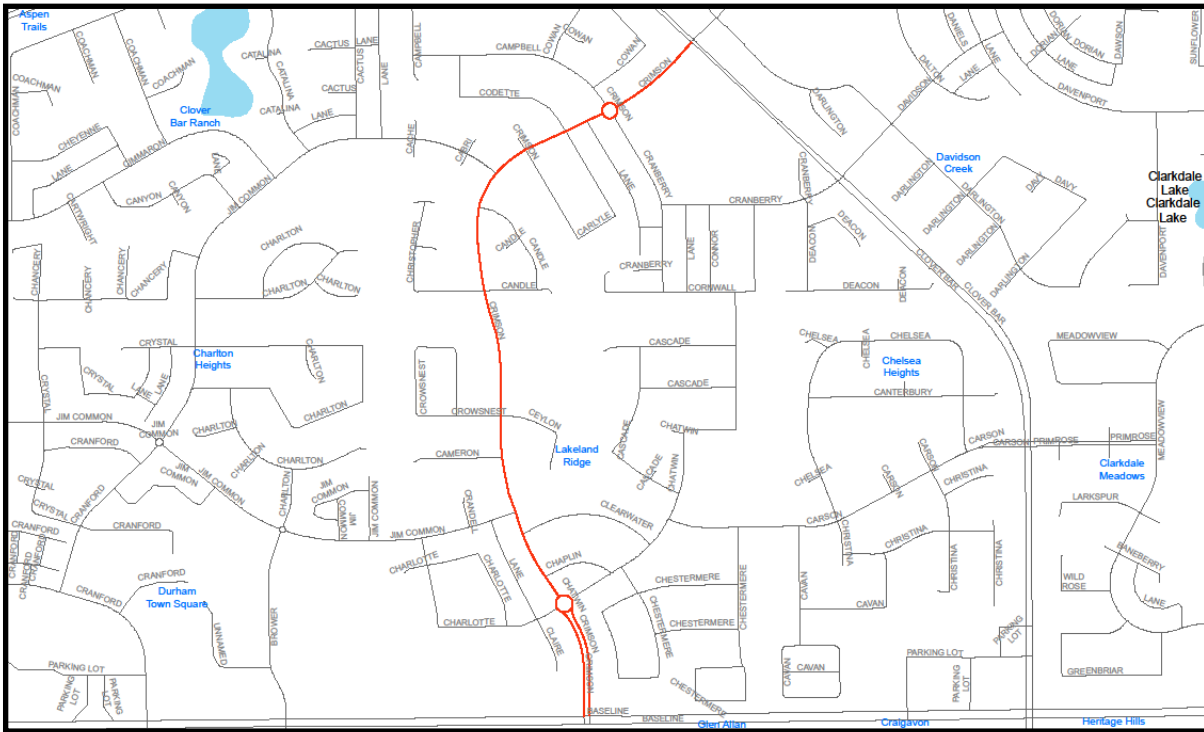


Crimson Drive Traffic Safety and Calming Review Report



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Date: February 8, 2018

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1.1 Introduction

This report has been prepared in response to Council Motion 2017-330, dated September 5, 2017.

"To prepare a report to Council with recommendations for traffic calming measures for Crimson Drive to be brought back Q1 of 2018."

This report contains a detailed road safety review for Crimson Drive from Baseline Road to Clover Bar Road. The report includes a review of traffic operations, traffic volumes, vehicle speeds, collision history, and travel times. The report discusses key points and recommends strategies to address driver behaviour issues along the corridor.

Crimson Drive is classified as a collector road which runs from Baseline Road on the south side, to Clover Bar Road on the north side, and is located in the Lakeland Ridge neighbourhood of Sherwood Park. As part of the Lakeland Ridge development, the entire section of Crimson Drive is traffic calmed with two roundabouts, parking, and curb extensions at critical intersections and crossings. Roundabouts are located at Chatwin Road/Charlotte Way and Cranberry Way/Campbell Drive towards the north and south ends of the road. Parking is permitted along the road on either one side or both sides of the road. Residential houses front onto the roadway. Lakeland Ridge School is located near the Cranberry Way/Campbell Drive roundabout. The speed limit for the road is 50 km/h except for 30 km/h in the school zone. Transit is operating on a portion of Crimson Drive from Clover Bar Road to Jim Common Drive North, and from Chatwin Road to Jim Common Drive South.

1.2 Traffic Calming

Neighbourhood traffic calming is governed by the Strathcona County Traffic Calming Policy SER-009-040. According to the policy, the purpose of traffic calming is to reduce negative effects of motor vehicles and improve conditions of other modes of travel, including walking and cycling. The policy sets out principles and guidelines for the consideration of request for traffic calming. Under the guidelines, traffic calming will be implemented where there are identified speed, volume, shortcutting and/or collision issues. Traffic calming has been introduced in mature neighbourhoods and generally combined with road rehabilitation projects. The Transportation Planning and Engineering department determines the opportunities to accommodate traffic calming projects with new construction. Crimson Drive is a newer roadway, where traffic calming was introduced at the planning stage as a requirement of development.

1.3 Traffic Control

The study area includes Crimson Drive from Baseline Road to Clover Bar Road. Traffic is mainly controlled by stop or yield signs at intersections. There are fourteen intersections including two roundabouts, five four-legged intersections, five three-legged intersections, one alley access and one school access. Roundabouts are yield controlled, and Jim Common Drive North and Jim Common Drive South intersections are stop controlled. Intersections located to the south side of Jim Common Drive North are stop controlled and intersections located to the north of Jim Common Drive North are yield controlled. Traffic is restricted to one-way eastbound operation on Chaplin Lane and Clearwater Lane. There is no traffic coming out of these roads directly onto Crimson Drive. The purpose of creating one way operation was to discourage short cutting on these roads.

1.4 Crosswalks

Crosswalk facilities are provided along the corridor and located at;

1. Roundabout at Chatwin Road; east and north leg
2. At the trail crossing; approx. 50m south of Christopher Close
3. At the trail crossing; just north of Jim Common Drive North
4. Roundabout at Cranberry Way; on all four legs

Accessible pedestrian ramps are also provided at all intersection locations and pedestrians can legally cross at all intersection locations. A short crossing distance of 6.6m has been provided on trail crossing locations with the use of curb extensions to address pedestrian safety.

