Encl 1 - Traffic Safety Annual Report 2019.docx 2019

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Highlights

This report provides an update on Strathcona County's progress towards meeting the targets of the Traffic Safety Strategic Plan 2020 (TSSP). To date, nine of 12 strategies outlined in the TSSP are developed and implemented.

Collision trends between 2009 and 2018:

- ➢ generally, there was a decrease in both number and rate of collisions across all roads within Strathcona County.
- ➢ however, when broken out by collision types:
  - o consistent decrease in property damage only (PDO) collisions;
  - o rate of minor injury collisions remain essentially unchanged;
  - o decrease in fatal/major injury collisions through 2014 with a significant rise 2015-2017, then significant reduction in 2018.

While the 2018 annual collision rate for combined fatal and major injury collisions was 10.2, the high number of serious collisions experienced in 2016 and 2017 is keeping the average annual frequency well above the TSSP target. If the 2019 and 2020 collision rate remain low, the proposed TSSP targets may be realized.

Based on the information presented in this document, the current priority projects for traffic safety in the County are:

- ➢ engage a consultant to complete an update of our Traffic Safety Strategic Plan (TSSP) and Integrated Transportation Master Plan (ITMP).
- ➢ better alignment of resources towards evidence-based, data driven engineering, enforcement, and education initiatives to improve traffic safety.
- ➢ continue to complete actions identified in our Intersection Safety Action Plan.
- ➢ build capacity to create and implement a comprehensive Distracted Driving Strategy in 2021.
- ➢ complete update and implement the Traffic Safety Communication Plan.
- ➢ Sherwood Drive Corridor study and intersection optimization project within the Centre in the Park.
- ➢ complete development and start implementation of a Rural Road Safety Strategy in alignment with the Sustainable Rural Roads Master Plan.
- ➢ maintain and grow strategies which have been implemented to date.

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I.   Introduction

The Traffic Safety Strategic Plan 2020 (TSSP), adopted in 2014, serves as an internal guiding document for decision-making related to traffic safety. This report will provide an update on the County's progress towards meeting the targets of the TSSP. This document summarizes information and statistics and identifies trends based on information and statistics from the *2017 & 2018 Strathcona County Traffic Collision Statistics Reports.*

This report will also highlight current and upcoming traffic safety initiatives.

A. Background

The TSSP 2020 is based on a safer system approach:

Vision: *No one is seriously injured or killed while travelling on Strathcona County's road network*

Mission: *Strathcona County is committed to the proactive implementation of integrated, evidence-based, and collaborative road safety strategies to create an increasingly safe and sustainable transportation environment.*

The TSSP 2020 outlines 13 strategies to address traffic safety in the County:

Implemented and Ongoing Strategies	Planned Strategies (Implement in 2014)	Short-Term Strategies (Implement by 2017)	Long-Term Strategies (Implement by 2020)
• Strategy 1: Traffic Safety Data Collection, Analysis and Management Program	• Strategy 5: In-Service Road Safety Review Program	• Strategy 7: Road Safety Audit Program	• Strategy 11: MARD/Older Adults Traffic Safety Strategy
• Strategy 2: Road Network Screening Program	• Strategy 6: Neighbourhood Traffic Safety Strategy	• Strategy 8: Intersection Safety Strategy	• Strategy 12: Safe Vehicles Strategy
• Strategy 3: Integrated Safety-Focused Enforcement Program		• Strategy 9: Rural Road Safety Strategy	• Strategy 13: Corporate Traffic Safety Strategy
• Strategy 4: Integrated Public Education and Social Marketing Program		• Strategy 10: Work Zone Safety Strategy	

B. What is a safe system?

The implementation of a safe system is how we can achieve our vision of zero fatalities or serious injuries on Strathcona County's road network.

Figure 1: Summary of a safe system approach

People Make Mistakes

The price of a mistake should not be death or serious injury

Crashes WILL occur

Human body has a limited tolerance of violent forces

$$Energy_{Kinetic} = \tfrac{1}{2}\ Mass \times Velocity^2$$

Build forgivingness into road system

Manage road infrastructure, vehicles and speeds to reduce crash energies to levels that can be tolerated by the human body

In every situation a person might fail, the road system should not

Under a safe system:

➢ death and major injury on roads are unacceptable rather than inevitable outcomes of road transport;
➢ responsibility for road safety is shared between road users, designers and regulators;
➢ road safety decisions are data-driven and collaborative;
➢ efficiency is not prioritized over safety;
➢ speeds are managed and roads designed to keep potential collision forces within levels that can be tolerated by the human body; and
➢ traffic collisions are predictable and preventable.

Figure 2: Four pillars of the Safe System Approach

Safe Roads and Roadsides

Safe Road Users

Safe Vehicles

Safe Speeds
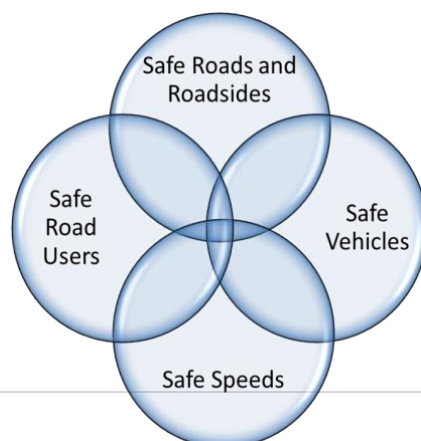
II. Current state of traffic safety in Strathcona County

