	334	-	300	274
	Crash Injury Rate	49.4%	48.3%	50.2%	44.0%	46.5%	49.8%	48.3%	50.3%	48.8%	47.3%	-	48.9%	48.3%

¹Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



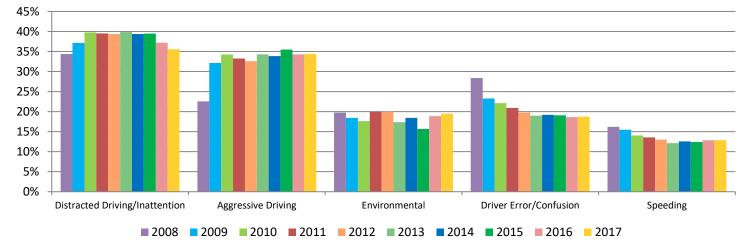
5. Factors Contributing to Motor Vehicle Crashes

lable 1	1: Tob Fa	actors Co	ontributi	ing to Po	lice-Rep	orted Ci	rashes in	i 2017 ai	nd Histo	rically by	/ Group		
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
Distracted Driving/Inattention	13743	12804	14038	13640	14023	13715	13779	14599	14246	13384	-	13945	13797
Aggressive Driving	9017	8567	9474	8534	8887	8911	9084	9911	9890	9546	-	9468	9182
Environmental	7900	6357	6233	6874	7119	5970	6454	5799	7216	7332	-	6554	6725
Driver Error/Confusion	11349	8022	7801	7216	7037	6540	6723	7042	7126	7054	-	6897	7591
Speeding	6474	5333	4952	4678	4639	4165	4394	4583	4911	4840	-	4579	4897
Provincial Total	39972	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	36450	36215

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, data for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



*Figure 6: Proportion of all Police-Reported Crashes*¹ *by Contributing Factors - 2008 to 2017*

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, data for 2017 should be used as the most recent data.



6. Characteristics of Police-Reported Crashes Resulting in Fatalities

Road Types

Table 12. Fatalitias	Deline Denembed Intrusion	and Dalias Danamad Cu	ashas by Dead Tures
Table 12: Fatalities	, Police-Reported Injuries	and Police-Reported Cr	asnes by Road Type

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
	Fatalities	202	222	164	146	139	154	162	149	172	161	160	167
Provincial Highway	Injuries	6593	6279	5970	6013	5621	5686	6482	6471	7222	6090	6390	6243
0 7	Crashes	10346	9308	9266	9374	8809	9250	10153	11099	11617	-	-	-
City/	Fatalities	133	111	103	110	116	111	115	126	85	100	107	111
Municipal	Injuries	12628	13736	12795	13271	14363	14978	15489	14965	13277	12876	14317	13838
Street	Crashes	22281	24296	23600	24469	24409	24773	25723	25963	24742	-	-	-
	Fatalities	28	31	25	25	14	24	18	13	24	21	20	22
Rural Roads	Injuries	1151	1077	955	972	805	545	535	664	691	662	619	806
	Crashes	1864	1708	1635	1785	1195	974	1081	1203	1257	-	-	-
	Fatalities	363	364	292	281	269	289	295	288	281	282	287	300
Provincial Total	Injuries	20372	21092	19720	20256	20789	21209	22506	22100	21190	19628	21327	20886
	Crashes	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	-	-

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, data for 2017 should be used as the most recent data.

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only.

² The 5-year average represents the average of data from 2014 to 2018.

³ The 10-year average represents the average of data from 2009 to 2018.

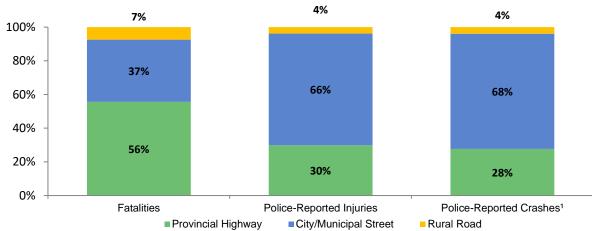


Figure 7: Proportion of all Fatalities, Police-Reported Injuries and Police-Reported Crashes since 2009 by Road Type

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, police-reported crashes only represent 2009 to 2017 data.



		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
Provincial	Crashes with Fatalities	161	178	185	140	123	125	129	145	141	153	-	139	148
Highway	Crash Fatality Rate	1.4%	1.7%	2.0%	1.5%	1.3%	1.4%	1.4%	1.4%	1.3%	1.3%	-	1.4%	1.5%
City/ Municipal	Crashes with Fatalities	115	124	104	100	105	106	105	115	120	84	-	106	108
Street	Crash Fatality Rate	0.4%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.3%	-	0.4%	0.4%
Rural	Crashes with Fatalities	47	27	30	24	23	14	22	17	13	23	-	18	24
Road	Crash Fatality Rate	1.9%	1.4%	1.8%	1.5%	1.3%	1.2%	2.3%	1.6%	1.1%	1.8%	-	1.6%	1.6%
Provincial	Crashes with Fatalities	323	329	319	264	251	245	256	277	274	260	-	262	280
Total	Crash Fatality Rate	0.8%	1.0%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	-	0.7%	0.8%

Table 13: Proportion of Police-Reported Crashes Resulting in Fatalities by Road Type

¹ Police-Reported Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.

	14016 14.1	roportic	511 01 1 0	nee nep		asines in	counting	in niju	ics by in	Jau iyp	-			
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
Provincial	Crashes with Injuries	4780	4548	4402	4140	4236	3841	3898	4382	4480	4961	-	4312	4367
Highway	Crash Injury Rate	40.6%	44.0%	47.3%	44.7%	45.2%	43.6%	42.1%	43.2%	40.4%	42.7%	-	42.4%	43.4%
City/ Municipal	Crashes with Injuries	10355	9433	10193	9643	10103	10477	11087	11476	11043	9833	-	10783	10364
Street	Crash Injury Rate	40.2%	42.3%	42.0%	40.9%	41.3%	42.9%	44.8%	44.6%	42.5%	39.7%	-	42.9%	42.1%
Rural	Crashes with Injuries	977	828	777	705	712	596	387	395	503	509	-	478	639
Road	Crash Injury Rate	40.1%	44.4%	45.5%	43.1%	39.9%	49.9%	39.7%	36.5%	41.8%	40.5%	-	41.7%	42.1%
Provincial	Crashes with Injuries	16112	14809	15372	14488	15051	14914	15372	16253	16026	15303	-	15574	15370
Total	Crash Injury Rate	40.3%	42.9%	43.5%	42.0%	42.2%	43.3%	43.9%	44.0%	41.9%	40.7%	-	42.8%	42.5%