1.5 Travel Time and Short Cutting

The community has been concerned that some drivers may use Crimson Drive as a short cut to reduce travel time. Motorists living northeast of the Clover Bar/Crimson Drive intersection have the option of taking Clover Bar Road to Baseline Road, or to go through Lakeland Ridge using Crimson Drive. The other short cut would be to get to Sherwood Drive/Jim Common Drive or Sherwood Drive/Cimmaron Way intersections using Crimson Drive and Jim Common Drive North. The distance from Clover Bar Road to Baseline Road on Crimson Drive is about 1.7 km compared with 2.6 km on Clover Bar Rd and Baseline Road. Travel times were measured in the field during off-peak traffic conditions and are shown in Table 1 travelling at the posted speed limits

TRAVEL TIME COMPARISON		
ROUTE	TIME	DIFFERENCE
NB CRIMSON DRIVE	2 Min, 23 Sec	58 Seconds
EB BASELINE ROAD/NB CLOVER BAR ROAD	3 Min, 21 Sec	
SB CRIMSON DRIVE	2 Min, 29 Sec	22 Seconds
SB CLOVER BAR ROAD/WB BASELINE ROAD	2 Min, 51 Sec	

Table 1: Travel Time Comparison

From the table above, traveling on Crimson Drive in the northbound direction saves approximately one minute compared to taking westbound Baseline Road to northbound Clover Bar Road. When travel time measured in the southbound direction was compared, there is less difference in travel time but motorists still save 22 seconds on average by taking the Crimson Drive route. Travel time difference is mainly due to two reasons; longer distance, and the presence of traffic signals causing delay to traffic especially when comparing the eastbound to northbound route.

Figure 1: Traffic Survey Locations

Traffic counts are based on 24 hour traffic data and were conducted in July 2017 and January 2018. Since the study was conducted during certain time periods of the year, it may not reflect seasonal variations. The results of the study are shown in Table 2.

Number	Location	Date	Traffic Volume (veh/day)	
			NB	SB
1	B/W Chaplin Lane and Clearwater Lane	January 4-5, 2018	1529	1556
2	S of Crowsnest Crescent	July 17-19, 2017	1551	1566
3	S of Christopher Close	January 4-5, 2018	1149	1106
4	B/W Carlyle Crescent and Codette Way	January 4-5, 2018	1384	1318

Table 2: Traffic volume

From the table above, the traffic volume ranges from approximately 2250 veh/day to approx. 3100 veh/day combined in both directions. Traffic volume at Location 4 (between Chaplin Lane and Clearwater Lane) was higher than Location 3 in the January 2018 study and indicated that approximately 200 vehicles turned at Jim Common Drive North. There are no significant differences in directional traffic volumes and they are balanced in both directions for all locations. These results indicate that there is no preferred direction of travel.

According to Strathcona County's Design and Construction Standards, major residential collector roads with traffic calming are designed for traffic volumes between 2500 veh/day to 6000 veh/day. Crimson Drive falls within the lower range of expected collector road traffic volumes.

Traffic volume varies throughout the day. To see hourly variations, the data for Location 2 is shown in Figure 2 for Northbound and Figure 3 for Southbound.