Collision trends

Based on data presented in the *2018 Strathcona County Traffic Collision Statistics Report*, several trends can be identified.
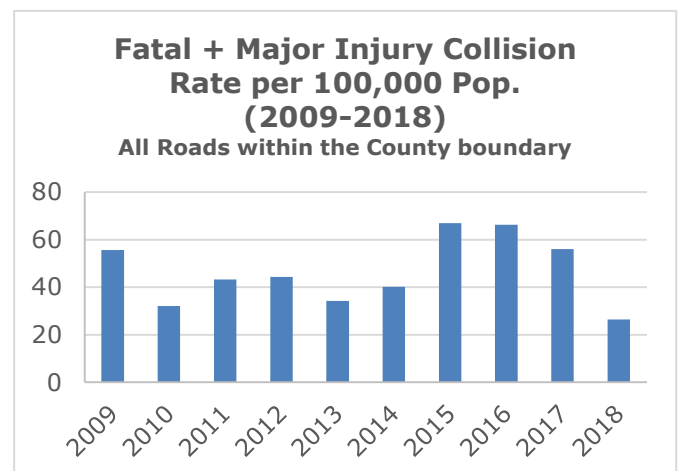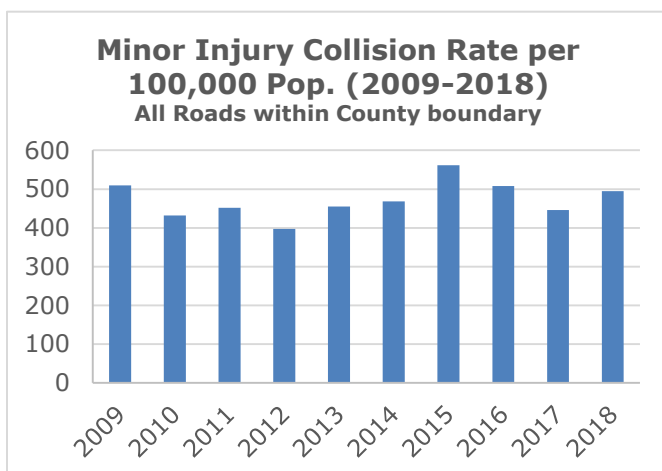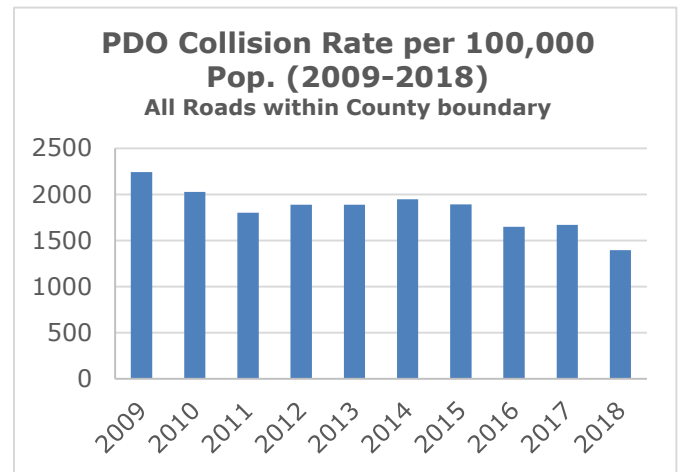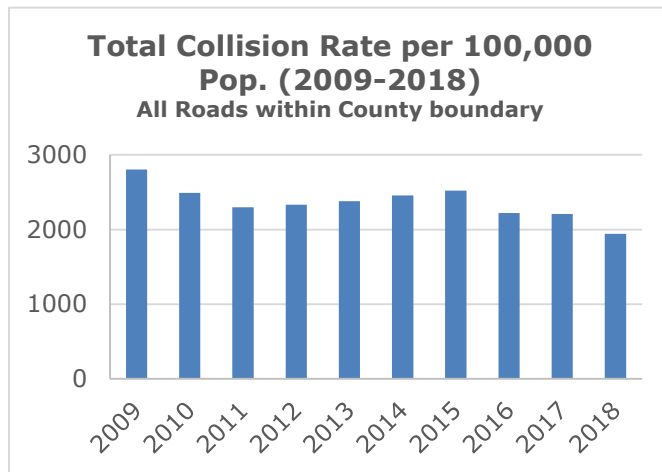
The information presented in this report is based upon reportable incidents at the time of printing. Due to continuing police investigations, some numbers presented in this report may be subject to revision.

All road within Strathcona County boundaries:
- ➢ generally, there was a decrease in both number and rate of collisions across all roads within Strathcona County between 2009 and 2018.
- ➢ however, when broken out by collision types,
  - o a consistent decrease in property damage only (PDO) collisions,
  - o minor injury collisions have fluctuated, but remained essentially unchanged

- o an initial decrease in fatal/major injury collisions through 2014 with a significant rise 2015-2017 and then significant reduction in 2018.

This trend is stronger on County owned roads when statistics are separated out excluding provincial highways.

Total Collision Rate per 100,000 Pop. (2009-2018)
County Roads Only

PDO Collision Rate per 100,000 Pop. (2009-2018)
County Roads Only

Minor Injury Collision Rate per 100,000 Pop. (2009-2018)
County Roads Only

Fatal + Major Injury Collision Rate per 100,000 Pop. (2009-2018)
County Roads Only
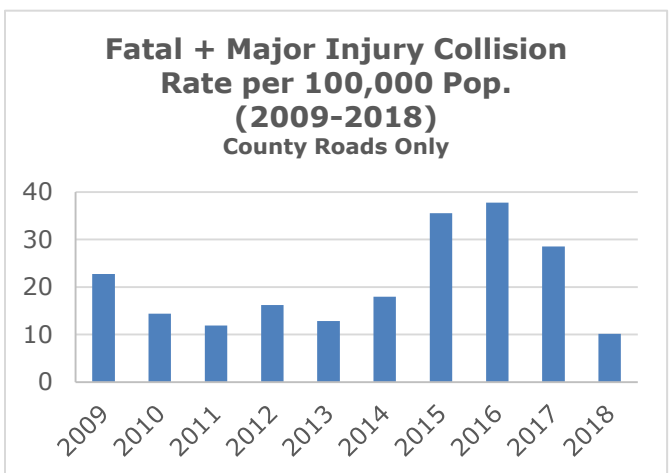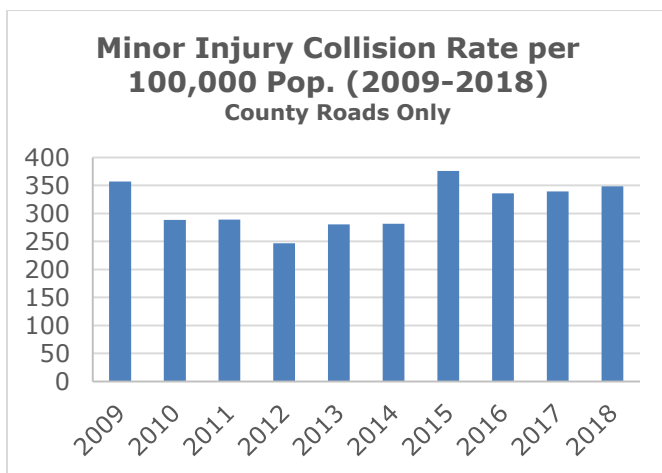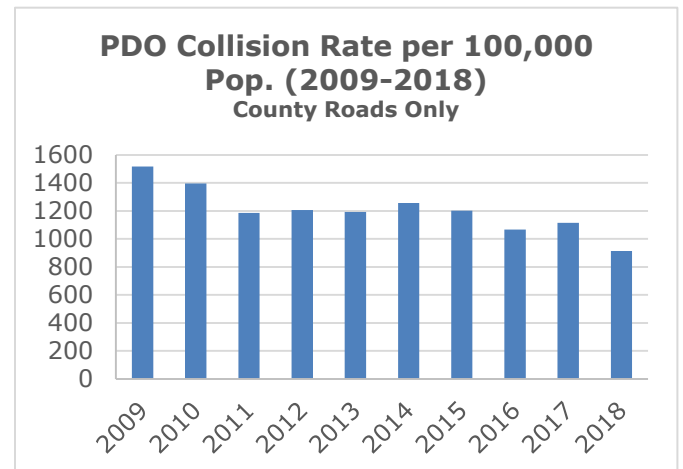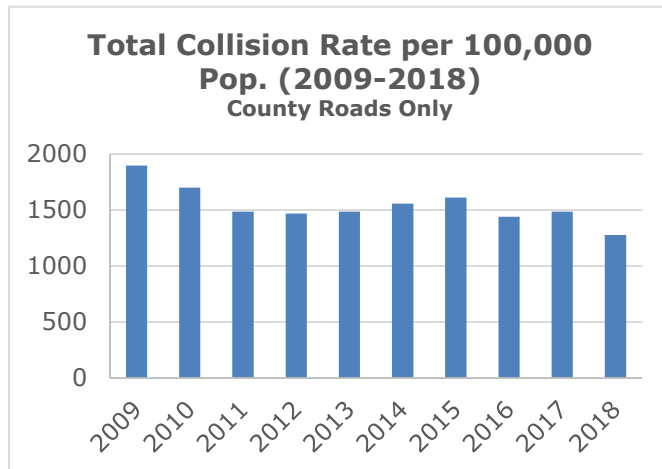
Deeper analysis of collisions (see *2017 & 2018 Strathcona County Traffic Collision Statistics Reports* for more detail) on County owned roads reveal:

➢ PDO collisions have dropped fairly steadily in the urban area since 2014. Rural PDO collisions peaked in 2016, and have been decreasing through 2018, but remain higher than 2014.
➢ minor injury collisions have remained fairly constant over the last four years in both the rural and urban area.
➢ in three of the last four years, the urban area has experienced a greater proportion of major/fatal collisions than usual.

- in 2018, Sherwood Drive had three of the top intersections for fatal/major injury collisions; three were on Wye Road, and three were on Baseline Road.
- in 2017, two serious collisions involving senior pedestrians took place on Sherwood Drive near the Sherwood Park Mall; one resulted in a fatality and one resulted in a major injury.
- no pedestrians were killed or sustained a major injury on public roads in Strathcona County in 2018. The one serious collision involving a pedestrian took place in a parking lot.
- two children 12 and under and five older adults (55 years and older) were involved in pedestrian collisions. All occurred in a parking lot.
- the majority of fatalities happen on the arterial road network. In the last ten years, 2009-2018, 57 individuals died on Strathcona County roads: 56 were killed on the arterial network.
- traffic safety in Strathcona County neighbourhoods is excellent and continues to improve, with one major injury collision taking place on residential roads in 2017 or 2018.

The following map illustrates the locations of fatal and major injury collisions in the urban areas of Strathcona County from 2016-2018.

Fatal and Major Injury Collisions
Sherwood Park Urban Area
(Jan 2016 to Dec 2018)

SEVERITY LEVEL
● Fatal
● Major Injury
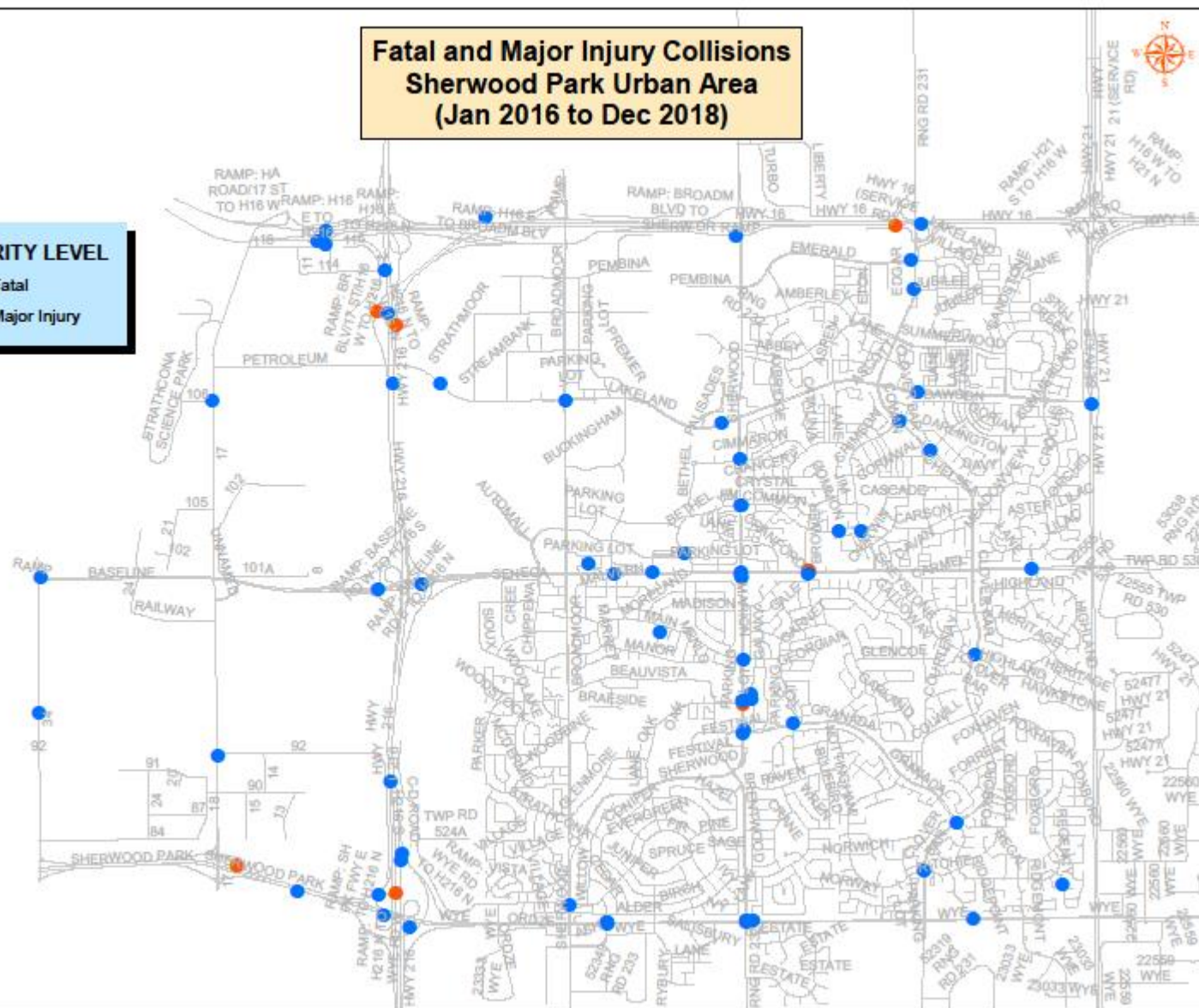
III. Targets and results

