The Corporation of the Town of Milton

Report To:	Council
From:	Jill Hogan, Commissioner, Development Services
Date:	April 11, 2022
Report No:	DS-030-22
Subject:	Supporting Safe Roads in Milton

Recommendations:

THAT a 40 km/h Neighbourhood Speed Limit 1 year pilot be implemented in Ward 4 - bordered by Derry Road, Louis St Laurent Avenue, Regional Road 25 and Bronte Street South, including a speed reduction of 30 km/h in school zones within the pilot area as shown in Appendix 1;

AND THAT the speed limit be reduced to 30 km/h "when flashing" along the frontage of Viola Desmond Elementary School on Leger Way for a 1 year period as a pilot project;

AND THAT staff report back to Council in Fall 2023 with the results of the two pilot projects;

AND THAT a number of Community Safety Zones be implemented in preparation for Automated Speed Enforcement as shown in Appendix 2;

AND THAT staff review and lower warrant thresholds where appropriate within the existing Traffic Calming Policy for all types of traffic calming devices including speed humps and report back to Council in July 2022;

AND THAT staff continue to monitor the status of Administrative Penalties (APS) in relation to Automated Speed Enforcement and report back to Council when appropriate with budget implications;

AND THAT staff work together with Halton Region Staff to review the installation of green pavement markings in the bicycle lanes

(conflict area) on Santa Maria Boulevard between Derry Road and Serafini Crescent, as shown on Appendix 3, and that the associated costs be included, for consideration, in the 2023 Operating Budget;

AND THAT "Complete Streets" be established as a road design guiding principle to accommodate the needs of all road users;

AND THAT staff execute the "Road Safety Education Campaign" as outlined in Appendix 4;

AND THAT Schedule 23 of the Uniform Traffic Control By-law 1984-1 be amended accordingly;

AND FURTHER THAT the appropriate by-laws be presented to Council for approval on May 2, 2022.

EXECUTIVE SUMMARY

Streets are not just for cars; they are a place for people and must be designed with all users in mind. The Development Services Department strives to provide comfort for pedestrians and cyclists, while ensuring vehicles can also safely maneuver.

This report comprehensively reviews the regulatory framework related to safety and traffic control and considers new initiatives to support safe roads in Milton.

REPORT

Background

In January 2022, in response to road safety concerns raised by residents, Milton Council passed resolutions asking staff to report back to Council on:

- The possibility of using automated speed-enforcement cameras;
- Appropriate speed limits; and
- Traffic calming tools and other available safety measures.

This report expands on this direction and recommends a number of strategies that would support road safety to benefit all users, whether they are walking, cycling, riding transit, using a mobility device or driving.

Discussion

Regulatory Framework

The Highway Traffic Act regulates moving violations as it relates to vehicle road traffic. These moving violations include speed, and regulatory violations such as disobeyance of stop signs and red light violations to name a few. Moving violations are typically enforced by the police.

The Official Plan determines road classifications throughout the municipality. The following road classification definitions are from the Town's Transportation Master Plan 2018:

- **Multi-purpose arterials** serve a mix of functions while accommodating moderate to high volumes of traffic.
- **Minor arterials** serve mainly the local traffic at moderate to high demand. Traffic is distributed from major, multi-purpose arterials to the minor arterials.
- **Collector roads** serve local travel demand and distribute traffic between local roads and arterials, normally major collector roads serve two or more arterial roadways and minor collector roads serve only local travel demands and connect to local roads. They carry lower traffic volumes and have narrower rights-of-way than that of the major collectors.
- **Local roads** and **lanes** serve residential neighbourhoods or employment areas. They are designed for low volumes of traffic at low speeds.
- **Lanes** also serve the residential or commercial community but usually provide rear access to individual properties and connection to local roads.

A number of standards are followed including provincial standards and specifications, *Transportation Association of Canada* standards, and local standards when designing roads. In addition, the *Institute of Transportation Engineers Trip Generation Guidelines* are followed when reviewing development applications to ensure that traffic generated can be accommodated by the road network. Planning for transit also affects the design and capacity of the road network as articulated in the Town's Transportation Master Plan.

Complete Streets

Perhaps the design of roads themselves is the biggest contributor to safety. A "Complete Streets" design approach considers the needs of all users – people who walk, cycle, take transit or drive – and considers people of varying ages and levels of ability. It also considers other street uses like, benches, trees, lighting, utilities, and stormwater management.

An incredible opportunity exists in Milton to implement "Complete Streets". This is happening in Milton's newly developed areas and there are opportunities to retrofit other areas as they begin to redevelop. This report recommends "Complete Streets" be established as a road design guiding principle to accommodate the needs of all road users in Milton.

At present, the following is implemented:

- Multi use paths and on-road bike lanes are installed along arterial roads when constructed.
- On-road bike lanes are installed along collector roads through the subdivision approval process.
- All new subdivisions will include pedestrian crosswalks (PXO's) at all trail/path connections that cross collector roads.
- Through subdivision design, pedestrian routing plans are developed to ensure safety for all road users.

Design Elements for Road Safety

Barrier curb is utilized to keep vehicles within the travelled portion of the roadway up to 60 km/h. Milton's roads currently include barrier curbs as part of the standard design. Providing separation between vehicles, cyclists and pedestrians provides additional safety. This has been used in Toronto on roads like Wellington Street. Toronto has installed islands along the length of the dividing line between cycling lanes and vehicular lanes to create a physical barrier between cyclists and vehicular traffic. This treatment not only provides safety but encourages more active transportation. This treatment may be considered as part of future designs or retrofits in Milton.

In addition, boulevard widths should be maximized and curb faced sidewalks discouraged through the community design process. Wide boulevards help pedestrians feel more comfortable and provide room for vehicle run out should a vehicle accidentally mount the curb and leave the travelling lane.