Table 14: Proportion of Police-Reported Crashes Resulting in Injuries by Road Type

¹ Police-Reported Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



Speed Limit

Table 15: Fatalities, Police-Reported Injuries and Police-Reported Crashes by Speed Limit

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
	Fatalities	3	3	5	11	6	2	4	4	6	2	4	5
30 km/h or less	Injuries	477	505	414	519	481	435	547	527	539	557	521	500
01 1035	Crashes	1264	1191	1197	1330	1037	1086	1272	1479	1479	-	-	-
	Fatalities	160	118	105	116	112	95	107	126	90	99	103	113
40-60 km/h	Injuries	12774	13738	12531	12881	13451	13551	14566	14179	12895	12310	13500	13288
Kiny n	Crashes	20190	21619	20549	21041	20462	20559	21805	22537	21329	-	-	-
	Fatalities	110	152	86	82	86	95	81	88	95	82	88	96
70-90 km/h	Injuries	3644	3569	3381	3342	3396	3451	3521	3450	3561	2910	3379	3423
Kiny n	Crashes	5410	5369	5102	5220	5177	5115	5185	5414	5551	-	-	-
	Fatalities	72	62	65	50	48	70	83	57	72	81	73	66
100+ km/h	Injuries	1471	1478	1565	1569	1569	1742	1883	1839	2080	1788	1866	1698
Kiny n	Crashes	2248	2231	2545	2570	2372	2659	2934	3047	3246	-	-	-
	Fatalities	363	364	292	281	269	289	295	288	281	282	287	300
Provincial Total	Injuries	20372	21092	19720	20256	20789	21209	22506	22100	21190	19628	21327	20886
	Crashes	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	-	-

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, data for 2017 should be used as the most recent data.

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only.

Crashes where the speed_zn variable was either "0 – Unknown" or "999 – Other" were not grouped into any speed limit group.

² The 5-year average represents the average of data from 2014 to 2018.

³ The 10-year average represents the average of data from 2009 to 2018.

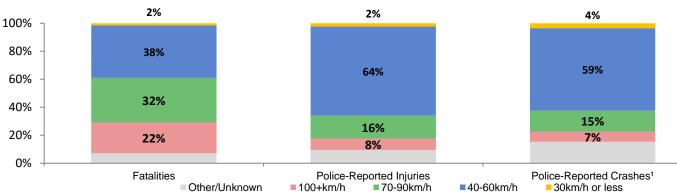


Figure 8: Proportion of all Fatalities, Police-Reported Injuries and Police-Reported Crashes since 2009 by Speed Limit

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, police-reported crashes only represent 2009 to 2017 data.



Table 16: Proportion of Police-Reported Crashes Resulting in Fatalities by Speed Limit

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
30 km/h	Crashes with Fatalities	8	3	3	5	10	6	2	4	4	5	-	4	5
or less	Crash Fatality Rate	0.6%	0.2%	0.3%	0.4%	0.8%	0.6%	0.2%	0.3%	0.3%	0.3%	-	0.3%	0.4%
40-60	Crashes with Fatalities	140	150	112	102	110	107	91	104	120	88	-	102	112
km/h	Crash Fatality Rate	0.6%	0.7%	0.5%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	-	0.5%	0.5%
70-90	Crashes with Fatalities	116	100	123	79	72	71	82	78	85	86	-	80	89
km/h	Crash Fatality Rate	1.8%	1.8%	2.3%	1.5%	1.4%	1.4%	1.6%	1.5%	1.6%	1.5%	-	1.5%	1.6%
100+	Crashes with Fatalities	43	60	53	53	38	44	55	72	52	63	-	57	53
km/h	Crash Fatality Rate	1.5%	2.7%	2.4%	2.1%	1.5%	1.9%	2.1%	2.5%	1.7%	1.9%	-	2.0%	2.0%
Provincial	Crashes with Fatalities	323	329	319	264	251	245	256	277	274	260	-	262	280
Total	Crash Fatality Rate	0.8%	1.0%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	-	0.7%	0.8%

¹ Police-Reported Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data. Crashes where the speed_zn variable was either "0 – Unknown" or "999 – Other" were not grouped into any speed limit group.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.

Table 17: Proportion of Police-Reported Crashes Resulting in Injuries by Speed Limit

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
30 km/h	Crashes with Injuries	406	385	421	355	425	397	357	444	447	454	-	420	409
or less	Crash Injury Rate	28.1%	30.5%	35.3%	29.7%	32.0%	38.3%	32.9%	34.9%	30.2%	30.7%	-	33.4%	32.2%
40-60	Crashes with Injuries	10283	9414	10074	9356	9669	9721	9950	10599	10393	9468	-	10026	9893
km/h	Crash Injury Rate	44.4%	46.6%	46.6%	45.5%	46.0%	47.5%	48.4%	48.6%	46.1%	44.4%	-	47.0%	46.4%
70-90	Crashes with Injuries	2714	2449	2463	2287	2337	2280	2334	2369	2353	2400	-	2347	2399
km/h	Crash Injury Rate	42.5%	45.3%	45.9%	44.8%	44.8%	44.0%	45.6%	45.7%	43.5%	43.2%	-	44.4%	44.5%
100+	Crashes with Injuries	1142	1009	1023	1064	1083	1043	1159	1280	1243	1403	-	1226	1145
km/h	Crash Injury Rate	40.5%	44.9%	45.9%	41.8%	42.1%	44.0%	43.6%	43.6%	40.8%	43.2%	-	43.0%	43.0%
Provincial	Crashes with Injuries	16112	14809	15372	14488	15051	14914	15372	16253	16026	15303	-	15574	15370
Total	Crash Injury Rate	40.3%	42.9%	43.5%	42.0%	42.2%	43.3%	43.9%	44.0%	41.9%	40.7%	-	42.8%	42.5%

¹ Police-Reported Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

Crashes where the speed_zn variable was either "0 – Unknown" or "999 – Other" were not grouped into any speed limit group.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



Intersections

•		acantico)	T office It	reported	erastres	mjarres	andron	ee nepe		Shies at 1			
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
	Fatalities	85	62	66	77	79	49	73	85	57	68	66	70
At INTXN	Injuries	8813	9707	9105	9000	9692	9683	10249	10150	9485	8971	9708	9486
	Crashes	11585	12985	12368	12617	12326	12536	13000	13333	12951	-	-	-
	Fatalities	274	296	216	192	185	238	215	203	221	210	217	225
Not At INTXN	Injuries	11179	11084	10312	10895	10784	11268	11970	11653	11392	10347	11326	11088
	Crashes	22082	21619	21215	22138	21363	21836	23175	24156	23815	-	-	-
	Fatalities	363	364	292	281	269	289	295	288	281	282	287	300
Provincial Total	Injuries	20372	21092	19720	20256	20789	21209	22506	22100	21190	19628	21327	20886
. otur	Crashes	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	-	-

Table 18: Fatalities, Police-Reported Crashes Injuries and Police-Reported Crashes at Intersections

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, data for 2017 should be used as the most recent data.