A. Traffic collision data

The County's TSSP 2020 sets out the following target for roads that are owned and maintained by Strathcona County:

> *The average annual rate of combined fatal and major injury collisions per 100,000 population from 2018 to 2020 will be reduced by 15 percent compared to the average rate from 2011 to 2013. The average number of fatal and major injury collisions from 2018 to 2020 will be reduced by 15 percent compared to the average number of collisions from 2011 to 2013.*

Table 1: average annual rate of combined fatal and major injury collisions per 100,000 population on county owned roads

Years	average annual collision rate (combined fatal and major injury collisions)	average annual frequency of fatal and major injury collisions
2012-2014	15.69	14.67
2013-2015	22.13	21.00
2014-2016	30.43	29.33
2015-2017	33.94	33.00
2016-2018	25.47	25.00
TSSP Target 2018-2020	*11.50*	*10.80*

While the 2018 annual collision rate for combined fatal and major injury collisions was 10.2, the high number of serious collisions experienced in 2016 and 2017 is keeping the average annual frequency well above the TSSP target. If the 2019 and 2020 collision rate remain low, the proposed TSSP targets may be realized.

For provincial highways in the County, the TSSP sets out the following target:

> *For Provincial Highways in the County: work cooperatively with Alberta Transportation staff to improve traffic safety and help meet provincial safety targets.*

Strathcona County continues to work closely with the province and supports them in all safety initiatives.

B. Resident perceptions of traffic safety

Strathcona County recognizes that resident perceptions are also an important outcome in traffic safety. With regards to resident perceptions of traffic safety, the TSSP 2020 sets out the following targets:

15% increase in those rating traffic safety in Strathcona County as "Very Safe" or "Somewhat Safe", and those who "Strongly Agree" or "Somewhat Agree" that Strathcona County is always working to improve traffic safety.

Table 2: TSSP 2020 targets for resident perception outcomes

Base condition 2013 Resident Survey		Target 2020 Resident Survey	
Percent of residents rating traffic safety in the County as safe	Percent of residents who agree that the County is working to improve road safety	Percent of residents rating traffic safety in the County as safe	Percent of residents who agree that the County is working to improve road safety
77.0%	67.6%	88.5%	77.7%

Resident perception was measured in September 2019 through questions asked in a mixed topic survey administered through Strathcona County's Online Opinion Panel (SCOOP). It is important to note that the 2013 base condition was established using a completely different survey methodology (a survey sample of half online and half random telephone respondents). Thus, comparisons of resident opinions over time are limited.

In the January 2018 traffic safety survey, 63.8% of residents rated traffic safety as "very safe" or "somewhat safe" in the County. Residents rating safety through the 2019 SCOOP questionnaire rated safety on our roads more favourably, with 90.3% of residents rating traffic safety as "very safe" or "somewhat safe". It is not appropriate to consider this sample representative of the entire County, but the results do suggest that a strong (and possibly increasing) majority of Strathcona County residents feel positively about traffic safety in our community.

Figure 3: resident responses (n=431): "Overall, how would you rate the state of traffic safety in Strathcona County?"
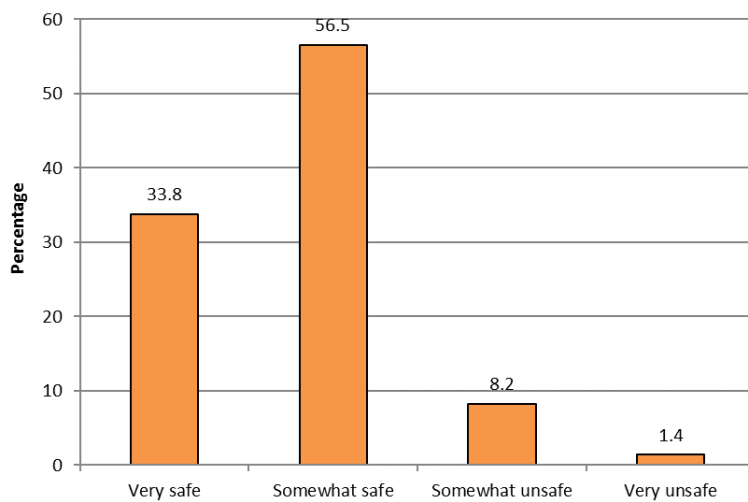
Similarly, results of the 2019 SCOOP survey suggest residents also have a strongly positive perception of Strathcona County's efforts towards improving traffic safety, with 87.7% of respondents agreeing that the County is always working to improve road safety.

Figure 4: resident responses (n=431): "Strathcona County is always working to improve road safety"
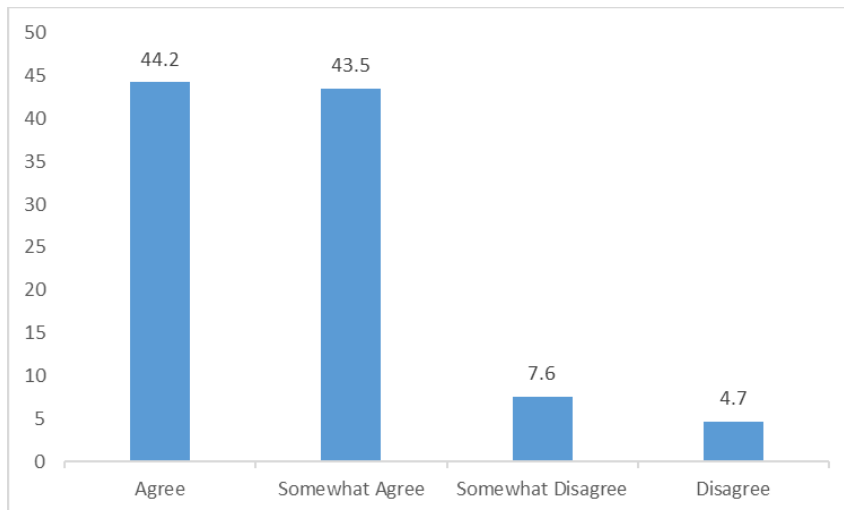
IV. Traffic safety strategies and programs

To date, nine of 12 strategies outlined in the TSSP are developed and implemented.