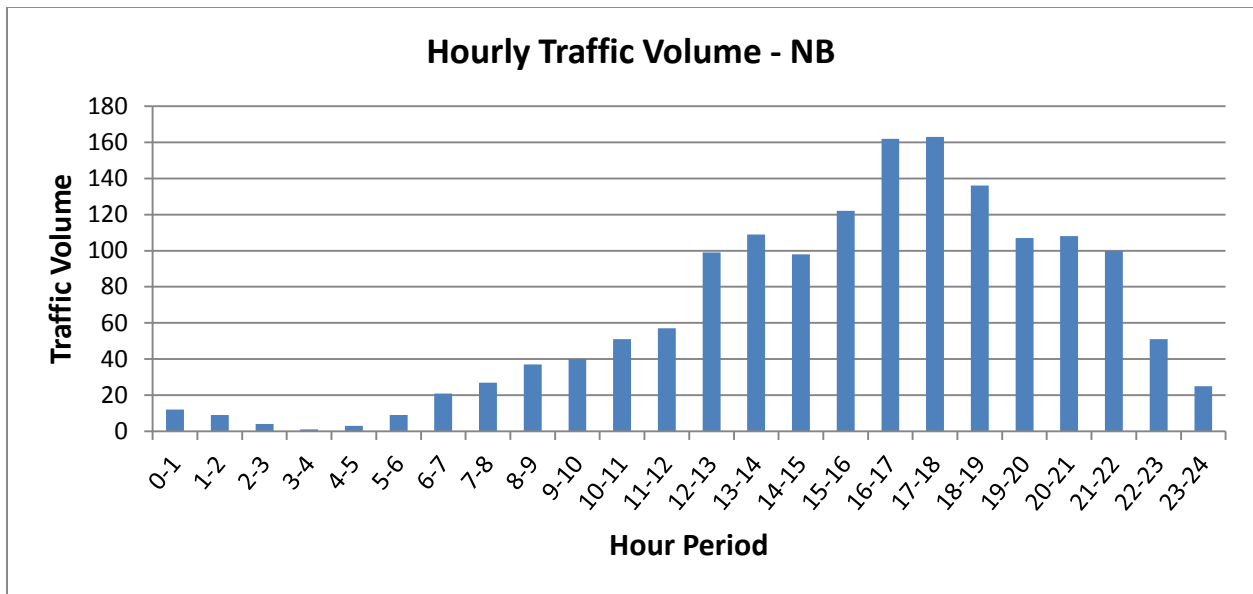


Figure 2: Northbound hourly traffic volume

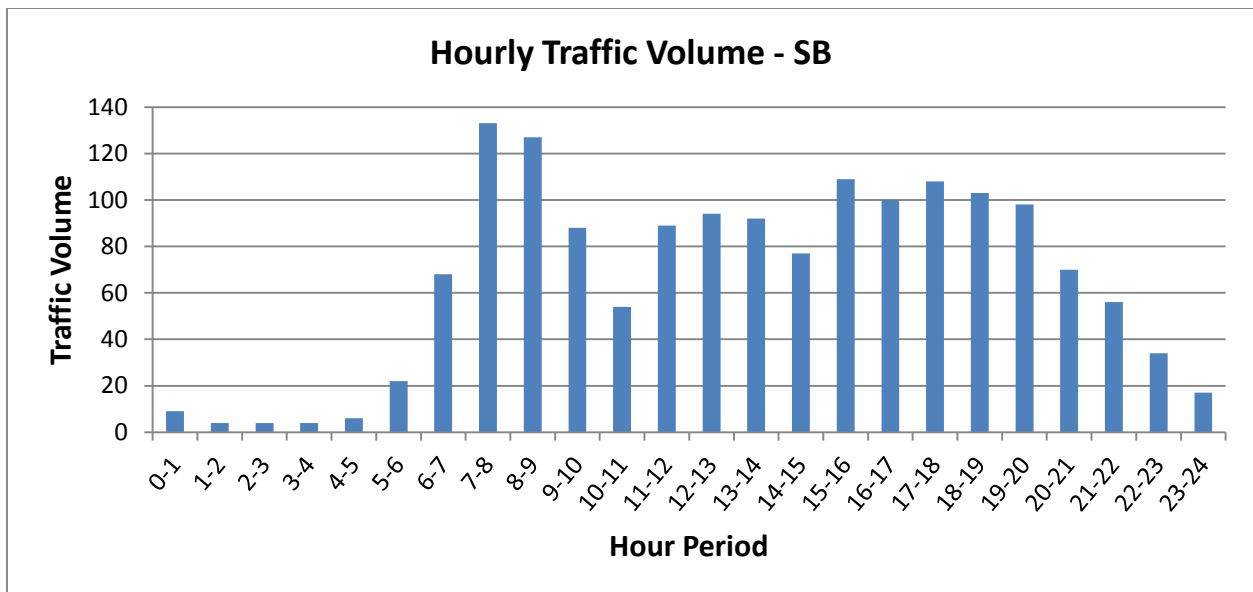


Figure 3: Southbound hourly traffic volume

An evaluation of the hourly traffic volume data, shows NB traffic peaking in the afternoon during the period from 4-6pm, and in the SB direction traffic is steady throughout the day with a peak in the morning from 7-9am.

It should be noted that the traffic volumes are based on a spot study which may not reflect the traffic volumes for other sections of roadway but should be considered a good indicator. Traffic counts also include vehicle type classification and about 90 percent were passenger cars and pickup trucks and about 10 percent were 2-axle single unit trucks.

1.6.2 Speed Study

A speed study was part of the traffic survey with speeds being recorded in both directions. The 85th percentile speed, which is the speed of free flowing vehicles traveling at or below the posted speed limit, is the most common way of evaluating speed limits in engineering best practices. The average speed and 85th percentile speeds were recorded in each direction for all four locations and averaged over the 24 hour period. This is shown in Table 3.

Number	Location	Date	Avg. Speed (km/h)		85th Percentile Speed (km/h)	
			NB	SB	NB	SB
1	B/W Chaplin Lane and Clearwater Lane	January 4-5, 2018	44.5	45.9	52.2	53.8
2	S of Crowsnest Crescent	July 17-19, 2017	43.1	44.2	52.1	54.4
3	S of Christopher Close	January 4-5, 2018	48.6	45.7	56.0	56.5
4	B/W Carlyle Crescent and Codette Way	January 4-5, 2018	46.0	41.4	54.2	48.4

Table 3: Crimson Drive Speed studies

According to the Traffic Calming Policy, 85th percentile speed of greater than 5 km/h over the speed limit would suggest that traffic calming be considered. The recorded speeds vary at the study locations with the highest operating speed of 56.5 km/h in the southbound direction at Location 3, south of Christopher Close (in front of Cascade Park). To further investigate the speed variations; speed vs percentage of vehicles charts were produced for Location # 3 in Figure 4 and Figure 5.