Milton's recent bridge designs has included a physical separation of pedestrian/cycling space from vehicular lanes. This protects pedestrians and cyclists and makes users feel comfortable. It is the intent to continue this practice and seek opportunities to retrofit older structures where no separation exists. A recent example of this is the newly constructed pedestrian tunnels on Main Street under the CN Rail bridge.

Pavement markers, including varying paint colours has been proven to increase safety of cyclists when using bicycle lanes, especially at busy intersections also known as "conflict areas". This report recommends that green pavement markers be installed in the conflict area for cyclists and motorists on Santa Maria Boulevard between Derry Road and Serafini Crescent (see Appendix 3). This work is estimated to cost approximately $85,000 and will be included in the 2023 Operating Budget for consideration.

Speed is the determining factor in the severity of injury when vehicles and pedestrians/cyclists collide. Lane widths directly affect the speed that motorists feel comfortable driving. It has

been demonstrated that decreasing lane widths encourage motorists to slow down, making roads safer. Milton's current standards are being reviewed this spring and necessary lane width adjustments to support user safety will be an important component of the review.

Traffic Review Requests

The Traffic Engineering section continues to receive a number of requests related to vehicular speeds, implementation of all-way stops, traffic signals and PXO's. Each request is reviewed and involves the installation of speed monitoring equipment or staff spending the morning and afternoon peak periods at a location to undertake traffic counts.

The following table illustrates that the majority of traffic service requests (2019-2022) relate to collector roads.

Year	Study Type	Number of Requests Road
2019	Speeds	77 (56- Collector Road, 21 – Local Roads) – 9 requests for enforcement sent to Halton Regional Police Services
	PXO's	29 (9 locations met warrants)
	All-Way Stop	34 (5 locations met warrants)
	Traffic Signals	6 (1 location met warrant)
2020	Speeds	73 (50- Collector Road, 23 – Local Roads) – 5 requests for enforcement sent to Halton Regional Police Services
	PXO's	18 (3 locations met warrants)
	All-Way Stops	20 (2 locations met warrants)
	Traffic Signals	2 (no locations met warrants)
2021	Speeds	71 (55- Collector Roads, 16 – Local Roads) – 16 requests for enforcement sent to Halton Regional Police Services
	PXO's	20 (8 locations met warrants)
	All-Way Stops	34 (3 locations met warrants)
	Traffic Signals	2 (no locations met warrants)

Existing Warrants/Policies:

All-Way Stop Warrants

Stop-signs are a regulatory device requiring drivers to stop their vehicles completely at an intersection. All-way stops provide gap opportunities at intersections for minor street traffic that would not otherwise be available under two-way stop control.

Notwithstanding the recommended role of stop signs, they are perceived by the public in some jurisdictions as a solution to speeding. To the contrary, experience has shown that un-warranted all-way stops result in increased driver non-compliance. This driver non-compliance behavior has also been shown to occur at unwarranted adjacent all-way stops creating unsafe conditions.

Implementation of unwarranted all-way stop signs also has negative environmental impacts. Estimates of fuel consumption resulting from the acceleration and deceleration of each stop are 0.065 litres per stop. For a road with daily traffic of 5,000 vehicles, one additional stop sign would result in over 300 litres of fuel per day or 100,000 litres of fuel per year. Similarly, vehicle emissions including Hydrocarbons (HC), Carbon Monoxide (CO), Nitrogen Oxides (NOX), Carbon Dioxide (CO2) and Particulate Matter (PM), would increase with the provision of each additional stop.

For these reasons and for operational efficiency, the *Ontario Traffic Manual (OTM) Book 5* notes that "Stop Signs are not intended as speed control devices" and their usage should be "limited to the control of right of way conflicts".

The OTM warrant is utilized in the Town of Milton:

Warrant	Ontario Traffic Manual Book 5
Warrant 1 Traffic Control	Installed as an interim measure, where traffic control signals are warranted but cannot be implemented immediately.
Warrant 2A Volume	Average of **500** vehicles per hour entering the intersection from all approaches for **Arterial or Major Roads**. Based on each of any eight hours of the day. **350** vehicles for the **highest hour** entering the intersection from all approaches for **Minor Collector or Local Roads**.
Warrant 2B Minor Road Volume	**Arterial or Major Roads** The combined vehicular and pedestrian volume on the minor street exceeds **200** units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same 8 hours, **with an average delay to traffic on the minor street (either vehicles or pedestrians wishing to enter the intersection) of greater than 30 sec.** A volume split that does not exceed **70/30**. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway.

	Minor Collector or Local Roads A volume split does not exceed 75/25 for three-way control or 65/35 for a four-way control. Volume is defined as vehicles only.
Warrant 3 Collisions	Average 4 per year, over 3 year period susceptible to correction by the installation of an all-way stop.

Ontario Traffic Manual Book 5*,* also states All-Way "Stop" sign controls should not be used under the following conditions:

- As a speed control device.
- Where the protection of pedestrians, school children in particular, is a prime concern. This concern can usually be addressed by other means.
- On roadways where progressive signal timing exists.
- On roadways within urban areas having a posted speed limit in excess of 60 km/hr.
- At intersections having less than three, or more than four approaches.
- At intersections that are offset, poorly defined or geometrically substandard.
- On truck or bus routes, except in an industrial area, or where two such routes cross.
- On multi-lane approaches where a parked or stopped vehicle on the right will obscure the "Stop" sign.
- Where traffic would be required to stop on grades.
- As a means of deterring the movement of through traffic in a residential area.
- Where visibility of the sign is hampered by curves or grades, and insufficient safe stopping distance exists.
- Where any other traffic device controlling right-of-way is permanently in place within 250 m, with the exception of a yield sign.

This all-way stop warrant is used when an intersection is counted to ensure that all-way stops are being used to control the right of way at an intersection.