Crashes where the acc loc variable was "0 – Unknown" were not grouped into any intersection group.

² The 5-year average represents the average of data from 2014 to 2018.

³ The 10-year average represents the average of data from 2009 to 2018.

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. Please refer to the Definitions section for a detailed definition of an "intersection".

Please also note that the definition of an intersection in TAS data differs from that used by ICBC. Additionally, ICBC reports on intersections using ICBC claims data, which contains many less severe motor vehicle crashes; as such, trends may not be consistent.

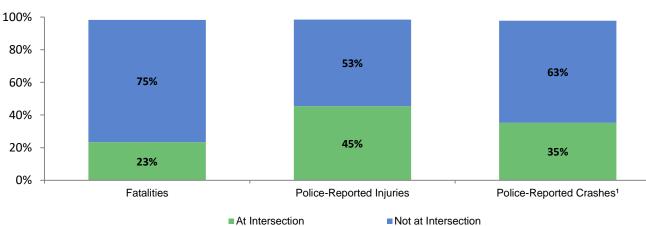


Figure 9: Proportion of all Fatalities, Police-Reported Crashes Injuries and Police-Reported Crashes since 2009 at Intersections

At Intersection

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, police-reported crashes only represent 2009 to 2017 data.



							0							
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
At INTXN	Crashes with Fatalities	67	76	60	63	72	70	47	73	82	56	-	66	67
ACINIAN	Crash Fatality Rate	0.5%	0.7%	0.5%	0.5%	0.6%	0.6%	0.4%	0.6%	0.6%	0.4%	-	0.5%	0.5%
Not At	Crashes with Fatalities	251	250	253	194	170	170	207	198	192	202	-	194	209
INTXN	Crash Fatality Rate	1.0%	1.1%	1.2%	0.9%	0.8%	0.8%	0.9%	0.9%	0.8%	0.8%	-	0.8%	0.9%
Provincial	Crashes with Fatalities	323	329	319	264	251	245	256	277	274	260	-	262	280
Total	Crash Fatality Rate	0.8%	1.0%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	-	0.7%	0.8%

Table 19: Proportion of Police-Reported Crashes Resulting in Fatalities at Intersections

¹ Police-Reported Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data. Motor vehicle crashes where the accident location was coded as "00 – Unknown" are excluded.

Notor vehicle crashes where the accident location was coded as UU = Unknown and $2\pi i$

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
At INTXN	Crashes with Injuries	6755	6255	6852	6533	6568	6721	6854	7194	7139	6646	-	6911	6752
	Crash Injury Rate	51.5%	54.0%	52.8%	52.8%	52.1%	54.5%	54.7%	55.3%	53.5%	51.3%	-	53.9%	53.2%
Not At	Crashes with Injuries	9102	8278	8305	7741	8206	7956	8329	8848	8659	8436	-	8446	8386
INTXN	Crash Injury Rate	35.2%	37.5%	38.4%	36.5%	37.1%	37.2%	38.1%	38.2%	35.8%	35.4%	-	37.0%	36.9%
Provincial	Crashes with Injuries	16112	14809	15372	14488	15051	14914	15372	16253	16026	15303	-	15574	15370
Total	Crash Injury Rate	40.3%	42.9%	43.5%	42.0%	42.2%	43.3%	43.9%	44.0%	41.9%	40.7%	-	42.8%	42.5%

Table 20: Proportion of Police-Reported Crashes Resulting in Injuries at Intersections

¹ Police-Reported Crash data for 2018 where an injury or fatality did not occur is expected to increase significantly as additional

crash data is entered into TAS. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

Motor vehicle crashes where the accident location was coded as "00 – Unknown" are excluded.

² The 5-year average represents the average of data from 2013 to 2017.

³ The 10-year average represents the average of data from 2008 to 2017.



Vehicle Type

Та	able 21: Fa	talities, P	olice-Rep	ported Cr	ashes Inj	uries and	Police-R	eported (Crashes b	y Vehicle	е Туре		
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
	Fatalities	49	38	40	25	32	36	32	35	32	50	37	37
Motorcycles	Injuries	1178	1068	1006	1006	1071	1039	1136	1111	1103	993	1076	1071
	Crashes	1188	1111	1020	1073	1062	1069	1164	1168	1116	-	-	-
	Fatalities	73	59	71	67	50	62	53	56	60	68	60	62
Heavy Vehicles	Injuries	1285	1331	1389	1347	1398	1361	1428	1287	1329	1381	1357	1354
	Crashes	2546	2554	2970	2880	2783	2839	2810	2809	3006	-	-	-
	Fatalities	363	364	292	281	269	289	295	288	281	282	287	300
Provincial Total	Injuries	20372	21092	19720	20256	20789	21209	22506	22100	21190	19628	21327	20886
	Crashes	34491	35312	34501	35628	34413	34997	36957	38265	37616	-	-	-

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, data for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2014 to 2018.

³ The 10-year average represents the average of data from 2009 to 2018.

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. **Note**: Fatality numbers for motorcycles will be slightly higher than those reported in previous years. To match the methodology used for all other motor vehicle crash characteristics, including those for heavy vehicles, motorcycle fatalities have been calculated as the number of fatalities resulting from a crash where a motorcycle was involved. In previous years, the total fatalities specific to motorcycle drivers or passengers was reported. This change does not affect reported fatalities for heavy vehicles.