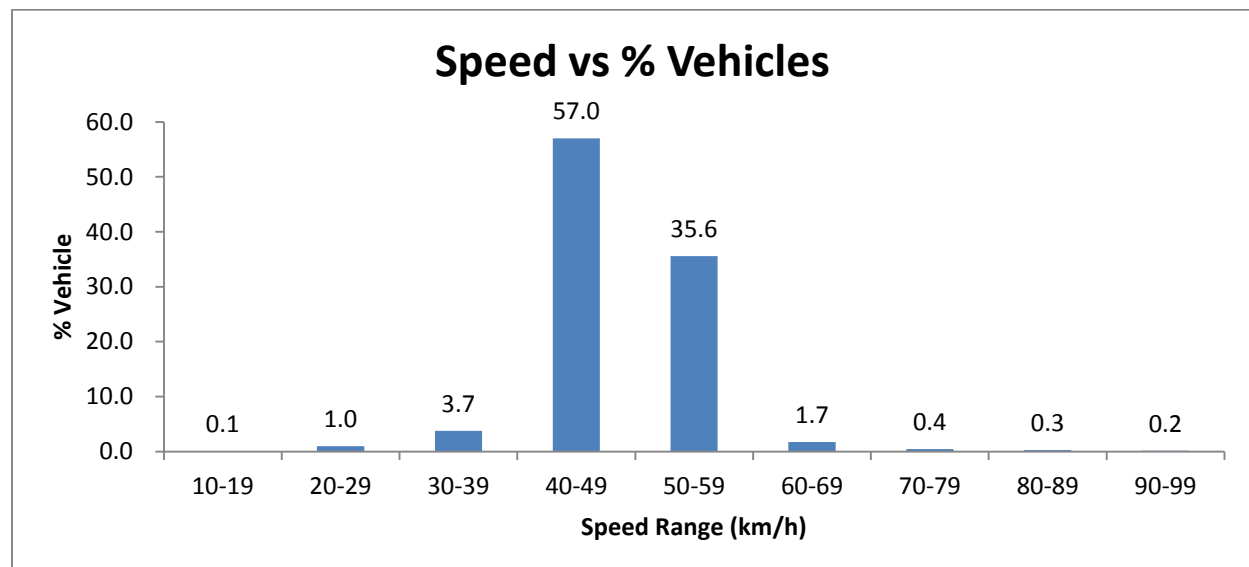


Figure 4: Speed vs Frequency of Vehicles – Northbound at Cascade Park

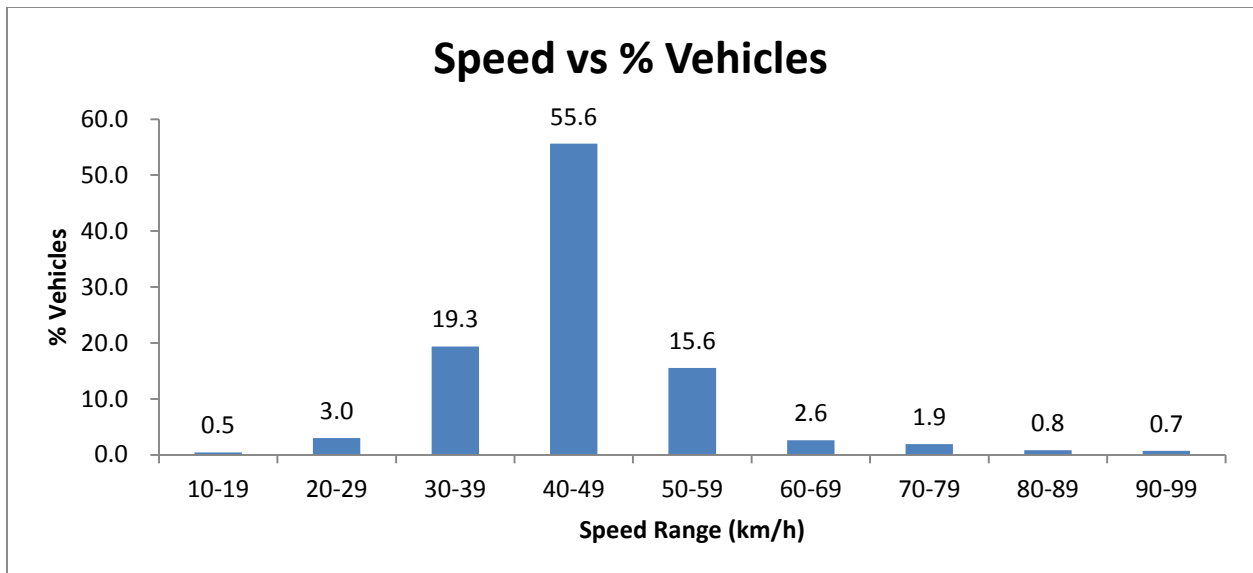


Figure 5: Speed vs Frequency of vehicles – Southbound at Cascade Park

From the above figures; a significant portion of vehicles are traveling above the posted speed limit. Approximately 38 percent vehicles were travelling above the speed limit in the northbound direction and about 22 percent were travelling above the speed limit in the SB direction, see Appendix A for additional detail.

Collision history was reviewed for the entire section over a period from January 1, 2012 to December 31, 2016. There were 27 collisions during the five year period including one minor, one major and 25 property damage only collisions shown in Figure 7, see Appendix B for detailed reports. The major injury collision occurred near Clearwater Lane and was cited as loss of control of the vehicle due to the driver's medical condition.



As shown in Figure 6, all crashes occurred within an intersection, with no history of mid-block crashes. There were seven single vehicle and 20 multiple vehicle collisions. The primary cause of single vehicle collisions was loss of control. Snow, slush and icy road surface conditions were the noted crash contributor in 22 out of 27 crashes. Intersection collisions are summarized in Table 4.

Intersection	Major	Minor	PDO	Total
Crimson/Chatwin	0	1	9	10
Crimson/Clearwater	1	0	1	2
Crimson/Jim Common S	0	0	1	2
Crimson/Crowsnest	0	0	2	2
Crimson/Christopher Cl	0	0	2	2
Crimson/Candle Cres	0	0	1	1
Crimson/Jim Common N	0	0	4	4
Crimson/Cranberry	0	0	4	4
TOTAL				27

Table 4: Intersection collisions

As shown in Table 4, 10 of the 27 total crashes occurred at the Crimson Drive and Chatwin Road roundabout; 5 were loss of control, 3 were rear ends, and 3 were failing to yield the right of way crashes. There is no history of pedestrian or bicyclist collisions. From the collision history there does not appear to be a significant pattern that indicates safety issues along the road.

2.0 Comparison Roads

Based on similar traffic studies in Sherwood Park that have received traffic calming, Crimson Drive is on the lower end of the pre traffic calming spectrum. Table 5 shows volumes and speeds of roads before traffic calming was recommended and approved.

Location	Volume Before	85 th Speed Before
Glencoe Blvd	~2100 vpd	60.4 – 60.9 km/h
Georgian Way South of Gatewood	~3400 vpd	56.8 – 74.1 km/h
Glenbrook Blvd	~5100 vpd	57.7 – 64 km/h
Graham Rd	~2500 vpd	57.3 – 62.9 km/h
Jim Common Drive South	~5300 vpd	64.3 – 67.8 km/h

Table 5: Volume and Speed Data for Previous Traffic Calming Projects

3.0 Conclusion

- The entire length of Crimson Drive is traffic calmed according to current Transportation Association of Canada recommended guidelines and Strathcona County Design and Construction Standards.

- Parking is allowed on one side or both side of the road and may create positive visual friction when vehicles are parked. During the day, there are fewer vehicles parked along the road potentially leading to increased speed due reduced visual friction.
- The speed studies indicate that the section of Crimson Drive from Chatwin Road to Jim Common Drive North has speeding issues where motorists are driving above the posted speed limit. Location 3 has the highest recorded 85th percentile speed of 56.5 km/h in the southbound direction; approximately 38 percent of drivers are driving over the speed limit.
- Traffic volumes of 2,500 to 3,100 vehicles per day is within acceptable design ranges for collector roads according to Strathcona County's Design and Construction Standards.
- Travel time studies show that there is a time savings of approximately one minute for motorists choosing to travel on Crimson Drive vs Baseline Road/Clover Bar Road route in the northbound direction. Drivers may choose Crimson Drive as a commuting route because it is physically shorter than the arterial road networks.
- There was one major and one minor injury crash in last 5 years. The major injury crash occurred due to the driver's medical condition. All crashes occurred within an intersection where slippery road conditions were shown to be a contributing factor in 22 of 27 crashes.
- All-way stop control is not warranted at both major intersections; Jim Common Drive North and Jim Common Drive South based upon current traffic volumes, delay measurements and collision history.
- Traffic calming traffic management projects were completed for Jim Common Drive North and South sections in September 2017. Any tertiary traffic impacts on Crimson Drive are unknown at this time.
- Transit operates on Crimson Drive from Clover Bar Road to Jim Common Drive North and from Chatwin Rd to Jim Common Drive.
- Other similar collector roads that received traffic calming recorded 85th percentile speeds higher than those measured on Crimson Drive

4.0 Ongoing Measures

Based upon this detailed traffic safety review, the following recommendations have been developed for consideration.

- Ensure snow and ice is cleared according to policy in order to avoid the road condition crashes.
- Continue to monitor and research municipalities reducing neighbourhood road speed limits to 40km/h as part of the Neighbourhood Traffic Safety Action Plan.

5.0 Potential Additional Measure

Consider installing permanent driver feedback signs (speed display boards) at two straightaway midblock locations near Cascade Park; one in each direction.