Traffic Signal Warrants/Traffic Signal Monitoring

In 2006, Milton adopted the new Canadian signal warrant, developed by the Transportation Association of Canada (TAC). This warrant was the result of a comprehensive investigation of traffic signal warrant methodologies throughout Canada and internationally, with a goal of developing a warrant designed for Canadian applications. It was based on extensive safety and operational research, and was calibrated in jurisdictions across Canada. It minimizes data collection requirements, is easy to use and based on best engineering practice and judgment.

The warrant uses a cumulative factor methodology (i.e. warrant system out of 100). It is based on the cross product of vehicle-vehicle and vehicle-pedestrian conflict risk and incorporates

factors based on roadway characteristics (e.g. speed, trucks, bus route and community size), pedestrian demographics (e.g. proximity of elementary schools or senior's facilities) and pedestrian exposure (e.g. roadway width).

The Canadian Traffic Signal Warrant is used each time an intersection is counted to ensure traffic control signals are properly installed and not causing unnecessary delays to motorists/pedestrians.

Traffic Signals are monitored using traffic management software. This software uses intersection cameras and analytics to process everything from traffic volume and speed, to pedestrian movement. This platform allows staff to monitor the operation of traffic control signals on demand and make adjustments instantaneously so that drivers can reach their destinations in less time. To date, 48 out of 54 Town intersections are equipped with this equipment. The remaining six intersections will be completed in early 2022. Since the installation of this monitoring equipment, the number of signal complaints has decreased and this technology allows staff to monitor historical data as well. Traffic management software is now included for all new traffic signals installed in the Town.

The use of the Canadian Signal Warrant and traffic management technology allows the Town the opportunity to build and maintain a signal system that serves the community with a high level of service. The results are satisfied users, better traffic flow and less frustration which creates safer intersections.

Speed Limit Policy

Under the Highway Traffic Act, roads that do not have a posted speed limit assigned are limited as per the following:

- Urban speed limit – 50 km/h unless otherwise posted
- Rural speed limit – 80 km/h unless otherwise posted

The Town of Milton Speed Limit Policy recommends the following:

Road Classification	Urban Sections	Rural Sections
Arterials Major Minor Multi-purpose	 60 or 70 km/hr 50 or 60 km/hr 50 or 60 km/hr	N/A
Collectors	40,50 or 60 km/hr	60,70 or 80 km/hr
Local	40 or 50 km/hr	40 or 50 km/hr
Lanes	40 or 50 km/hr	N/A

(a) Posted speed limits should be set between 40 km/h and 80 km/h in increments of 10 km/h.
(b) The posted speed limit should ideally be set at or near the 85th percentile speed based on actual measurements of the operating speed.

The posted speed limit may be set below the recommended level when:

- constrained by physical characteristics of the road;
- constrained by adjacent land uses and associated activities;
- required for heightened driver awareness in sensitive areas such as school zones;
- evidenced by a significantly higher than normal collision record;
- shown to be higher than the inferred design speed; or,
- there is significant conflict in roadway user, such as bikeway systems.

The Town continues to investigate speed concerns by completing 24 hour speed studies and analyzing the data to determine if requests for enforcement should be sent to Halton Regional Police. Halton Regional Police also operate a "Road Watch Program" that allows citizens to report aggressive driving.

It has been articulated by Council that a problem area for speeding is in the vicinity of Viola Desmond Elementary School. In an effort to improve driver behaviour, this report recommends that a one year pilot program be implemented on Leger Way in front of Viola Desmond school reducing the speed limit from 40 km/h to 30 km/h "when flashing". Staff will undertake before and after speed studies to determine if the lowering of the posted speed has any effect on operating speeds.

Community Safety Zones

Under the Highway Traffic Act, Council may by by-law designate a part of a road under its jurisdiction as a Community Safety Zone (CSZ). A CSZ is an area identified as a road segment of higher risk or concern. Certain Highway Traffic Act fines (including speeding) are doubled in CSZ and many CSZ are located close to schools. Therefore, CSZ may only be implemented at the following locations:

- Elementary or secondary schools
- Seniors centres and residences
- Community playgrounds
- High pedestrian traffic locations
- Community Centres
- Hospitals

There are currently 5 designated CSZ in Milton, as follows:

- Campbell Avenue between Guelph Line and 250m east of Wheelihan Way;
- Main Street between Thompson Road and 100m east of Pearson Way/Harris Boulevard;
- Ontario Street between 200m north of Laurier Avenue and 50m north of Main Street;
- Wilson Drive between 250m north of Woodward Avenue and 200m south of Mackenzie Drive; and
- Woodward Avenue between Maple Avenue and Lorne Scots Drive

To improve road safety and in preparation for the future implementation of Automated Speed Enforcement (discussed later in this report), it is recommended that additional CSZs be established in Milton (illustrated in Appendix 2).

Pedestrian Crossover (PXO) Warrants

In 2015, Ontario Highway Traffic Act through Bill 31 – Transportation Statute Law Amendment Act (Making Ontario's Roads Safer) introduced new Pedestrian Crossovers (PXO's). These are a defined set of roadside signs and pavement markings which form a new passive treatment to provide pedestrians the right-of-way when crossing the roadway where the treatment is installed.

Some PXO's require rapid rectangular flashing beacons (RRFB's) which are push button activated and based on traffic and pedestrian volumes. Warrants for these treatments have been expanded to allow pedestrian right-of-way for more road classifications and traffic conditions, including roundabouts.

Warrants for new PXO's are based on traffic volumes, pedestrian volumes, posted speed limits and lane configuration. At all PXO's, drivers are required to yield the right-of-way when a pedestrian is at a designated crossing and has the intent to cross the road. The pedestrian(s) will be required to continue to exercise caution when crossing by selecting a safe time to enter the road, giving the approaching driver adequate time to stop and yield right-of-way.