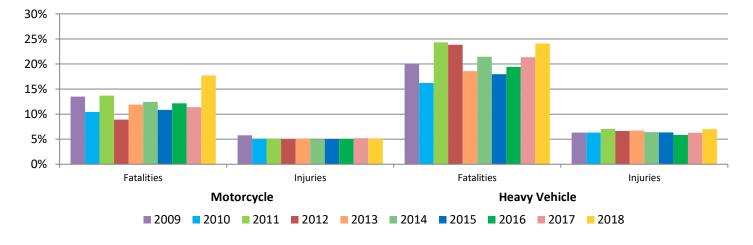


Figure 10: Proportion of all Police-Reported Crashes resulting in Fatalities and Injuries involving Motorcycles and Heavy Vehicles – 2009 to 2018



		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
Motorcycles	Crashes with Fatalities	39	49	35	38	23	30	35	32	35	31	-	33	35
motorcycles	Crash Fatality Rate	3.2%	4.1%	3.2%	3.7%	2.1%	2.8%	3.3%	2.7%	3.0%	2.8%	-	2.9%	3.1%
Heavy Vehicles	Crashes with Fatalities	58	62	52	57	53	47	48	50	54	57	-	51	54
	Crash Fatality Rate	1.8%	2.4%	2.0%	1.9%	1.8%	1.7%	1.7%	1.8%	1.9%	1.9%	-	1.8%	1.9%
Provincial Total	Crashes with Fatalities	323	329	319	264	251	245	256	277	274	260	-	262	280
	Crash Fatality Rate	0.8%	1.0%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	-	0.7%	0.8%

Table 22: Proportion of Police-Reported Crashes Resulting in Fatalities by Vehicle Type

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ the 10-year average represents the average of data from 2008 to 2017.

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	5-year avg ²	10-year avg ³
	Crashes with Injuries	1032	1017	958	873	902	918	922	1000	989	959	-	958	957
Motorcycles	Crash Injury Rate	85.4%	85.6%	86.2%	85.6%	84.1%	86.4%	86.2%	85.9%	84.7%	85.9%	-	85.8%	85.6%
Heavy	Crashes with Injuries	1103	939	944	992	991	1006	1020	976	931	956	-	978	986
Vehicles	Crash Injury Rate	35.0%	36.9%	37.0%	33.4%	34.4%	36.1%	35.9%	34.7%	33.1%	31.8%	-	34.4%	34.8%
Provincial Total	Crashes with Injuries	16112	14809	15372	14488	15051	14914	15372	16253	16026	15303	-	15574	15370
Total	Crash Injury Rate	40.3%	42.9%	43.5%	42.0%	42.2%	43.3%	43.9%	44.0%	41.9%	40.7%	-	42.8%	42.5%

Table 23: Proportion of Police-Reported Crashes Resulting in Injuries by Vehicle Type

¹ Police-Reported Crash data for 2018 are omitted until 2019, when manual data entry will be finalized. As such, crash fatality and injury rates for 2017 should be used as the most recent data.

² The 5-year average represents the average of data from 2013 to 2017.

³ the 10-year average represents the average of data from 2008 to 2017.



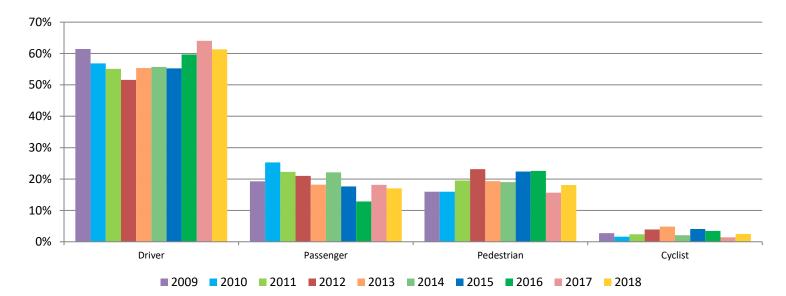
Occupant Type

Table 24: Fatalities by Occupant Type

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year avg	10-year avg
Driver	223	207	161	145	149	161	163	172	180	173	170	173
Passenger	70	92	65	59	49	64	52	37	51	48	50	59
Cyclist	10	6	7	11	13	6	12	10	4	7	8	9
Pedestrian	58	58	57	65	52	55	66	65	44	51	56	57
Other	2	1	2	1	6	3	2	4	2	3	3	3
Provincial Total	363	364	292	281	269	289	295	288	281	282	287	300

As noted in the definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only.

Figure 11: Proportion of Fatalities by Entity Type – 2009 to 2018





7. Population Demographics of Motor Vehicle Fatality Victims

Tab	ole 25: Fataliti	ies by Gende	er and Rate	per 100	,000 Populati	on				
		Male				Female	Unknown			
	Population	Fatalities	% of Fatalities	Rate	Population	Fatalities	% of Fatalities	Rate	Fatalities	% of Fatalities
2009	2,190,794	257	70.8%	11.7	2,218,891	106	29.2%	4.8	0	0.0%
2010	2,219,293	239	65.7%	10.8	2,245,381	125	34.3%	5.6	0	0.0%
2011	2,237,818	200	68.5%	8.9	2,263,360	90	30.8%	4.0	2	0.7%
2012	2,268,129	189	67.3%	8.3	2,297,564	92	32.7%	4.0	0	0.0%
2013	2,297,787	174	64.7%	7.6	2,331,160	92	34.2%	3.9	3	1.1%
2014	2,333,632	202	69.9%	8.7	2,372,159	87	30.1%	3.7	0	0.0%
2015	2,365,151	208	70.5%	8.8	2,409,895	86	29.2%	3.6	1	0.3%
2016	2,405,076	190	66.0%	7.9	2,452,803	97	33.7%	4.0	1	0.3%
2017	2,435,143	195	69.4%	8.0	2,485,615	86	30.6%	3.5	0	0.0%
2018	2,470,602	213	75.5%	8.6	2,519,548	69	24.5%	2.7	0	0.0%

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. Population data retrieved from BC Stats. Additional analysis of rate per 100,000 licensed drivers by age groups was not available, which may suggest alternate trends.