Strategy 1: Traffic safety data collection, analysis and management program

Strathcona County's Traffic Crash Location System (TCLS) has been implemented and forms the basis for all crash data analysis in the County. Information available in TCLS lags approximately seven months from the time of collision, as data is manually entered, once received from the police.

Strathcona County has now fully transitioned to the new provincial e-collision reporting system. Data from e-collision is received electronically and provides information much faster than the manual entry system formerly used. This allows us to be more responsive to safety concerns on our road network.
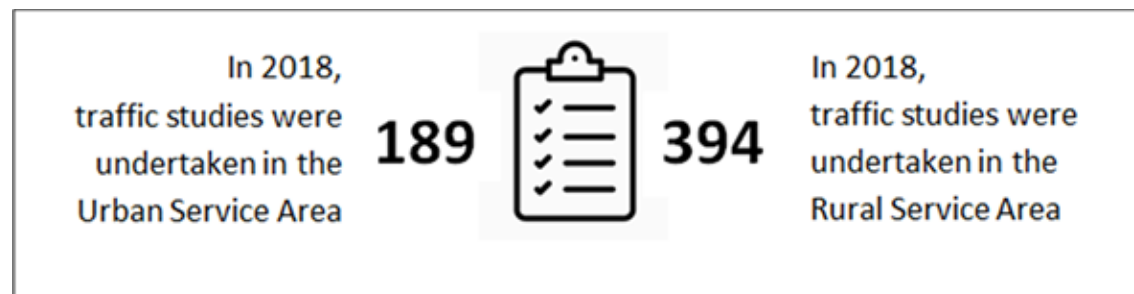
Data quality continues to be a challenge. Transportation Planning and Engineering continues to work with the RCMP and Enforcement Services to improve data sharing and to ensure e-collision data is cleaned as best as possible.

Strategy 2: Road network screening program

One of the fundamental tenets of the Safe System approach is making evidence-based decisions to improve road safety. Our Traffic Safety Engineer screens both the rural and urban County-owned networks to identify and rank specific sites where programs or infrastructure improvements have the potential to reduce the number of crashes.

In addition to mining collision data, the Transportation and Agriculture Services and Transportation Planning and Engineering Departments work together to collect and analyze traffic data on our road network, including speed and volume studies, pedestrian crossing warrants, traffic control warrants (signals, stop signs) and noise studies.

The information collected through collision data and traffic studies (supplemented by best practice research) drives traffic safety and management decisions in the County, such as rural road classification, and appropriate locations for the addition of intersection safety devices, stop signs or traffic signals.

In 2018, traffic studies were undertaken in the Urban Service Area **189**   **394** In 2018, traffic studies were undertaken in the Rural Service Area

Strategy 3: Integrated safety-focused enforcement program

In 2018, Strathcona County's Integrated Traffic Unit (ITU) was composed of 28 dedicated traffic officers. The ITU is increasingly data driven. The ITU works with its engineering partners and a RCMP data analyst to identify high risk locations and behaviours for enforcement efforts.

28 Dedicated traffic officers

The ITU focuses enforcement efforts on major roadways and rural roads, as the severity and likelihood of injuries and fatalities is greatest at these locations. Alcohol and drug related impaired driving continues to be a Provincial and National priority.

As speed strongly influences the level of injuries sustained by the occupants, police members enforce prescribed speed limits in areas of concern identified during past patrols through speed data and resident complaints. Intersection-related offences continue to be a priority for enforcement, as over half of our serious injury and fatal collisions occurred at intersections.

Generally, traffic enforcement is well-supported by the residents of Strathcona County.

Figure 6: Level of agreement with "traffic enforcement in Strathcona County makes our roads safer" (2019 SCOOP Survey, n=431)
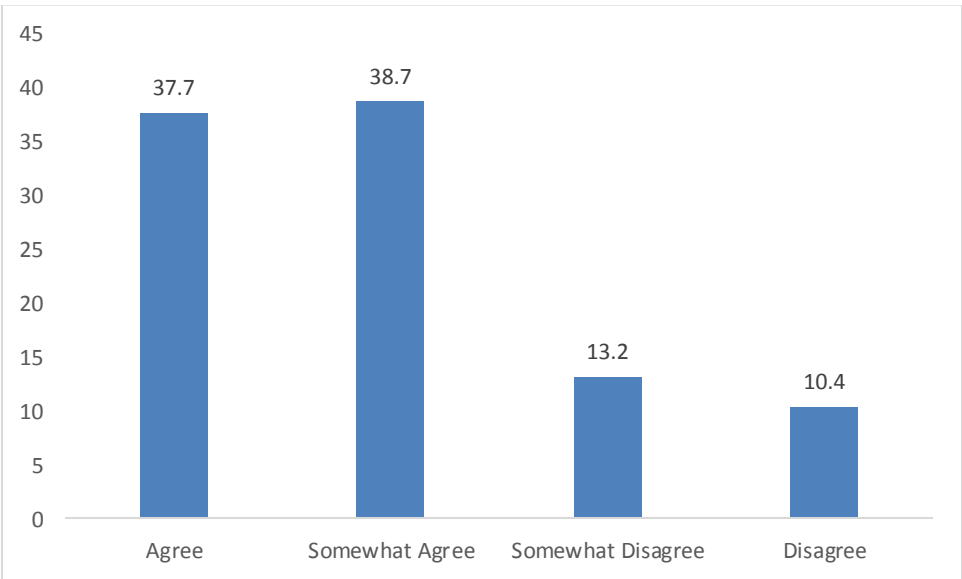
In 2018, 27,419 traffic violations were issued in Strathcona County.

During traffic stops in 2018, police apprehended:

138 *suspended drivers:*

189 *drivers with no insurance:*

277 *drivers without a license; and*

739 *impaired operation of a motor vehicle investigations initiated.*

Community Peace Officers (CPOs) are recognized as leaders in the province in commercial vehicle safety assessments. This work is particularly valuable in our community due to the significant amount of commercial vehicle traffic. Officers conduct patrols to protect Strathcona County's infrastructure as well as protecting the public from unsafe commercial vehicles.