These PXO options offer safer pedestrian mobility and connectivity. That being said, these treatments also pose a significant change in mobility and on-road operating conditions for both pedestrians and motorists. In 2015, the Province of Ontario was the last remaining Provincial jurisdiction to enhance pedestrian right-of-way to the level proposed in Book 15. This is a major improvement for pedestrian mobility and one that pedestrians may adopt fairly quickly. However, positive changes to driver behavior will take longer to realize. Staff continue to leverage the reach of social media to educate the public.

There are presently four types of PXO's that can be installed:

- **Type A:** The "Type A" PXO is not currently used in Milton. This PXO consists of side mounted poles with crossing signs, as well as overhead signs with flashing beacons suspended on wire spanning the two roadside poles. This type of PXO is designed for use on high to medium volume, high speed and single or multi-lane arterials. The "Type A" PXO's have been replaced in many municipalities with Mid-Block Pedestrian Signals or Intersection Pedestrian Signals, including Milton.

- **Type B:** The "Type B" PXO consists of a roadside mounted sign leading to a crossing in both directions with an overhead sign and a RRFB on top of the roadside mounted sign.

- **Type C:** The "Type C" PXO consists of a roadside mounted sign at a crossing for both directions with a RRFB on top of the roadside mounted signs.

- **Type D:** The "Type D" PXO consists of a roadside mounted sign at the crossing in both directions.

PXO's have been successfully implemented in Milton since 2016. There are presently 30 PXO's installed with 10 more planned for 2022. The Town also has 13 roundabouts where PXO's are installed at every pedestrian crossing within the roundabout. It should be noted that at all roundabouts under the Town's jurisdiction, PXO's are installed as part of the construction.

As previously mentioned, PXO's will be installed as part of the subdivision development at any trail/path connections that cross collector roads. The Type "C" PXO will be installed at these locations. Having these PXO's installed at the time of subdivision construction will further promote active transportation and road safety.

In addition, there are five "Intersection Pedestrian Signals" within Milton. These are half signals, where the through street signal will remain green until a pedestrian pushes the button and the signal cycles. The side streets are stop controlled.

Traffic Calming Warrants

In 2011, the Town adopted a Traffic Calming Policy. The purpose of this policy is to provide guidelines, procedures and criteria for the initiation, investigation and implementation of traffic calming measures within residential neighbourhoods to address safety concerns related to speeding and excessive volume in a fair and efficient manner. The policy is applied to local and collector roadways and will not be considered on arterial roads.

Traffic calming is defined as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-

motorized street users. Traffic calming measures combined with engineering, education and enforcement tools can significantly improve the liveability and safety of neighbourhoods.

Included within the Town of Milton's Traffic Calming Policy, a process is outlined to review traffic calming for a particular roadway. Since 2011, the Town has received a number of requests for implementing physical traffic calming (eg: Speed Humps) on both local and collector roads. To date there has not been any physical traffic calming measures implemented. The Town has installed passive traffic calming on a number of streets. Passive traffic calming consists of urban shoulders (Childs Drive, Woodward Avenue east of Ontario Street) and parking lanes (Pine Street, Duncan Lane).

A jurisdictional review has been completed and the Town's traffic calming policy is comparable to many other municipalities with the exception of the warrant criteria. This report recommends that the warrant matrix be lowered where appropriate and that staff report back to Council with an updated policy.

Additional Tools to Reduce Vehicle Speeds

Driver Feedback Boards

Driver Feedback Boards (DFB) have been operating in the Town of Milton for a number of years. These are large display boards that flash a driver's speed and are used as an educational and awareness tool. This program operates on a yearly basis from April 15 to November 15. The DFB's remain in a location for a two week period and then are rotated throughout the Town. Location requests are received from residents.

Although these boards are not permanent, resident feedback has been positive and indicates a reduction of vehicle speeds while the boards are operating. Studies have found that installing boards on a permanent basis has very little effect on long-term vehicle speeds as drivers become conditioned to them.

Please Slow Down Lawn Sign Program

Residents are encouraged to post a "Please Slow Down" lawn sign produced by the Town to encourage safe driving habits and to lower vehicle operating speeds on neighbourhood streets. The signs are available free of charge to all Milton residents with a limit of one (1) sign per household as quantities are limited. This program is very popular with residents.

Community Entrance Signs

In response to residents' concerns of motorists disregard for the safety and integrity of residential neighbourhoods, the Town has developed the "Drive Slowly…Think of Us" sign. The sign features a picture of a person walking with two children and the text "Drive Slowly…Think of Us".

The community entrance sign is purely informational and as such, intended to serve as a reminder to motorists that they are entering a residential area where the residents are concerned about the safety of their neighbourhood.

As the over use of any traffic control device or sign can have a negative effect on motorist behaviour, Traffic Engineering staff limits the placement of community entrance signs using the following principles/guidelines:

- As the sign is purely informational and has no regulatory or legal status, its installation is limited to entrances to residential neighbourhoods from major collector and arterial roadways where the neighbourhood experiences a degree of non-residential through traffic.

- The sign is meant to serve as a reminder for motorists to “turn off” the highway driving mode and to be aware that they are entering a residential area where reduced speeds are required to negotiate vehicles entering and exiting driveways as well as the potential for children to be playing adjacent to the roadway.

- Installing community entrance signs at entrances to small residential areas and in particular, “closed” neighbourhoods (courts, small crescents, cul-de-sacs, etc.) would result in the Town being inundated with requests for signage. In turn, the sign would lose effectiveness.

In recent years, this entrance sign is now included on the Traffic Control Plans for new subdivisions.