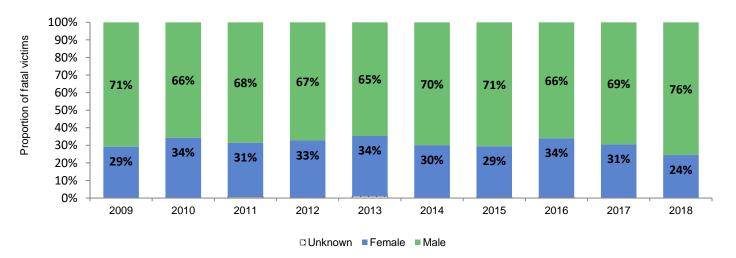


Figure 12: Proportion of all Fatalities by Gender – 2009 to 2018

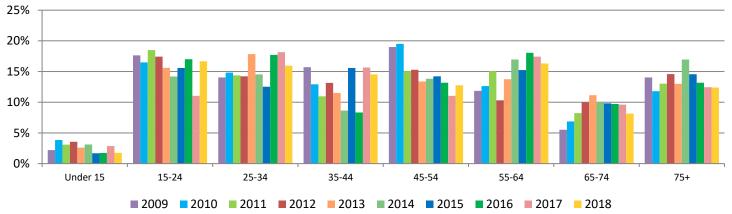


	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year avg	10-year avg
Under 15 ¹	8	14	9	10	7	9	5	5	8	5	6.4	8
15-24	64	60	54	49	42	41	46	49	31	47	42.8	48.3
25-34	51	54	42	40	48	42	37	51	51	45	45.2	46.1
35-44	57	47	32	37	31	25	46	24	44	41	36	38.4
45-54	69	71	44	43	36	40	42	38	31	36	37.4	45
55-64	43	46	44	29	37	49	45	52	49	46	48.2	44
65-74	20	25	24	28	30	29	29	28	27	23	27.2	26.3
75+	51	43	38	41	35	49	43	38	35	35	40	40.8
Unknown	0	4	5	4	3	5	2	3	5	4	3.8	3.5
Provincial Total	363	364	292	281	269	289	295	288	281	282	287	300

Table 26: Fatalities by Age Group

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. ¹Previous reports included the unknown ages of victims in the 'Under 15' age range, which has now been corrected.

Figure 13: Proportion of all Fatalities by Age Group – 2009 to 2018



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year avg	10-year avg
Under 15	1.2	2.6	2.0	2.1	1.5	2.0	1.0	1.1	1.8	1.3	1.5	1.7
15-24	11.0	10.3	9.2	8.3	7.1	6.9	7.8	8.3	5.2	7.8	7.2	8.2
25-34	8.6	8.8	6.8	6.4	7.5	6.4	5.6	7.5	7.4	6.4	6.6	7.1
35-44	9.1	7.6	5.2	6.0	5.0	4.0	7.4	3.8	6.9	6.3	5.7	6.1
45-54	9.8	10.0	6.2	6.1	5.1	5.6	5.9	5.3	4.4	5.2	5.3	6.4
55-64	7.6	7.8	7.3	4.7	5.8	7.4	6.6	7.4	6.9	6.4	7.0	6.8
65-74	5.8	7.0	6.5	7.1	7.2	6.6	6.2	5.7	5.3	4.3	5.6	6.2
75+	16.8	13.9	12.0	12.7	10.6	14.5	12.5	10.7	9.6	9.2	11.3	12.3
Provincial Total	363	364	292	281	269	289	295	288	281	282	287	300

Table 27: Fatality Rate per 100,000 Population by Age



8. Geographical Analysis of Motor Vehicle Fatalities

Table 26.	Fatalitie	s by Reg	on									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year avg	10-year avg
Fraser Valley	76	87	52	55	52	61	56	70	56	51	59	62
Greater Vancouver	37	35	33	43	47	35	44	39	39	43	40	40
Northern Coastal	60	71	61	51	53	62	59	60	63	57	60	60
Southern Interior	129	111	107	94	75	104	97	80	89	89	92	98
Vancouver Island	58	60	37	38	42	27	38	39	34	42	36	42
Provincial Total	363	364	292	281	269	289	295	288	281	282	287	300

Table 28. Fatalities by Region

As noted in the Definitions section, fatality, injury and crash counts represent police-reported motor vehicle crashes only. Region totals may not add up to provincial totals due to fatalities occurring in locations not specified in regional data.

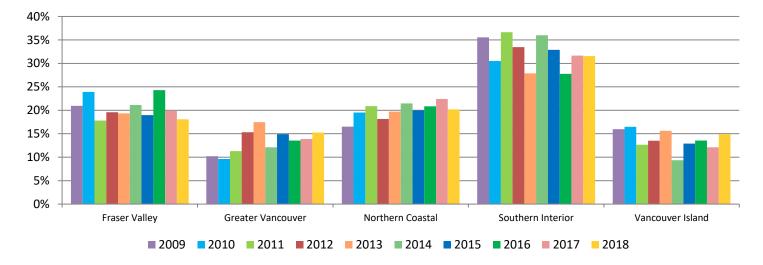


Figure 14: Proportion of all Fatalities by Region – 2009 to 2018

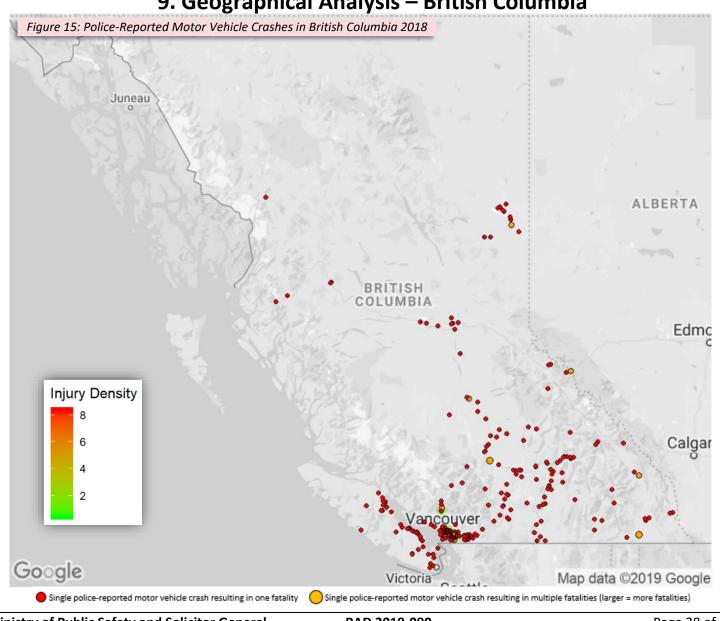
British Columbia's regions include the following:

- Fraser Valley: Includes areas south of Vancouver, including Richmond, Delta, and Surrey, and as • far east as Hope.
- Greater Vancouver: Includes Vancouver to Port Coquitlam, as far North as Whistler, and the . eastern parts of the Sunshine Coast.
- Northern Coastal: Includes the Central Interior as far south as 100 Mile House, the Peace River • district, Prince Rupert, Haida Gwaii, and all points north.
- Southern Interior: Includes the southern third of the province, including the Kamloops area, the • Okanagan and Kootenay regions, as far west as Boston Bar and Lillooet.
- Vancouver Island: Encompasses the Gulf Islands and the Mainland coastal community of Powell • River.