APPENDIX 'A'
TRAFFIC VOLUME AND SPEED STUDY

DAILY SPEED CLASSIFICATION SUMMARY

NORTHBOUND

Crimson Dr @ #544

Jan. 4, 2018

Date	Speed (kph)															Total	Average Speed	85th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
January 4, 2018	1	4	7	336	945	206	18	6	4	2	0	0	0	0	0	1529	44.5	52.2
TOTALS	1	4	7	336	945	206	18	6	4	2	0	0	0	0	0	1529	44.5	52.2
PCTGE	0.1	0.3	0.5	22.0	61.8	13.5	1.2	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	100.0	44.5 km/h	52.2 km/h

DAILY SPEED CLASSIFICATION SUMMARY

SOUTHBOUND

Crimson Dr @ #544

Jan. 4, 2018

Date	Speed (kph)															Total	Average Speed	85th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
January 4, 2018	0	2	11	255	930	317	30	5	2	4	0	0	0	0	0	1556	45.9	53.8
TOTALS	0	2	11	255	930	317	30	5	2	4	0	0	0	0	0	1556	45.9	53.8
PCTGE	0.0	0.1	0.7	16.4	59.8	20.4	1.9	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.0	100.0	45.9 km/h	53.8 km/h

Notes:

Start: Jan 4 @ 12:00 AM

End: Jan 5 @ 12:00 AM

DAILY SPEED CLASSIFICATION SUMMARY

NORTHBOUND

Crimson Dr S of Crownest Cr

July 17 - 19, 2017

Date	Speed (mph)															Total	Average Speed	50th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
July 17, 2017	0	3	100	367	651	268	11	0	1	0	0	0	0	0	0	1401	43.0	52.0
July 18, 2017	1	5	104	417	731	276	15	0	1	1	0	0	0	0	0	1551	42.9	52.0
July 19, 2017	0	0	13	44	113	55	3	0	0	0	0	0	0	0	0	228	44.6	53.4
TOTALS	1	8	217	828	1495	599	29	0	2	1	0	0	0	0	0	3180	43.1	52.1
PCTGE	0.0	0.3	6.8	26.0	47.0	18.8	0.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	43.1 km/h	52.1 km/h

DAILY SPEED CLASSIFICATION SUMMARY

SOUTHBOUND

Crimson Dr S of Crownest Cr

July 17 - 19, 2017

Date	Speed (mph)															Total	Average Speed	50th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
July 17, 2017	1	1	129	273	589	374	31	1	1	0	0	0	0	0	0	1400	44.3	54.4
July 18, 2017	0	2	146	325	662	403	27	0	1	0	0	0	0	0	0	1566	44.0	53.9
July 19, 2017	1	1	48	102	188	161	18	0	0	0	0	0	0	0	0	519	44.8	55.5
TOTALS	2	4	323	700	1439	938	76	1	2	0	0	0	0	0	0	3485	44.2	54.4
PCTGE	0.1	0.1	9.3	20.1	41.3	26.9	2.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	44.2 km/h	54.4 km/h

Notes:

Start July 17 @ 12:00 AM

End July 19 @ 11:00 AM

DAILY SPEED CLASSIFICATION SUMMARY

NORTHBOUND

Crimson Dr @ #420

Jan. 4, 2018

Date	Speed (kph)															Total	Average Speed	85th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
January 4, 2018	0	1	11	43	655	409	20	5	3	2	0	0	0	0	0	1149	48.6	56.0
TOTALS	0	1	11	43	655	409	20	5	3	2	0	0	0	0	0	1149	48.6	56.0
PCTGE	0.0	0.1	1.0	3.7	57.0	35.6	1.7	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.0	100.0	48.6 km/h	56.0 km/h

DAILY SPEED CLASSIFICATION SUMMARY

SOUTHBOUND

Crimson Dr @ #420

Jan. 4, 2018

Date	Speed (kph)															Total	Average Speed	85th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
January 4, 2018	0	5	33	214	615	172	29	21	9	8	0	0	0	0	0	1106	45.7	56.5
TOTALS	0	5	33	214	615	172	29	21	9	8	0	0	0	0	0	1106	45.7	56.5
PCTGE	0.0	0.5	3.0	19.3	55.6	15.6	2.6	1.9	0.8	0.7	0.0	0.0	0.0	0.0	0.0	100.0	45.7 km/h	56.5 km/h

Notes:

Start: Jan 4 @ 12:00 AM

End: Jan 5 @ 12:00 AM

DAILY SPEED CLASSIFICATION SUMMARY

NORTHBOUND

Crimson Dr b/w Carlyle Cr & Cadotte Wy

Jan. 4, 2018

Date	Speed (kph)															Total	Average Speed	85th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
January 4, 2018	0	1	23	221	780	317	35	3	3	1	0	0	0	0	0	1384	46.0	54.2
TOTALS	0	1	23	221	780	317	35	3	3	1	0	0	0	0	0	1384	46.0	54.2
PCTGE	0.0	0.1	1.7	16.0	56.4	22.9	2.5	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	100.0	46.0 km/h	54.2 km/h

DAILY SPEED CLASSIFICATION SUMMARY

SOUTHBOUND

Crimson Dr b/w Carlyle Cr & Cadotte Wy

Jan. 4, 2018

Date	Speed (kph)															Total	Average Speed	85th Percentile Speed
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140+			
January 4, 2018	0	1	58	441	737	78	3	0	0	0	0	0	0	0	0	1318	41.4	48.4
TOTALS	0	1	58	441	737	78	3	0	0	0	0	0	0	0	0	1318	41.4	48.4
PCTGE	0.0	0.1	4.4	33.5	55.9	5.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	41.4 km/h	48.4 km/h

Notes:

Start: Jan 4 @ 12:00 AM

End: Jan 5 @ 12:00 AM

APPENDIX 'B'
COLLISION HISTORY
Jan 1, 2102 to Dec 31, 2016



CRIMSON COLLISION HISTORY

Request #: 0045342

Printed By: Tahir Hameed

Printed On: 2/2/2018

DATE_VAL:

between 01/01/2012 and 12/31/2016

#1 Location: CRIMSON (0.00) 0 meters from CHATWIN

Crash ID: 37821

Crash Date: 03/22/2012 Day: Thu Hour: 1am Weather: UNKNOWN Surface: SLUSH/SNOW/ICE Light: DARKNESS

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: OTHER

Primary: LOST CONTROL Secondary: uncoded Crash Rpt No: 2012414828

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1		GOING AHEAD		PASSENGER CAR		7000
2		none		FIXED OBJECT		

#2 Location: CRIMSON (0.00) 50 meters W of CRANBERRY

Crash ID: 36357

Crash Date: 11/07/2012 Day: Wed Hour: 2pm Weather: SNOW Surface: SLUSH/SNOW/ICE Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: SIDESWIPE - SAME DIRECTION

Primary: SIDESWIPE Secondary: uncoded Crash Rpt No: 20121440752

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	E	SLOWING OR STOPPING	DRIVING PROPERLY	PASSENGER CAR	APPARENTLY NORMAL	2000
2	E	GOING AHEAD	OTHER/SPECIFY	PICK-UP/VAN < 4500KG	APPARENTLY NORMAL	0