Crossing Guard Policy

School crossing guards are used to assign right-of-way for pedestrians, primarily children, at locations with conflicting vehicular traffic. The role of a School Crossing Guard is to stop traffic for school aged children (JK-6) walking to and from school where sufficient naturally occurring gaps in vehicular traffic do not exist. Presently, there are 43 School Crossing Guards at 41 locations in the Town.

In 2019, Council approved the Crossing Guard Policy based on the Ontario Traffic Council (OTC) 2017 School Crossing Guard Guide. The Town of Milton along with representatives from a number of municipalities throughout Ontario sat on the committee to assist with creating the update. The updated OTC School Crossing Guard Guide recommends best practices and warrants for municipalities to use when determining locations for school crossing guards to be placed.

The warrant combines engineering principles, observation and judgement as a basis for data collection. The warrant also takes into consideration vehicle and pedestrian volumes during the key times around school entrance and dismissal. The 2017 OTC School Crossing Guard Guide

recommends a gap survey for mid block/minor stop controlled locations and an Exposure Index for all-way stops and traffic control signals.

Included within the policy are specific minimum values for pedestrians and vehicular traffic volumes for a variety of crossing location types. The policy also contains information with respect to the process of requesting a school crossing guard, procedure for new school opening and steps for removal of a school crossing guard.

At some signalized intersections where crossing guards are not warranted, the Town has successfully implemented a 5 second "Leading Pedestrian Interval" (LPI) phase. This LPI gives school aged children/parents a 5 second lead to cross the road before the signal turns green for the vehicles.

The policy approved in 2019, has provided staff with a consistent method of evaluating existing and newly requested locations to determine if a school crossing guard is warranted.

Education and Outreach

The Town continues to educate and promote road safety through social media channels. This includes information about new traffic control signals, all-way stops and PXO's and many other road safety considerations.

When a new PXO is opened near an elementary school, Town staff is on site to educate students and residents. In addition, when on location, staff distribute information brochures related to the correct use of PXO's. Staff also provides this information to individual schools for distribution in their e-newsletters to all parents.

To ensure that Milton's roads are safe for all users, this report recommends the implementation of a road safety campaign (outlined in Appendix 4). Subject to Council approval, the campaign will launch in June 2022 and will address three themes supporting interventions for safe roads. It will aim to build awareness of the roles that the motorist, cyclist and pedestrian have to support safe roads in Milton.

As part of the campaign the Town will partner with the following organizations to help deliver messaging and maintain enforcement levels where appropriate:

- Halton Regional Police Service
- Halton District School Board
- Halton Catholic District School Board
- Schools supported through pilot projects

New Initiatives

Neighbourhood 40 km/h Speed Limits

Recent amendments to the Highway Traffic Act allow municipalities to set a speed limit other than 50 km/h on roadways within a designated area, often a neighbourhood with defined boundaries. Once designated and assigned a speed limit (such as 40 km/h), all roadways within that area will have the speed limit specified. Speed limit signs are then only required at entry/exit points to the defined area. This method creates consistency throughout a given neighbourhood with a goal to increase compliance by drivers. Should collector roads not be included as part of a designated neighbourhood, signs would be installed at each intersection along the collector road. Many municipalities implementing neighbourhood 40 km/h speed limits are also implementing a 30 km/h speed limit in front of schools.

As an alternative approach, the Town's default speed limit could be changed to 40 km/h unless otherwise posted. This would require all Town entrance signs to be changed and signage would be required on all roads with a posted speed limit other than 40 km/h. This macro approach is not recommended by staff, especially on collector roads where CSZs are more appropriate.

To gauge the impact of lowering speed limits, this report recommends a one year 40 km/h Neighbourhood Speed Limit pilot along with a 30 km/h limit in front of schools. The pilot would be implemented in the neighbourhood bounded by Derry Road, Louis St Laurent Avenue, Regional Road 25 and Bronte Street South (see Appendix 1). Staff will undertake before and after speed studies to determine if the lowering of the posted speed limit has any effect on operating speeds. The pilot would be implemented in June 2022 and staff would report back to Council with the results in Fall 2023.

Automated Speed Enforcement (ASE)

Automated Speed Enforcement (ASE) is a technology-based safety tool intended to address speeding and to supplement traditional speed enforcement. On May 30, 2017, the Province of Ontario passed Bill 65, the Safer School Zone Act. Bill 65 authorizes municipalities to use ASE, also known as photo radar, to improve traffic safety. The Bill allows municipalities to use ASE only in designated Community Safety Zones (CSZ) and School Zones. An ASE system captures and records images of vehicles travelling in excess of the posted speed limit in School Zones and CSZ with tickets issued to the registered plate holder regardless of who was driving. This will result in a monetary fine, but no demerit points will be applied.

In 2017, the Ontario Traffic Council (OTC) formed a working group consisting of municipalities, the Ministry of Transportation Ontario and the Ministry of the Attorney General to develop and cost-share in a consistent ASE program province-wide. The working group consisted of 21 municipalities including the Cities of Toronto, Burlington, Guelph and Kingston, the Town of Oakville and Regions of Niagara and Durham. Members of this working group were required

to make a financial contribution of at least $5,000 to participate. Engineering Services staff decided to monitor the implementation of ASE by others rather than participating directly at that time.

The tasks of the working group included:

- Establishing common operating principles for ASE across the province;
- Creating location selection criteria, communication and official signage;
- Selecting technology, including equipment and hardware (fixed and mobile systems);
- Developing a request for proposal (RFP) for a joint processing centre for ASE, including administration of infraction processing.

The following Site Selection Criteria were developed:

- Areas with low speed limit compliance
- High collision/ potential for safety improvement (PSI) areas
- Areas with other safety concerns (Risk Factors)
- Areas in need of special consideration
- Potential areas to avoid

Where Can ASE Be Utilized?

ASE can only be installed within a Community Safety Zone or a School Zone.