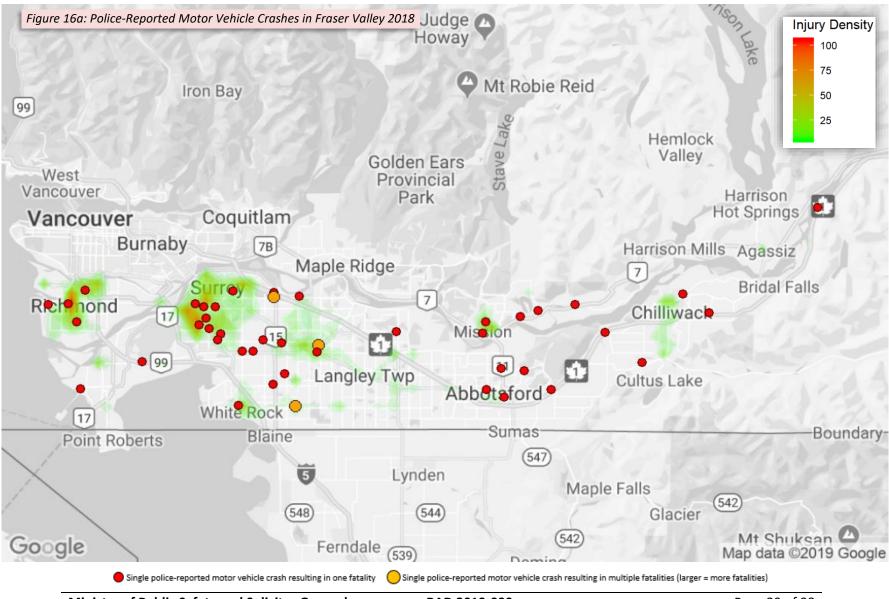
The following section examines a geographical representation of all police-reported motor vehicle crashes which resulted in one or more fatalities and the density of police-reported motor vehicle crashes which resulted in at least one injury, specific to each region.





9. Geographical Analysis – British Columbia

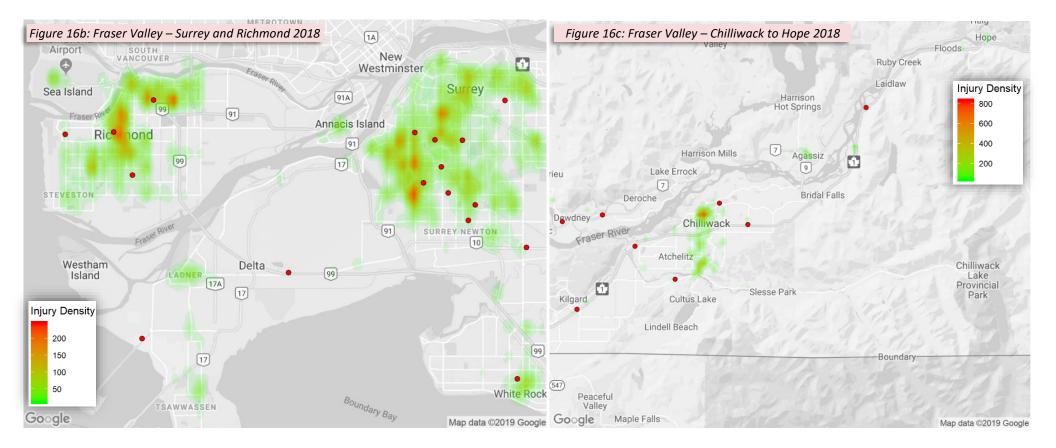




10. Geographical Analysis – Fraser Valley

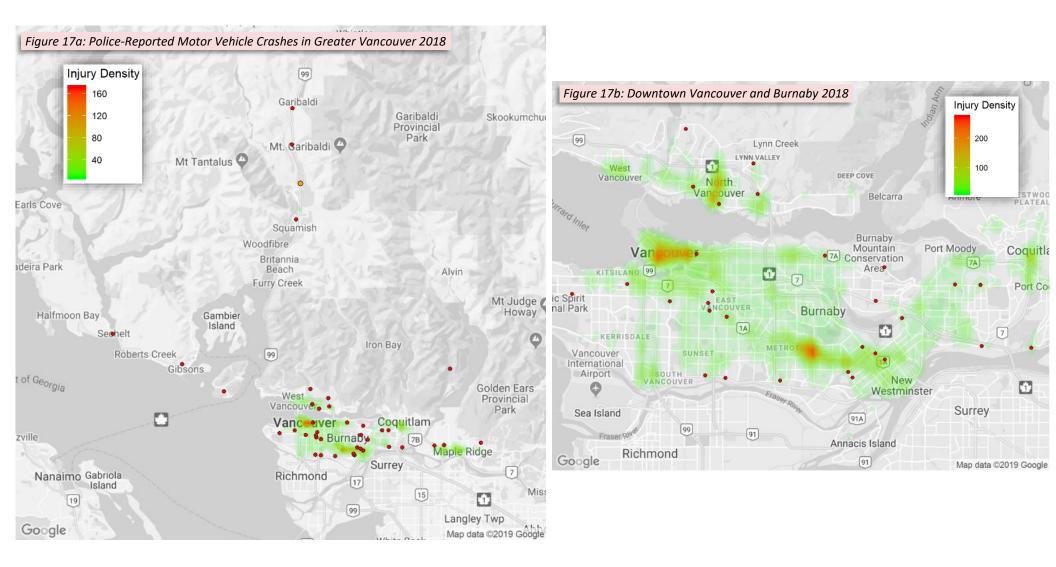
Ministry of Public Safety and Solicitor General RoadSafetyBC