#3 Location: CHATWIN (0.00) 0 meters S of CRIMSON

Crash ID: 36539

Crash Date: 11/07/2012 Day: Wed Hour: 8am Weather: SNOW Surface: SLUSH/SNOW/ICE Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: REAR END

Primary: REAR-ENDED Secondary: uncoded Crash Rpt No: 20121438734

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	STOPPED IN TRAFFIC	DRIVING PROPERLY	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	
2	E	GOING AHEAD	DRIVING PROPERLY	PASSENGER CAR	APPARENTLY NORMAL	

#4 Location: CHATWIN (0.00) 0 meters W of CRIMSON

Crash ID: 39454

Crash Date: 03/03/2013 Day: Sun Hour: 9am Weather: CLEAR Surface: DRY Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: OTHER

Primary: LOST CONTROL Secondary: uncoded Crash Rpt No: 2013248461

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1		MERGING	RAN OFF ROAD	MINI-VAN/MPV/SUV		2000
2		none		OTHER/SPECIFY		

#5 Location: CRIMSON (0.00) 0 meters from CROWSNEST

Crash ID: 39534

Crash Date: 03/20/2013 Day: Wed Hour: 9pm Weather: CLEAR Surface: SLUSH/SNOW/ICE Light: DARKNESS

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: PASSING - RIGHT TURN

Primary: IMPROPER PASSING Secondary: uncoded Crash Rpt No: 2013318172

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1		GOING AHEAD	DRIVING PROPERLY	PASSENGER CAR	APPARENTLY NORMAL	2938
2		GOING AHEAD	UNKNOWN	PICK-UP/VAN < 4500KG	APPARENTLY NORMAL	2000

#6 Location: CRIMSON (0.00) 0 meters E of CANDLE

Crash ID: 40914

Crash Date: 11/20/2013 Day: Wed Hour: 5pm Weather: SNOW Surface: SLUSH/SNOW/ICE Light: DARKNESS

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: RIGHT ANGLE

Primary: SIDESWIPE Secondary: uncoded Crash Rpt No: 20131487741

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	GOING AHEAD	DRIVING PROPERLY	TRUCK > 4500KG	APPARENTLY NORMAL	2000
2	S	GOING AHEAD	DRIVING PROPERLY	TRUCK > 4500KG	APPARENTLY NORMAL	2000

#7 Location: CRIMSON (0.00) 0 meters E of CRANBERRY

Crash ID: 41115

Crash Date: 11/23/2013 Day: Sat Hour: 2pm Weather: UNKNOWN Surface: UNKNOWN Light: UNKNOWN

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: BACKING

Primary: BACK UNSAFELY Secondary: uncoded Crash Rpt No: 20131510010

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	E	none	UNKNOWN	MINI-VAN/MPV/SUV		
2	E	none	UNKNOWN	OTHER/SPECIFY		

#8 Location: CRIMSON (0.00) 0 meters from CLEARWATER LN **Crash ID:** 4
Crash Date: 01/03/2014 **Day:** Fri **Hour:** 2pm **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** LEFT TURN - ACROSS F
Primary: LEFT TURN ACROSS PATH **Secondary:** uncoded **Crash Rpt No:** 201426191

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	GOING AHEAD	DRIVING PROPERLY	PICK-UP/VAN < 4500KG	APPARENTLY NORMAL	2500
2	S	TURNING LEFT	LEFT TURN ACROSS PATH	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	9000

#9 Location: CHATWIN (0.00) 0 meters from CRIMSON **Crash ID:** 41656
Crash Date: 01/06/2014 **Day:** Mon **Hour:** 6pm **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** DARKNESS
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 1 **No Inj:** 0 **Type:** REAR END
Primary: REAR-ENDED **Secondary:** uncoded **Crash Rpt No:** 201423872

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1		GOING AHEAD	DRIVING PROPERLY	PASSENGER CAR	APPARENTLY NORMAL	1000
2	N	SLOWING OR STOPPING	DRIVING PROPERLY	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	2000

#10 Location: CRIMSON (0.00) 0 meters S of CANDLE **Crash ID:** 4208
Crash Date: 02/12/2014 **Day:** Wed **Hour:** 12pm **Weather:** SNOW **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** SIDESWIPE - OPPOSITE DIRECTION
Primary: SIDESWIPE **Secondary:** uncoded **Crash Rpt No:** 201466347

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	S	GOING AHEAD	DRIVING PROPERLY	MINI-VAN/MPV/SUV	HAD BEEN DRINKING	2700
2	N	GOING AHEAD	LEFT OF CENTRE	PASSENGER CAR	APPARENTLY NORMAL	2300

#11 Location: CHATWIN (0.00) 0 meters W of CRIMSON **Crash ID:** 42246
Crash Date: 03/20/2014 **Day:** Thu **Hour:** 8am **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** STRUCK OBJECT
Primary: LOST CONTROL **Secondary:** uncoded **Crash Rpt No:** 2014309779

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	W	GOING AHEAD	UNKNOWN	PASSENGER CAR		4000

#12 Location: CHATWIN (0.00) 0 meters from CRIMSON **Crash ID:** 42824
Crash Date: 06/06/2014 **Day:** Fri **Hour:** 9pm **Weather:** CLEAR **Surface:** DRY **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** OTHER
Primary: LOST CONTROL **Secondary:** uncoded **Crash Rpt No:** 2014669937

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	W	ENTERING TRAFFIC CIRCLE	OTHER/SPECIFY	PASSENGER CAR	UNKNOWN	8000.0

#13 Location: CRIMSON (0.00) 0 meters from JIM COMMON **Crash ID:** 42691
Crash Date: 09/11/2014 **Day:** Thu **Hour:** 8am **Weather:** CLEAR **Surface:** DRY **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** REAR END
Primary: FAIL TO STOP **Secondary:** uncoded **Crash Rpt No:** 2014-1146382

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	S	STOPPED IN TRAFFIC	DRIVING PROPERLY	OTHER BUS	APPARENTLY NORMAL	0
2	S	STOPPED IN TRAFFIC	DRIVING PROPERLY	PASSENGER CAR	APPARENTLY NORMAL	1500
3	S	GOING AHEAD	FOLLOWED TOO CLOSELY	PASSENGER CAR	APPARENTLY NORMAL	500

#14 Location: CRIMSON (0.00) 0 meters from CRANBERRY **Crash ID:** 44099
Crash Date: 11/22/2014 **Day:** Sat **Hour:** 10am **Weather:** SNOW **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** OTHER
Primary: LOST CONTROL **Secondary:** uncoded **Crash Rpt No:** 20141488647

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	E	ENTERING TRAFFIC CIRCLE	UNKNOWN	PASSENGER CAR	UNKNOWN	3700.
2		none		FIXED OBJECT		

#15 Location: CRIMSON (0.00) 0 meters from CHARLOTTE **Crash ID:** 44406
Crash Date: 12/18/2014 **Day:** Thu **Hour:** 2pm **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** SUNGLARE
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** SIDESWIPE - SAME DIRECTION

Primary: FAIL TO YIELD Secondary: uncoded

Crash Rpt No: 20141581409

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	GOING AHEAD	DRIVING PROPERLY	PICK-UP/VAN < 4500KG	APPARENTLY NORMAL	2000.
2	W	ENTERING TRAFFIC CIRCLE	YIELD SIGN VIOLATION	PASSENGER CAR	APPARENTLY NORMAL	2000.