Under the Highway Traffic Act, Council may, by by-law, designate a portion of a road under its jurisdiction that adjoins the entrance to or exit from a school and that is within 150 metres along the road in either direction beyond the limits of the land used for the purposes of the school as a School Zone.

Milton's current Traffic By-law does not use designated School Zones to establish reduced speed limits in front of schools. Instead, the practice of reducing speed limits in front of schools is governed by the Town's Speed Limit Policy with speed limits established through the rate of speed schedule of the Town's Traffic By-law 1984-1. Under the ASE guidelines, any operating school zone flashers must be removed. Flashers and ASE cannot operate concurrently.

In considering the implementation of ASE, a review of the Town's existing CSZs and use of designated School Zones would be undertaken and Council would be required to adopt an implementing by-law.

What Does The ASE System Look Like and How Does a Municipality Get Started?

An ASE system consists of a combination of a camera and speed-measuring equipment that is used to photograph a motor vehicle and determine and record the rate of speed at which the motor vehicle is travelling at the time the photograph is taken.

In April 2019, the City of Toronto issued a joint Request for Proposal (RFP) on behalf of participating municipalities for the supply and operation of ASE equipment. Proposals were evaluated based on a technical evaluation, a proof of performance evaluation and the cost of services. Redflex Traffic Systems (Canada) Limited was selected as the successful vendor.

Municipalities wishing to participate in ASE must enter into an agreement with the vendor. The vendor is responsible for the supply, placement and operation of all related ASE equipment in the field. The costs associated with this service generally include a daily rate for the equipment as well as installation and relocation costs. The ASE equipment can be rotated to various suitable locations and includes the ability to limit the hours of operation based on time of day.

Municipalities must enter into an agreement with the Joint Processing Centre (JPC). The City of Toronto operates a Joint Processing Centre for all ASE charges province wide. The JPC is staffed by Provincial Offences Officers designated by the Province to issue charges captured by the ASE system. Costs are distributed proportionally based upon the number of offence charges issued within a given jurisdiction. Municipalities must enter into an agreement with the Ministry of Transportation for the provision of vehicle registration information for ASE offences.

Who Is Using ASE?

At this time many larger municipalities including the Cities of Toronto, Hamilton, Brampton and Mississauga are presently using ASE. Currently, there are no municipalities within Halton operating ASE, although its implementation is anticipated.

What are the Challenges?

The Town of Milton along with all other municipalities in Halton have been advised that the JPC can only process a maximum of 5,000 charges per year. Should the City of Toronto JPC expand its operation, or another municipality decide to open a JPC, this number could potentially increase. To put this number in perspective, staff completed 4 days of 24-hour speed studies on Martin Street north of Woodward Avenue in early July. From that study, it was found that over 2,000 vehicles were traveling over the posted speed limit and could be eligible for an ASE ticket. As such, a cap of 5,000 charges per year is quite low relative to the number of potential infractions. Despite this, it should be noted that information signage is installed when an ASE camera is operational. This provides a further deterrent and results in motorists adjusting their driving speeds accordingly, which may offset the cap in charges from an overall safety perspective.

In addition, the charges resulting from the ASE program continue to be processed under the Provincial Offences Act (POA) and Halton Court Services has advised that it that lacks sufficient capacity to process the anticipated number of charges. At this time HCS cannot accommodate any ASE charges.

Next Steps – Automated Speed Enforcement

The Province is planning to create an Administrative Penalties System (APS) which will cover ASE, automated school bus cameras, and red light cameras and is anticipated to come into effect by late 2022 or early 2023. Due to the lack of capacity at HCS, it is recommended that the Town of Milton wait until the Province implements APS to commence ASE.

In light of the above, this report recommends that staff continue to monitor the status of Administrative Penalties (APS) in relation to Automated Speed Enforcement and report back to Council when appropriate with a recommended roll-out of the program including budget implications.

Automated School Bus Arm Cameras

In 2017, the Safer School Zones Act authorized the use of *Automated School Bus Stop Arm Camera Systems* to detect incidents where vehicles failed to stop when the school bus was stopped and the stop arm was extended.

Similar to a red light camera, the system records data like location, time and date of the incident, in addition to taking pictures of vehicles that failed to stop. Once images are processed and confirmed by a Provincial Offences Officer, an offence notice is generated and sent to the vehicle's owner, who would be subject to the same options in terms of paying the fine or requesting a trial in front of a Justice of the Peace. This program has the same issues as ASE, where Halton Court Services has no capacity to deal with these charges. It is anticipated that this program will also fall under the APS regime and that the school boards and their associated transportation providers will consider implementation at the appropriate time.

Financial Impact

The estimated cost of signage for the 1 year pilot project to reduce the Neighbourhood Speed Limit to 40 km/h in Ward 4 and reduce the speed limit to 30 km/h in front of Viola Desmond Elementary School is $2,500. The cost of signage for the additional Community Safety Zones is approximately $3,000. These costs can be provided for through the Traffic Safety Services Review capital project (C4001100).

Financial Impact

The estimated cost of green pavement markings in the bicycle lanes on Santa Maria Boulevard (Derry Road to Serafini Crescent) is $85,000. This item will be brought forward for consideration through the 2023 budget.

The financial impacts associated with ASE will be analyzed as part of any future reviews to implement an Administrative Penalties System for ASE and included with any future reports that recommend the roll out of that program.

All other recommendations will be undertaken with current staff resources, the costs of which are provided for within the Town's 2022 operating budget.