Single police-reported motor vehicle crash resulting in one fatality

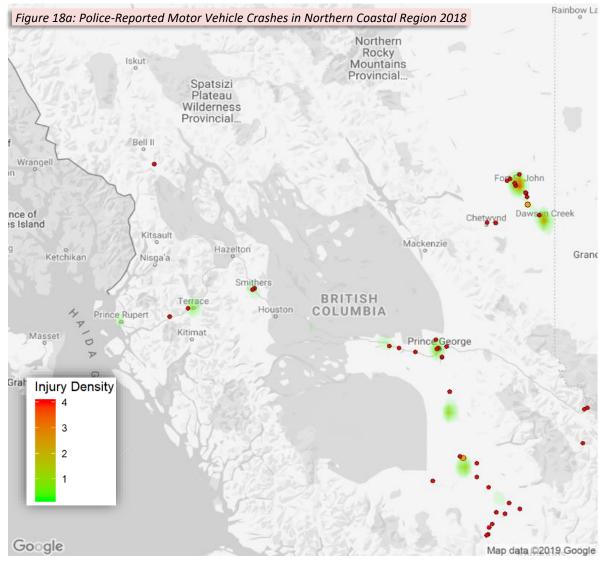




11. Geographical Analysis – Greater Vancouver

🔵 Single police-reported motor vehicle crash resulting in one fatality 🛛 🕒 Single police-reported motor vehicle crash resulting in multiple fatalities (larger = more fatalities)

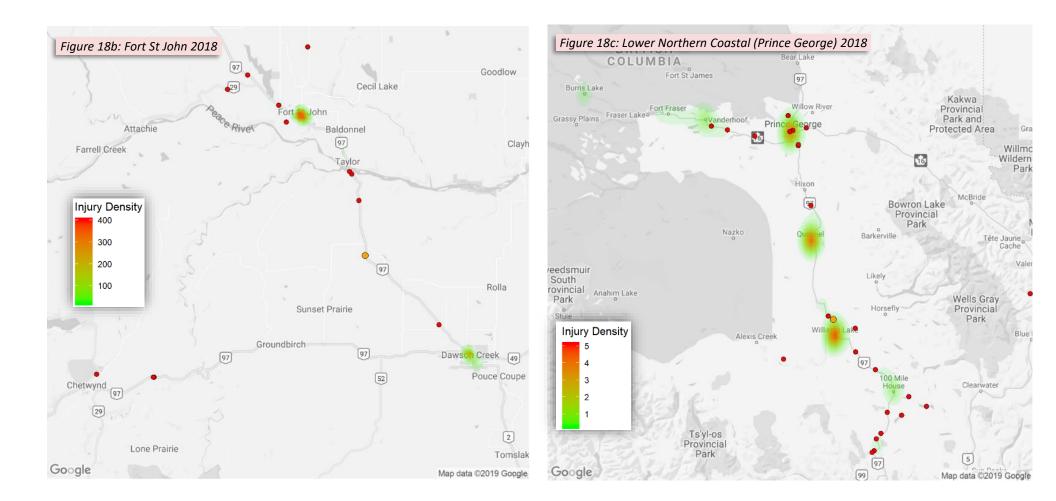




12. Geographical Analysis – Northern Coastal

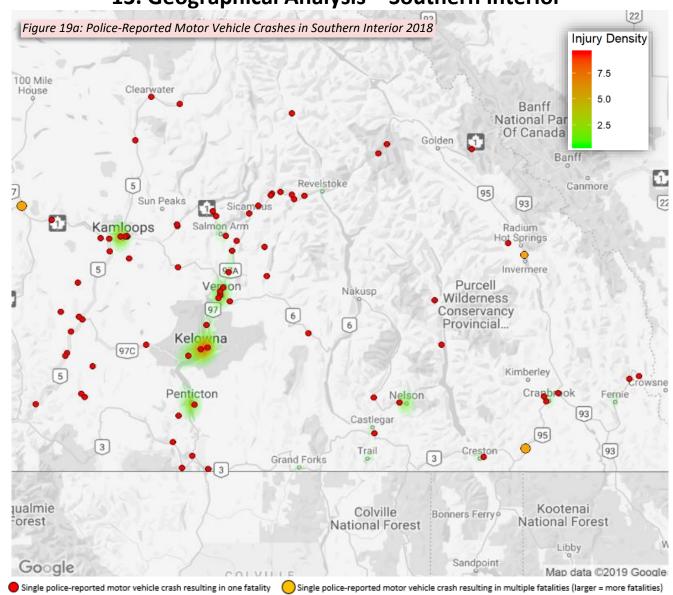
Single police-reported motor vehicle crash resulting in one fatality 😑 Single police-reported motor vehicle crash resulting in multiple fatalities (larger = more fatalities)





🔵 Single police-reported motor vehicle crash resulting in one fatality 🛛 🕒 Single police-reported motor vehicle crash resulting in multiple fatalities (larger = more fatalities)