In 2018, CPOs conducted 454 commercial vehicle inspections, resulting in 186 unsafe vehicles being taken out of service and identifying another 124 vehicles which needed attention.

186 Unsafe commercial vehicles taken out of service

Strategy 4: Integrated public education and social marketing program

Strathcona County's traffic safety communication plan was developed in 2013. Much of this plan is centered around traffic safety messaging, based on a traffic safety calendar. Regularly scheduled safety messages were developed around monthly themes and shared through the County website, on social media and traditional print media. In 2018, Strathcona County ended this practice, as evaluation indicated the uptake of these messages was very poor.

Strathcona County continues to use public education and social marketing to support specific traffic-related engineering and enforcement initiatives and address specific education gaps. Strathcona County also has several Community Peace Officers who tweet about traffic safety on a regular basis.

Strathcona County distributed over 500 personal pedestrian safety lights during the Christmas in the Country and Christmas in the Heartland events to educate residents about pedestrian visibility. Through our partnership with the Strathcona County School Traffic Safety Partnership, another 1500 lights were distributed to all rural bus students to encourage them to be seen while waiting for their buses during low light months.

We are continuing to look for fresh and innovative ways to educate around traffic safety. We continue to partner with Community Action on Residential Traffic Safety (CARTS) to support them to distribute their messages about residential speeding, as their grassroots campaigns resonate with residents and are more engaging than traditional messaging. In 2018, CARTS distributed 500 signs at the RCMP bike rodeo to encourage residents to slow down in our neighbourhoods. The bike rodeo itself was attended by about 800 residents, who had the opportunity to learn about bike safety and rail crossing safety.

The Distracted Driving Option 4 initiative undertaken with the RCMP and Enforcement Services in October was very well received. Option 4 is an alternate option from the existing three options listed on the back of a violation notice. Recipients of the ticket are given the option to attend an information session in lieu of paying the fine received. The sessions provided

89% of participants in the Distracted Driving Option 4 said their driving behaviour will change as a result of attending the session.

Research found drivers who attended our 2017 Option 4 sessions were 44% less likely to have a subsequent traffic violation in the next year than those who opted not to attend.

us with 90 minutes to talk directly with known offenders about traffic safety in our community. In total, 220 people attended four Option 4 presentations in 2018. All Option 4 initiatives to date have given us the opportunity to engage 663 residents in a discussion about traffic safety in our community.

The latest research from the Traffic Injury Research Foundation reports approximately 1 in 4 fatal crashes involves distraction, and distraction-related fatalities have exceeded impaired driving fatalities in several jurisdictions in Canada[1]. This is consistent with trends in Strathcona County.

The RCMP and Enforcement Services continue to partner with the Strathcona County Citizens on Patrol Speed Watch program. Speed Watch educates the public to watch their speed, particularly in residential areas; they also provide valuable information back to Enforcement Services. In addition to recording and reporting vehicle speeds using a driver feedback speed monitor, Speed Watch volunteers observe and record rolling stops at intersections in the immediate area of operations, hand-held cell phone use, texting, pet(s) on driver's lap, personal grooming, eating food, tinted front windows, covered license plates, noisy mufflers, and "thumbs up" acknowledgements. This information is used to inform resident inquiries and to identify locations which may benefit from traffic enforcement.

Driver feedback signs are also used to educate drivers regarding their travelling speed and to encourage them to drive within the speed limit. In 2018, signs were posted at 36 urban locations and 12 rural locations for an average of 3-4 weeks per location. Three permanent signs were also installed in Davidson Creek.

In collaboration with the Capital Region Intersection Safety Partnership, Strathcona County will be working with a local physics teacher to create lesson plans for high school students that highlight the importance of speed in crash outcomes. In the future, we hope all students graduating high school in Strathcona County (and eventually the province) will have been exposed to and understand safe system concepts.

Updating the traffic safety communication plan is a top priority for the final quarter of 2019. Strathcona County will be working with the Traffic Safety Advisory Committee to develop an up-to-date plan that is relevant and effective for our community.

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[1] https://tirf.ca/2019/11/08/distracted-driving-puts-all-canadians-at-risk/

Strategy 5: In-Service road safety review program

In-Service Road Safety Reviews (ISRSRs) address the safety of all road users at crash prone or high-risk locations. Priority locations are highlighted for review through our network screening program, but can also be identified based on a resident or Councilor concern/request. ISRSRs were undertaken at seven intersections in Strathcona County in 2018. More detail is available in Strategy 8: Intersection Safety.

Strategy 6: Neighbourhood traffic safety strategy

Strathcona County continues to invest a great deal of resources in addressing resident concerns about neighbourhood traffic safety.

In May 2017, Council approved the Neighbourhood Traffic Safety Action Plan (NTSAP). The NTSAP set out eight specific actions based on resident priority and best practice. The accompanying report *Neighbourhood Traffic Safety Action Plan Outcomes* details the implementation of these actions to date.

The NTSAP has resulted in significant improvements in the way we engineer, educate, enforce, evaluate and engage with residents in our neighbourhoods. While our neighbourhoods had an excellent safety record prior to the NTSAP's implementation, recent statistics suggest we are continuing to improve safety, with none of our fatal or major injury collisions happening on residential roads in 2017 or 2018.

Table 2: Residential collisions as a percentage of major injury and fatal collisions

	MAJOR INJURY CRASHES			
	2015	2016	2017	2018
RESIDENTIAL	5.08%	11.66%	0.00%	0.00%
ARTERIAL/HIGHWAYS	94.92%	88.34%	100%	100%

Table 3: Fatal and major injury collisions by location, 2015-2018

	2015		2016		2017		2018	
	FATAL	MAJOR	FATAL	MAJOR	FATAL	MAJOR	FATAL	MAJOR
URBAN RESIDENTIAL	0	2	0	5	0	0	0	0
RURAL RESIDENTIAL	0	1	0	2	0	0	0	0
ARTERIAL	3	31	1	32	2	29	0	10
HIGHWAYS	2	25	4	21	4	20	5	11

No collisions involving a cyclist were reported in residential areas of Strathcona County in 2017 or 2018.