#16 Location: CRIMSON (0.00) 0 meters from CHARLOTTE

Crash ID: 44759

Crash Date: 01/08/2015 Day: Thu Hour: 3pm Weather: CLEAR Surface: SLUSH/SNOW/ICE Light: SUNGLARE

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: RIGHT ANGLE

Primary: FAIL TO YIELD Secondary: uncoded

Crash Rpt No: 2015-31571

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	ENTERING TRAFFIC CIRCLE	DRIVING PROPERLY	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	3269.
2	W	ENTERING TRAFFIC CIRCLE	YIELD SIGN VIOLATION	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	2000.

#17 Location: CRIMSON (0.00) 0 meters from JIM COMMON

Crash ID: 45023

Crash Date: 02/06/2015 Day: Fri Hour: 2pm Weather: SNOW Surface: SLUSH/SNOW/ICE Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: RIGHT ANGLE

Primary: FAIL TO STOP Secondary: uncoded

Crash Rpt No: 2015-141663

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	GOING AHEAD	DRIVING PROPERLY	PICK-UP/VAN < 4500KG	APPARENTLY NORMAL	2000.
2	E	SKIDDING OR SWERVING	OTHER/SPECIFY	PASSENGER CAR	APPARENTLY NORMAL	2000.

#18 Location: JIM COMMON (0.00) 0 meters from CRIMSON

Crash ID: 44911

Crash Date: 02/09/2015 Day: Mon Hour: 9am Weather: CLEAR Surface: SLUSH/SNOW/ICE Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: RIGHT ANGLE

Primary: FAIL TO STOP Secondary: uncoded

Crash Rpt No: 2015-151122

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	E	SKIDDING OR SWERVING	STOP SIGN VIOLATION	PASSENGER CAR	APPARENTLY NORMAL	1000.
2	N	GOING AHEAD	DRIVING PROPERLY	PICK-UP/VAN < 4500KG	APPARENTLY NORMAL	10000.

#19 Location: JIM COMMON (0.00) 10 meters N of CRIMSON

Crash ID: 44923

Crash Date: 02/17/2015 Day: Tue Hour: 4pm Weather: CLEAR Surface: SLUSH/SNOW/ICE Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: REAR END

Primary: FOLLOW TO CLOSE Secondary: uncoded

Crash Rpt No: 2015-189749

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	E	STOPPED	DRIVING PROPERLY	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	4100.
2	E	UNKNOWN	FOLLOWED TOO CLOSELY	MINI-VAN/MPV/SUV	APPARENTLY NORMAL	2000.

#20 Location: CRIMSON (0.00) 0 meters from CHATWIN

Crash ID: 45171

Crash Date: 03/20/2015 Day: Fri Hour: 8am Weather: CLEAR Surface: SLUSH/SNOW/ICE Light: DAYLIGHT

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: RIGHT ANGLE

Primary: FAIL TO PROCEED IN SAFETY Secondary: uncoded

Crash Rpt No: 2015-30709

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	W	GOING AHEAD	DRIVING PROPERLY	PASSENGER CAR	UNKNOWN	500.
2	S	SKIDDING OR SWERVING	DRIVING PROPERLY	TRANSIT BUS	UNKNOWN	1000.

#21 Location: CRIMSON (0.00) 0 meters from CANDLE

Crash ID: 46565

Crash Date: 11/24/2015 Day: Tue Hour: 4pm Weather: CLEAR Surface: SLUSH/SNOW/ICE Light: DARKNESS

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: OTHER

Primary: HIT AND RUN Secondary: uncoded

Crash Rpt No: 2015-1524185

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1		PARKED LEGALLY	PARKED VEHICLE	MINI-VAN/MPV/SUV		2001
2		UNKNOWN	UNKNOWN	UNKNOWN		

#22 Location: CRIMSON (0.00) 0 meters from CHARLOTTE WAY

Crash ID: 47183

Crash Date: 02/12/2016 Day: Fri Hour: 5pm Weather: SNOW Surface: SLUSH/SNOW/ICE Light: DARKNESS

Injuries F: 0 Major: 0 Other: 0 Minor: 0 No Inj: 0 Type: STRUCK OBJECT

Primary: LOST CONTROL Secondary: uncoded

Crash Rpt No: 2016-187504

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	ENTERING TRAFFIC CIRCLE	RAN OFF ROAD	PASSENGER CAR		2403.00
2		FIXED OBJECT		FIXED OBJECT		

#23 Location: CRIMSON (0.00) 20 meters S of CLEARWATER LANE **Crash ID:** 47819
Crash Date: 06/15/2016 **Day:** Wed **Hour:** 6pm **Weather:** CLEAR **Surface:** DRY **Light:** DAYLIGHT
Injuries F: 0 **Major:** 1 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** HEAD ON
Primary: OTHER **Secondary:** uncoded **Crash Rpt No:** 2016-745674

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	GOING AHEAD	DRIVING PROPERLY	MINI-VAN/MPV/SUV		2001.00
2	S	SKIDDING OR SWERVING LEFT OF CENTRE		MINI-VAN/MPV/SUV		2001.00

#24 Location: CROWSNEST (0.00) 10 meters W of CRIMSON **Crash ID:** 48928
Crash Date: 12/09/2016 **Day:** Fri **Hour:** 4am **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** DARKNESS
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** REAR END
Primary: HIT AND RUN **Secondary:** uncoded **Crash Rpt No:** 2016-1618227

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1		PARKED LEGALLY	PARKED VEHICLE	PASSENGER CAR		3400.00
2	W	UNKNOWN	UNKNOWN	UNKNOWN		

#25 Location: CRIMSON (0.00) 10 meters N of JIM COMMON **Crash ID:** 48952
Crash Date: 12/26/2016 **Day:** Mon **Hour:** 2pm **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** OFF ROAD RIGHT
Primary: LOST CONTROL **Secondary:** uncoded **Crash Rpt No:** 2016-1689253