Respectfully submitted,

Jill Hogan
Commissioner, Development Services

For questions, please contact: Phone: Ext. 2506
Heide Schlegl

Attachments

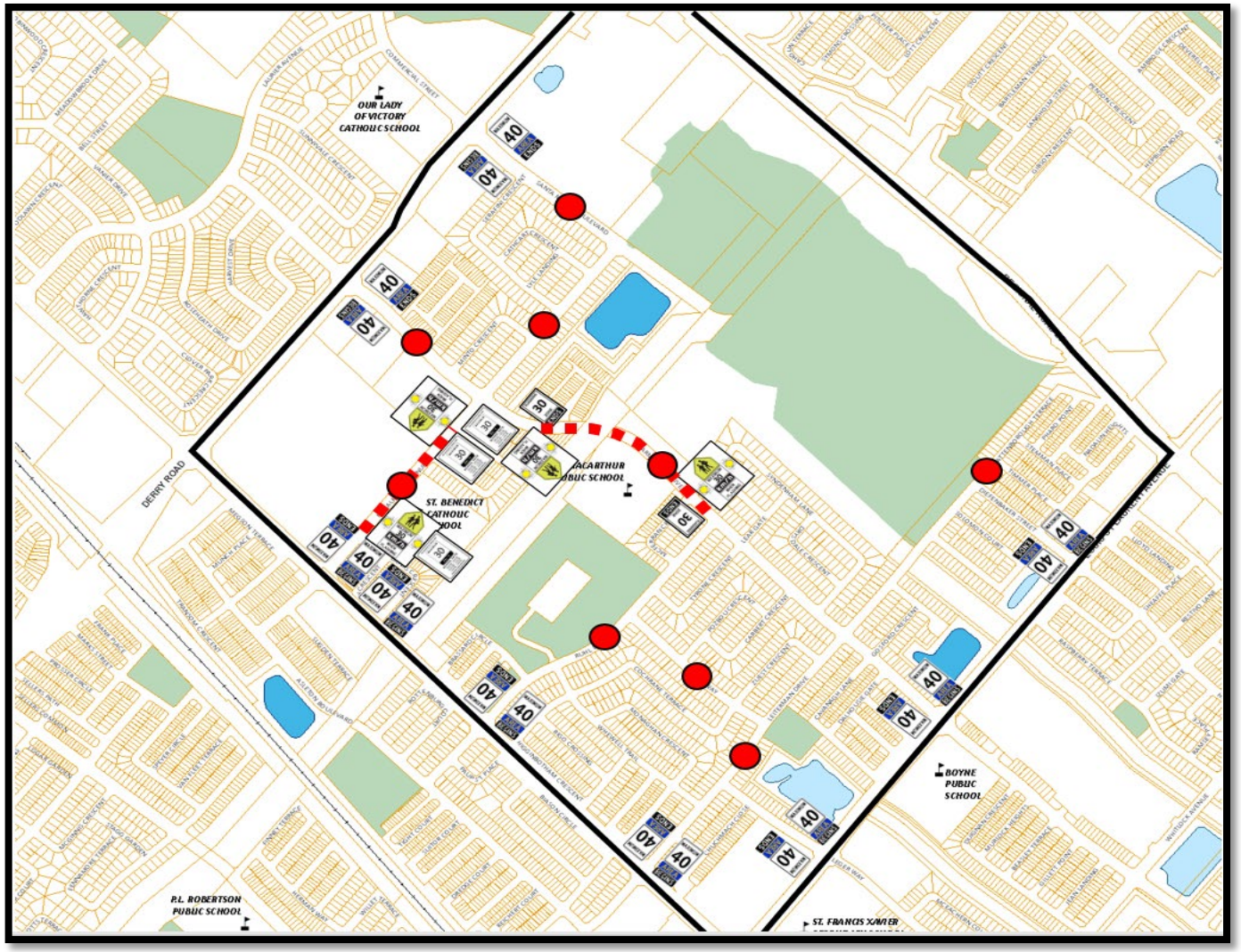
Appendix 1 – Proposed 40 km/h Neighbourhood Speed Limit Pilot Project
Appendix 2 – Additional Community Safety Zones
Appendix 3 – Santa Maria Boulevard – Enhanced Bike Lane Markings
Appendix 4 – Road Safety Campaign Outline

CAO Approval
Andrew M. Siltala
Chief Administrative Officer

Recognition of Traditional Lands

The Town of Milton resides on the Treaty Lands and Territory of the Mississaugas of the Credit First Nation. We also recognize the traditional territory of the HuronWendat and Haudenosaunee people. The Town of Milton shares this land and the responsibility for the water, food and resources. We stand as allies with the First Nations as stewards of these lands.