In 2017, five minor pedestrian injuries were reported in residential areas; one pedestrian involved was 15 years old. All others were between 20-49 years of age. In 2018, one minor injury pedestrian collision was reported in the residential areas of the County; this collision involved an 11-year-old crossing in a school zone in a marked crosswalk with pedestrian beacons activated.
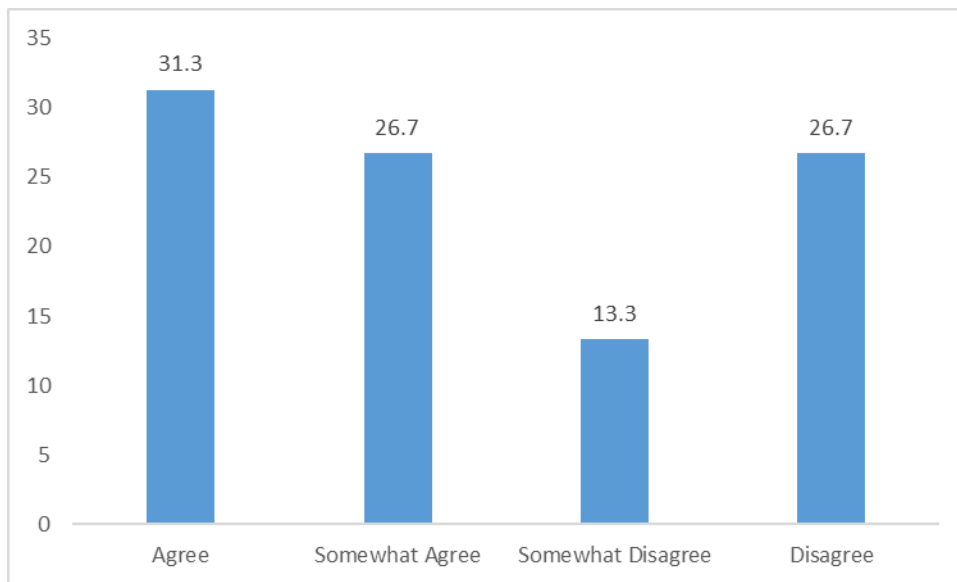
Several traffic safety projects are continuing in residential neighbourhoods. Transportation Planning and Engineering re-engaged with Glen Allan residents to update traffic calming plans for the neighbourhood. Construction of traffic calming features took place in Davidson Creek and Clarkdale Meadows prior to the new school opening in September 2018.

School related traffic safety remains a concern with County residents and a priority for Strathcona County. In September 2018, Strathcona County implemented all-day school zones, in effect from 7:30 am to 4:30 pm. As a result of the NTSAP, pedestrian upgrades were installed on Fir Street at Sherwood Heights School and playground in 2018.

Through the Strathcona County School Traffic Safety Partnership, we continue to engage with schools, parents and students to improve traffic safety at all schools. Through 2018, Strathcona County is worked closely with Elk Island Public Schools during the planning of the new Heritage Hills School.

Resident perception of neighbourhood traffic safety was measured in September 2019 through a question asked in a mixed topic survey administered through Strathcona County's Online Opinion Panel (SCOOP). Results of this survey suggest neighbourhood traffic safety remains a concern with many County residents, although the number of residents disagreeing that traffic safety is a concern in their neighbourhood was higher than in previous surveys. As previously mentioned, it is difficult to compare survey results due to methodological differences in surveying.

Figure 7: Resident responses: "I believe traffic safety is a concern in my neighbourhood"

The chart shows a bar graph with values: Agree 31.3, Somewhat Agree 26.7, Somewhat Disagree 13.3, Disagree 26.7.

Strategy 7: Road safety audit program

Road Safety Audits (RSAs) are safety-focused, multi-modal reviews conducted during the planning and design stages of new road or development projects.

In Strathcona County, road safety audits are now required at the design phase for any new arterial road. These audits are performed by independent consultants.

All new development in the County is reviewed by professional engineers in Transportation Planning and Engineering as well as experts in Planning and Development Services to ensure compliance with Strathcona County's Design and Construction Standards, as well as to identify any potential safety concern.

Strategy 8: Intersection safety

In 2017, Strathcona County completed an Intersection Safety Action Plan (ISAP) with the goal of identifying specific actions the County will take to increase intersection safety. Through 2018, Strathcona County did a significant amount of work to implement these important actions.

The plan identified seven locations of concern that were investigated through ISRSRs in 2018:

- Granada Boulevard and Sherwood Drive
- Lakeland Drive at Sherwood Drive
- 17th Street at Baseline Road
- Clover Bar Road at Lakeland Drive
- Baseline Road at Broadview Drive
- Baseline Road at Glenbrook Boulevard
- Wye Road at Ordze Crescent

A multidisciplinary team visited each location to identify traffic safety issues. Safety concerns at the five intersections will be addressed by engineering countermeasures, such as geometric changes or signal phasing changes. ISDs were recommended as the most appropriate countermeasure to improve safety at two of the seven intersections.
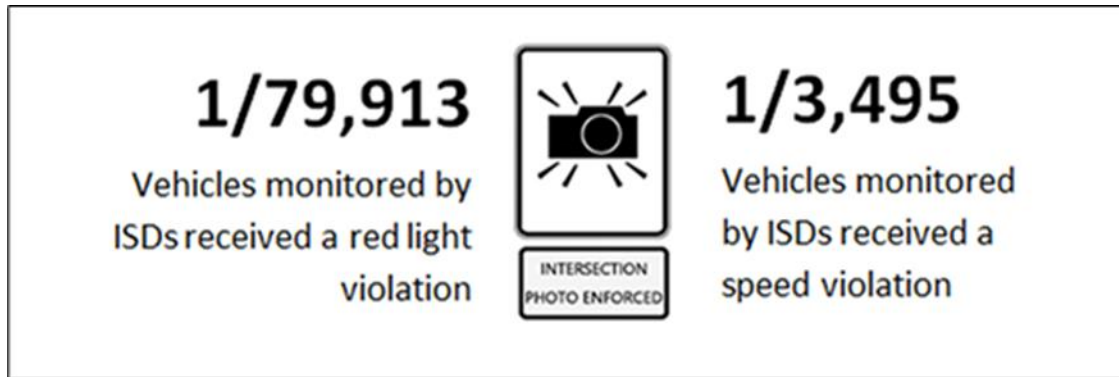
As a result of this assessment process, ISDs will be installed in 2019 at:

- Baseline Road & 17 Street (all directions)
- Sherwood Drive & Granada Boulevard (N/B, S/B W/B)

The ISDs will enforce both speeding and red light violations (including failure to stop before turning right at red light) at both intersections.