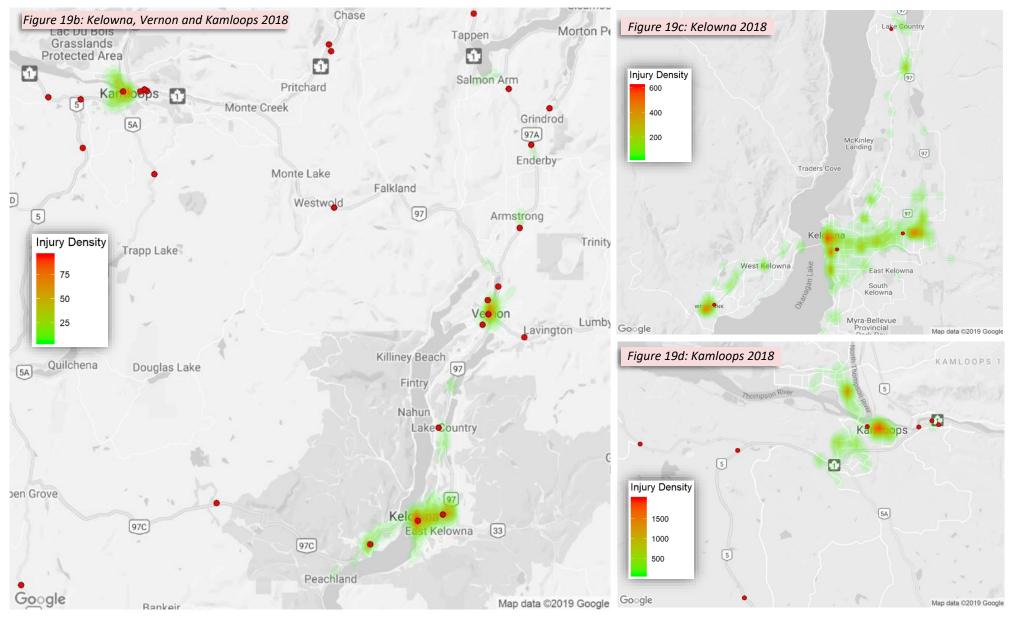




13. Geographical Analysis – Southern Interior

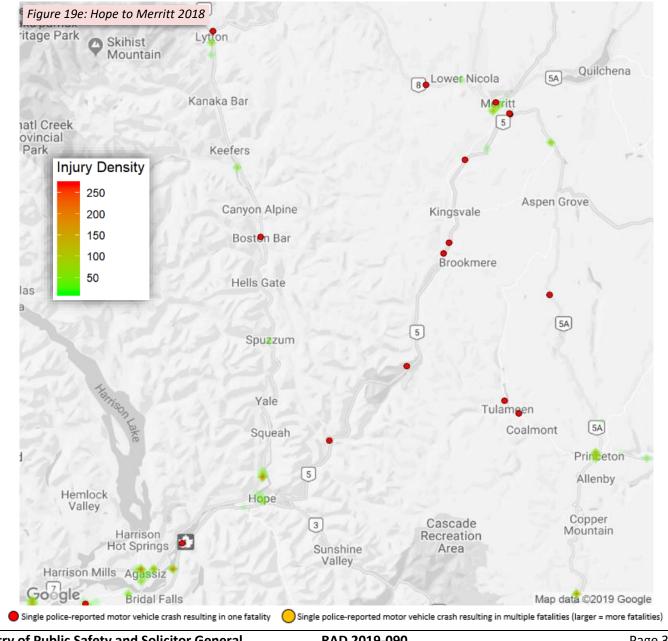


Research and Data Unit Policy, Research and Data Branch



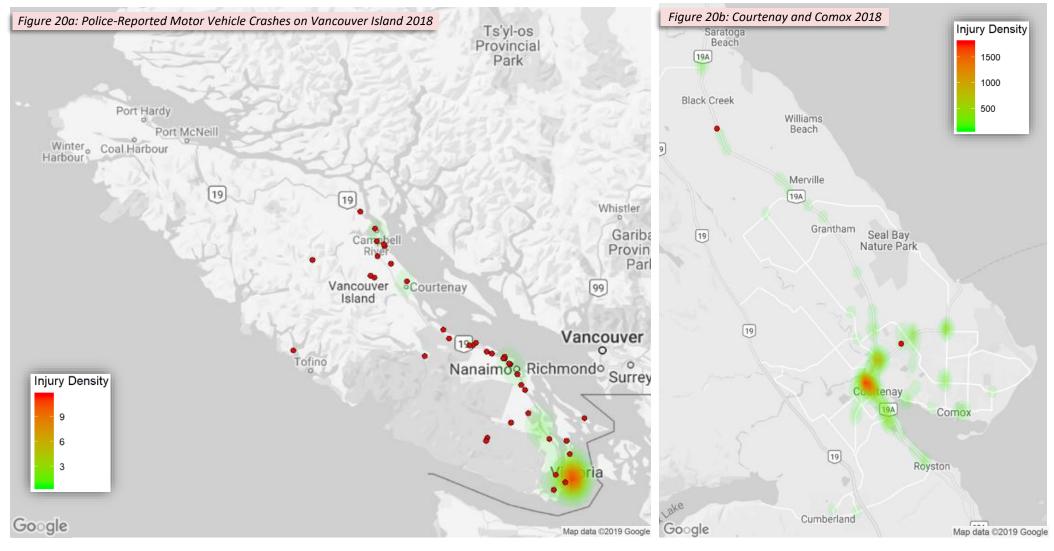
🔵 Single police-reported motor vehicle crash resulting in one fatality 🛛 🔵 Single police-reported motor vehicle crash resulting in multiple fatalities (larger = more fatalities)







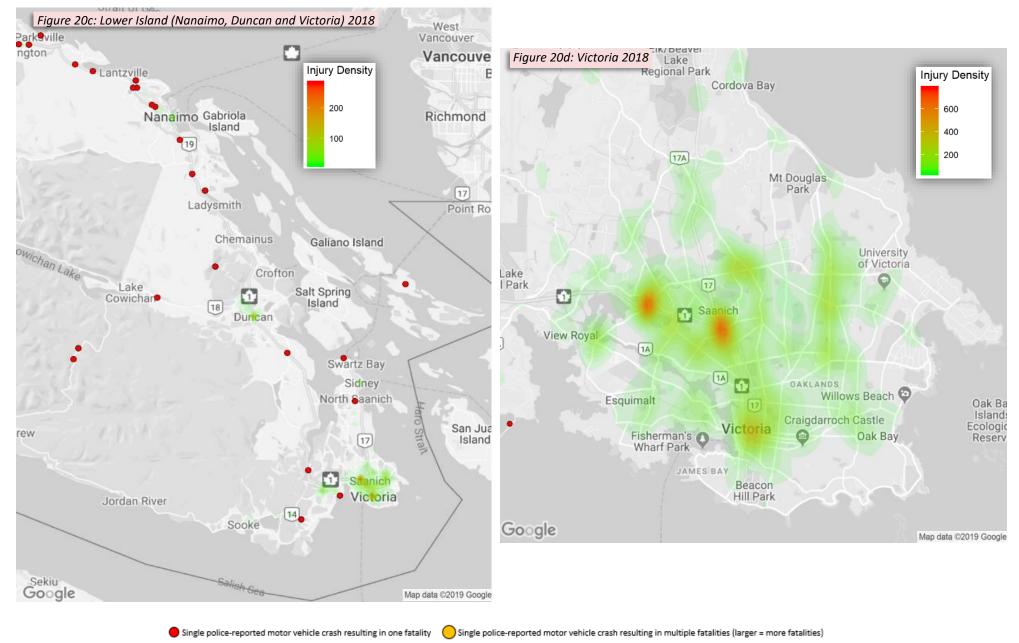




Single police-reported motor vehicle crash resulting in one fatality
Single police-reported motor vehicle crash resulting in multiple fatalities (larger = more fatalities)



Research and Data Unit Policy, Research and Data Branch



Ministry of Public Safety and Solicitor General RoadSafetyBC