Proposed 40 km/h Neighbourhood Speed Limit Pilot Project



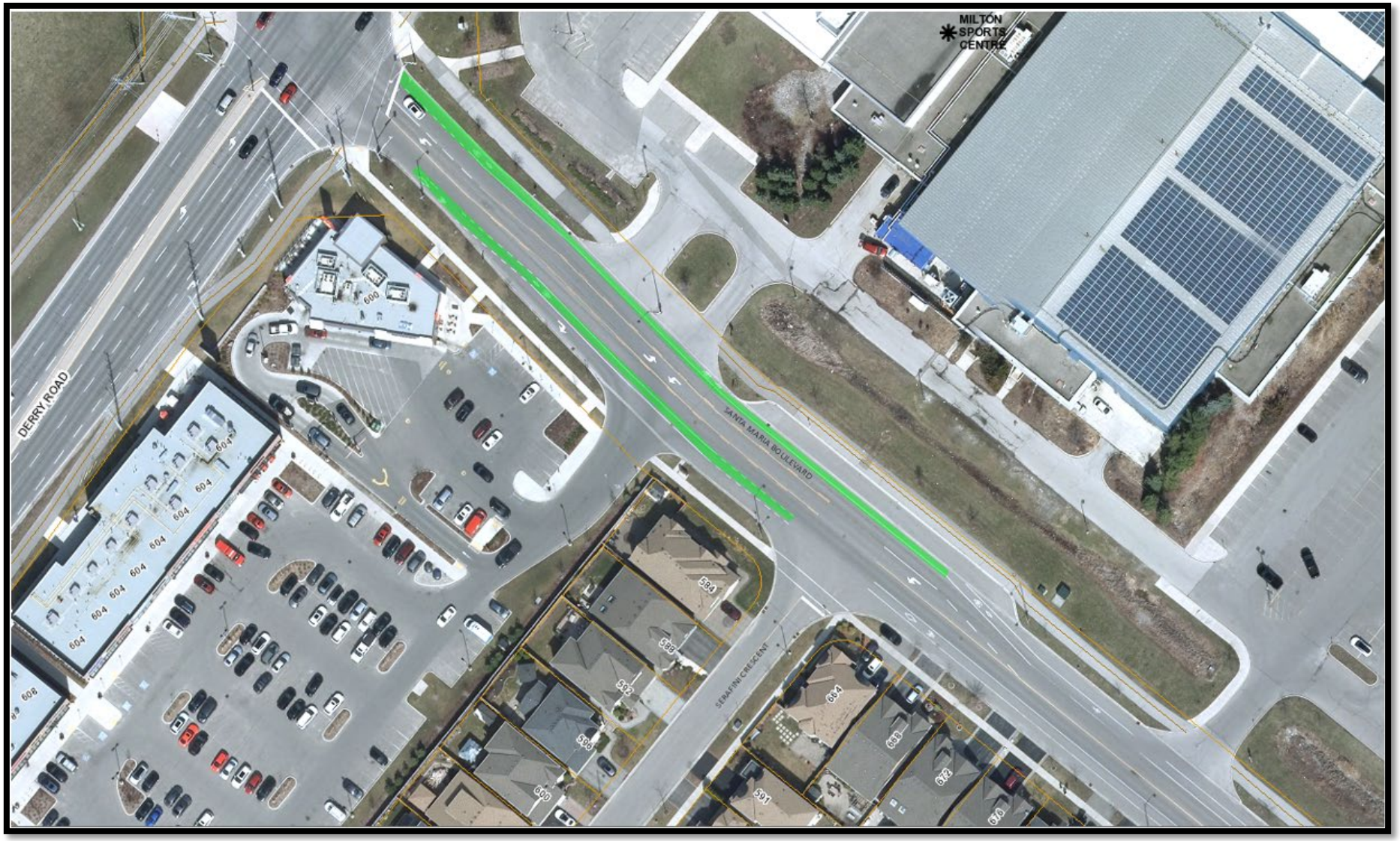
MILTON

Appendix I

Appendix 2

Additional Community Safety Zones

Santa Maria Boulevard - Enhanced Bike Lane Markings



MILTON

Appendix 3

Road safety campaign outline

Prepared by	Jessica Rabaey (Communications Advisor) and Carrie Beatty (Director, Strategic Communications)
Director responsible	Carrie Beatty, Director, Strategic Communications

OVERVIEW

Introduction

In January 2022, in response to road safety concerns raised by residents, Milton Council passed resolutions asking staff to report back to Council on:

- Possibility of using automated speed-enforcement cameras
- Appropriate speed limits
- Traffic calming tools and other available safety measures

We want to ensure that Milton's roads remain safe for all users. With the implementation of a road safety campaign, we hope to inform attitudes and change behaviours that enable people to use the road safely. The campaign will address three themes supporting interventions for safe roads, and aim to build awareness of the roles that the motorist, cyclist and pedestrian have to support safe roads in Milton.

RECOMMENDED THEMES

1. Traffic calming

Traffic calming measures are implemented to address issues with speeding, excessive traffic volumes, and neighbourhood safety. While methods may vary, all traffic calming measures help to improve the safety and quality of life for residents by reducing the speed and volume of traffic.

Objectives: To inform motorists, pedestrians and cyclists about traffic calming measures and the importance

Areas of focus

- Reduced speeds
- Roundabouts
- 40 km/h neighbourhood pilot
- Speed bumps

Audiences

- Motorists
- Pedestrians
- Cyclists

2. School safety

School zones are busy spots. Parents and school buses are dropping off and picking up children, crossing guards are stopping traffic, and kids are out and about. There's a lot going on and there's a lot to look out for as a driver, pedestrian or cyclist.

Objectives: To educate motorists, pedestrians and cyclists (including parents and school children) about school zone safety.

Areas of focus

- School Zones
- School Crossings
- Pedestrian Crossovers
- No stopping/no parking zones
- 30 km/h pilot at Viola Desmond School

Audiences

- Motorists (Parents dropping kids off and picking up, local traffic, bus drivers)
- Pedestrians (Kids walking to and from school)
- Cyclists (Kids cycling to and from school)

3. Community Safety Zones

CSZ are sections of roadway where public safety is of special concern. Community Safety Zones may include roadways near schools, day care centres, playgrounds, parks, hospitals, senior citizen residences, and may also be used for collision prone areas within a community. Designated areas where fines are doubled for traffic violations.

Objectives: To inform key audiences about the purpose of Community Safety Zones and why they are selected.

Areas of focus

- Roadways near schools
- Day care centres
- Playgrounds, parks
- Hospitals
- Senior citizen residences (retirement homes, LTC)

Audiences

- Motorists
- Pedestrians
- Cyclists

PARTNERS

The Town of Milton will partner with the following organizations to help deliver messaging and maintain enforcement levels where appropriate.

Halton Regional Police Service
Halton District School Board
Halton Catholic District School Board
Schools supported through pilot projects

NEXT STEPS

The Strategic Communications team is working to create a research-based communication strategy inclusive of key messages and tactics that accompany each theme area and area of focus. The communications strategy will form the basis for a branded campaign.

The launch of the strategy will align with the implementation of the traffic/road safety measures identified by Development Services.