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	AVOIDING OBJECT ON ROAD	DRIVING PROPERLY	PICK-UP/VAN < 4500KG		2000.00
2		FIXED OBJECT		FIXED OBJECT		

#26 Location: CRIMSON (0.00) 0 meters from CHRISTOPHER **Crash ID:** 48952
Crash Date: 12/28/2016 **Day:** Wed **Hour:** 3pm **Weather:** UNKNOWN **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** RIGHT ANGLE
Primary: FAIL TO PROCEED IN SAFETY **Secondary:** uncoded **Crash Rpt No:** 2016-17

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	E	SLOWING OR STOPPING	UNKNOWN	MINI-VAN/MPV/SUV		2000
2	S	GOING AHEAD	UNKNOWN	MINI-VAN/MPV/SUV		2000

#27 Location: CAMPBELL (0.00) 0 meters from CRIMSON **Crash ID:** 49268
Crash Date: 12/31/2016 **Day:** Sat **Hour:** 9am **Weather:** CLEAR **Surface:** SLUSH/SNOW/ICE **Light:** DAYLIGHT
Injuries F: 0 **Major:** 0 **Other:** 0 **Minor:** 0 **No Inj:** 0 **Type:** RIGHT ANGLE
Primary: LOST CONTROL **Secondary:** uncoded **Crash Rpt No:** 2017-62754

Unit No	Veh Dir	Action Prior	Driver Action	Unit Type	Driver Condition	Damage
1	N	ENTERING TRAFFIC CIRCLE	UNKNOWN	PASSENGER CAR		2000
2	W	ENTERING TRAFFIC CIRCLE	UNKNOWN	MINI-VAN/MPV/SUV		2500

Crash Type		Light Conditions		Weather		Surface Condition	
Count	Type	Count	Type	Count	Type	Count	Type
0	N/A	0		0		0	
2	STRUCK OBJECT	17	DAYLIGHT	17	CLEAR	4	DRY
0	OFF ROAD LEFT	2	SUNGLARE	0	RAINING	0	WET
7	RIGHT ANGLE	7	DARKNESS	0	HAIL/SLEET	22	SLUSH/SNOW/ICE
0	PASSING - LEFT TURN	0	NOT APPLICABLE	7	SNOW	0	LOOSE SURFACE MATERIAL
1	LEFT TURN - ACROSS PATH	1	UNKNOWN	0	FOG/SMOG/SMOKE/DUST	0	MUDDY
		Totals: 27		0	HIGH WIND	1	UNKNOWN
1	SIDESWIPE - OPPOSITE DIRECTION			3	UNKNOWN	Totals: 27	
5	OTHER			Totals: 27			
5	REAR END						
1	OFF ROAD RIGHT						
1	HEAD ON						
1	PASSING - RIGHT TURN						
2	SIDESWIPE - SAME DIRECTION						
1	BACKING						
Totals: 27							

Crashes By Month		Unit Type		Crashes By Year	
Count	Type	Count	Type	Count	Type
3	January	18	PASSENGER CAR	0	1982
5	February	1	TRANSIT BUS	0	1983
5	March	0	INTERCITY BUS	0	1984
0	April	1	OTHER BUS	0	1985
0	May	4	FIXED OBJECT	0	1986
2	June	0	TRAIN	0	1987
0	July	0	ANIMAL - OTHER	0	1988
0	August	0	MOTORHOME	0	1989
1	September	0	CONSTRUCTION EQUIPMENT	0	1990
0	October	0	EMERGENCY VEHICLE	0	1991
6	November	0	FARM EQUIPMENT	0	1992
5	December	7	PICK-UP/VAN < 4500KG	0	1993
Totals: 27		0	OFF-HIGHWAY VEHICLE	0	1994
		0	MOTORIZED SNOW VEHICLE	0	1995
		0	MOPED	0	1996
		0	ANIMAL - DEER	0	1997
		0	ANIMAL - MOOSE	0	1998
		16	MINI-VAN/MPV/SUV	0	1999
		2	TRUCK > 4500KG	0	2000
		0	TRUCK TRACTOR	0	2001
		0	MOTORCYCLE/SCOOTER	0	2002
		0	PEDESTRIAN	0	2003
		0	BICYCLE	0	2004
		0	SCHOOL BUS	0	2005
		0	NOT APPLICABLE	0	2006
				0	2007

2/2/2018

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2	OTHER/SPECIFY	0	2008
2	UNKNOWN	0	2009
Totals:	53	0	2010
		0	2011
		3	2012
		4	2013
		8	2014
		6	2015
		6	2016
		0	2017
		Totals:	27

Crash Severity

	FATAL	Major	Minor	Other	No Inj	Total
Persons	0	1	1	0	N/A	2
Crashes	0	1	1	0	25	27

Alcohol in Crashes

	FATAL	PI	PD	Total
Drinking	0	0	0	0
Not Drinking	0	2	25	27
Total	0	2	25	27

Crashes per Hour by Day

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Unknown	Total
12a - 1a	0	0	0	0	0	0	0	0	0
1a - 2a	0	0	0	0	1	0	0	0	1
2a - 3a	0	0	0	0	0	0	0	0	0
3a - 4a	0	0	0	0	0	0	0	0	0
4a - 5a	0	0	0	0	0	1	0	0	1
5a - 6a	0	0	0	0	0	0	0	0	0
6a - 7a	0	0	0	0	0	0	0	0	0
7a - 8a	0	0	0	0	0	0	0	0	0
8a - 9a	0	0	0	1	2	1	0	0	4
9a - 10a	1	1	0	0	0	0	1	0	3
10a - 11a	0	0	0	0	0	0	1	0	1
11a - 12p	0	0	0	0	0	0	0	0	0
12p - 1p	0	0	0	1	0	0	0	0	1
1p - 2p	0	0	0	0	0	0	0	0	0
2p - 3p	0	1	0	1	1	2	1	0	6
3p - 4p	0	0	0	1	1	0	0	0	2
4p - 5p	0	0	2	0	0	0	0	0	2
5p - 6p	0	0	0	1	0	1	0	0	2
6p - 7p	0	1	0	1	0	0	0	0	2
7p - 8p	0	0	0	0	0	0	0	0	0
8p - 9p	0	0	0	0	0	0	0	0	0
9p - 10p	0	0	0	1	0	1	0	0	2
10p - 11p	0	0	0	0	0	0	0	0	0
11p - 12a	0	0	0	0	0	0	0	0	0
Unknown Time	0	0	0	0	0	0	0	0	0
Total	1	3	2	7	5	6	3	0	27