The RCMP and Enforcement Services department manages our Intersection Safety Device (ISD) Program which currently operates ten ISDs at eight intersections. In 2018, 40,036,558 vehicles were monitored by the cameras. Speed offenses were detected in 0.029% of vehicles and 0.0013% of vehicles violated the red light.

A program has been developed for the installation of ISDs that improves transparency and accountability of their application that will facilitate the expansion of the ISD program.

1/79,913 Vehicles monitored by ISDs received a red light violation

1/3,495 Vehicles monitored by ISDs received a speed violation

INTERSECTION PHOTO ENFORCED

There is extensive evidence that protected left hand turn signal phases improve intersection safety. At Wye Road and Sherwood Drive, there was a 75% reduction in left-turn-across-path collisions after the implementation of protected left turn only phases. Safe system based left turn signal assessment warrant guidelines were developed in 2017 and Transportation Planning and Engineering is working to bring our network into compliance. Protected only left turns are now best practice wherever double left turn lanes exist.

Protected/permissive left turn signals were implemented at the following signalized intersections/movements:

- Baseline Road and Brower Drive, westbound left turn, AM peak and off peak
- Baseline Road and Broadview Drive, eastbound left turn, off peak

Protected only left turn signals were implemented at the following signalization intersections/movements:

- Baseline Road and Sherwood Drive, northbound left turn
- Granada Boulevard and Sherwood Drive, westbound left turn
- Baseline Road and Clover Bar Road, northbound left turn
- Baseline Road and Broadmoor Boulevard, northbound left turn
- Lakeland Drive and Premier Way, southbound left turn
- Emerald Drive and Sherwood Drive, westbound left turn

Strathcona County is on track to have all of our intersections in compliance with left turn guidelines by the end of 2021.

In 2018, new signals became operational on Lakeland Drive at Clarkdale Drive/Summerland Drive to facilitate safe access for added vehicle and pedestrian traffic travelling to the new Davidson Creek School.

The use of yellow signal backboards with retro reflective tape is a countermeasure with the potential to give significant benefit with little cost. New intersections in the County incorporate retro reflective tape into the standard for installation, and a program has been developed to upgrade existing intersections. In 2018, all signalized locations along and north of Lakeland Drive were upgraded with the yellow backboards.

Strathcona County roadway marking guidelines are being developed to ensure roadway markings are consistent across our municipality and reflect best practice. This will result in the addition of some newer features, such as shark's teeth yield lines, which have been shown to be effective countermeasures to improve safety. Transportation Planning and Engineering is now working with Transportation and Agriculture Services to bring all intersections into compliance.

Five new sets of rapid rectangular flashing beacons (RRFBs) were added to improve pedestrian safety: Broadmoor Drive/Beauvista Drive, Davidson Drive trail crossing, Clarkdale Drive/Davenport Drive, Meadowview Drive trail at McGhan Park and Summerland Drive/Lakeland Drive.

Strathcona County has a well-established access management program to ensure that any access onto our rural roads meets well-defined design and construction standards to ensure that safety and drainage requirements are met.

In 2018, 100 new and existing rural access inspections were conducted by Transportation and Agriculture Services.

Strategy 10: Work zone safety strategy

Strathcona County has invested significant resources to improve work zone safety over the past four years. All work undertaken within a road right-of-way requires a Right-of-Way Construction Activity Permit (ROWCAP). Work that requires temporary traffic control (TTC) must include a TTC plan. Strathcona County created their Right-of-Way Construction Activity Manual with TTC templates in 2016 as a resource for those developing TTC plans and we are currently in the process of undertaking an update, scheduled to come out Q1 2020.

Since 2018, ROWCAP processes have been updated and are now undertaken as an online application process through County Connect. Our team has grown with a Supervisor (2017), dedicated Permit Officer (2018), and a Right-of-Way Activity Technologist (2018) augmented by an 8-month Seasonal Right-of-Way Activity Technologist, 8-month Seasonal Inspector, and a 6-month Co-op Summer Student.

We have also strengthened our relationships with both internal and external stakeholders; especially with Strathcona County Enforcement Services, who are committed to assist in the field with ROWCAP infractions and resident concerns regarding compliance.

In 2018, we rolled out improvements to our road use agreements to help protect our infrastructure. A Traffic Support Aide also works to safely move over-dimensional and over-weight commercial vehicles through Strathcona County in a way that is safe for other road users and our infrastructure.
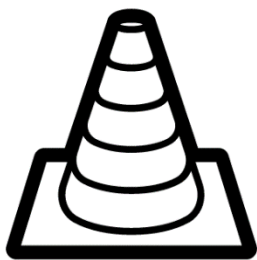
In 2018, the Right-of-Way Management branch of completed:

589 *Right-of-Way Construction Activity Permits (ROWCAPs);*

200 *ROWCAP Extensions / Revisions;*

352 *Traffic Disruption Notifications;*

1272 *ROWCAP Inspections;*

99 *Road Use Agreements; and*

5353 *TRAVIS Permits (Over-Size/Over-Weight movements).*

V. Next steps

Based on the information presented in this document, the current priority projects for traffic safety are:

- ➢ engage a consultant to complete an update of our Traffic Safety Strategic Plan (TSSP) and Integrated Transportation Master Plan (ITMP).
- ➢ better alignment of resources towards evidence-based, data driven engineering, enforcement, and education initiatives to improve traffic safety.
- ➢ continue to complete actions identified in our Intersection Safety Action Plan.
    - o continue to bring our signals into compliance with the protected left turn guidelines.
    - o undertake ISRSRs at our worst performing intersections, with specific attention to the Wye Road and Sherwood Drive corridors.
- ➢ build capacity to create and implement a comprehensive distracted driving strategy in 2021.
    - o consider the feasibility of acquiring a driving simulator for the community.
    - o advocate to the Alberta Solicitor General to request an exemption to Community Peace Officers for the use of inconspicuous traffic enforcement vehicles for the purpose of traffic enforcement to combat distracted driving.
- ➢ complete update and implement the Traffic Safety Communication Plan.
- ➢ Sherwood Drive Corridor study and intersection optimization project within the Centre in the Park.
- ➢ complete development and start implementation of a Rural Road Safety Strategy
    - o Strathcona County is in the process of updating our Sustainable Rural Roads Master Plan. Work is being conducted in parallel to develop a Rural Road Safety Strategy as the plans are strongly interrelated.
- ➢ maintain and grow strategies which have been implemented to date.