

| Report To: | Council |
|-----------------|---|
| From: | Doug Sampano, Commissioner, Community Services |
| Date: | June 23, 2025 |
| Report No: | COMS-004-25 |
| Subject: | Roundabout Review - Crossing Guards |
| Recommendation: | THAT the Roundabout Review - Crossing Guards Report be received for information by Council; |
| | AND THAT at this time no further changes be made to the existing Crossing Guard Policy that was approved by Council on June 3, 2024; |

EXECUTIVE SUMMARY

As a result of a Notice of Motion - Resolution 184 - 24 at the December 9th, 2024, Council Meeting staff were asked to review the following and report back to Council by the end of Q2 2025:

- Complete a review of traffic patterns and pedestrian safety data at roundabouts located near schools (elementary and secondary);
- Review the feasibility of assigning crossing guards to roundabouts near schools within the municipality.
- Review the feasibility of removing roundabouts and replacing them with alternative forms of traffic control systems (e.g., traffic lights);
- Consult with the Ontario Traffic Council (OTC) on their ongoing research regarding crossing guards at roundabouts;
- Complete a jurisdictional scan of municipalities in Ontario regarding the implementation of crossing guards for secondary schools near roundabouts;
- Identify potential schools and roundabouts where crossing guards could be implemented based on current traffic and pedestrian volumes, and the warrants identified in the Town's Crossing Guard Policy, along with a proposed implementation plan for the assignment of crossing guards.

The Town's current School Crossing Guard Policy reflects the most updated 2023 Ontario Traffic Council (OTC) School Crossing Guard Guide. As a result of this recent update, the Town's Placement of School Crossing Guards Policy now incorporates provisions for school crossing guards at Roundabouts and Pedestrian Crossovers (PXO's).



REPORT

Background

School crossing guards are used to assign right-of-way for pedestrians, primarily children, at locations with conflicting vehicular traffic. In accordance with the Town's Crossing Guard Policy, 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 do not exist. Currently, the Town of Milton has 37 school crossing guards at 34 locations. In addition, the Town has a pool of ten (10) standby school crossing guards to cover locations when necessary.

In 2024, Council approved report COMS-004-24 School Crossing Guard Policy Update which provides a consistent method of evaluating existing and newly requested locations to determine if a school crossing guard is warranted. This Policy update includes a new warrant system for school crossing guards being placed at Roundabouts and PXO's.

Discussion

In 2023, the Ontario Traffic Council (OTC) updated the School Crossing Guard Guide, which provides a technical approach to determine whether a school crossing guard should be provided at a specific location based on vehicular volumes, pedestrian volumes and adequate gaps in traffic. It should be noted that Town of Milton traffic staff was involved in the development of the original Crossing Guard Guide in 2016 and again with the updated guide. This guide includes a range of the best practices that are recommended for use within municipalities across Ontario. The Town's current School Crossing Guard Policy reflects the most current practices. (See Appendix I). It should be noted that the OTC is committed to updating the School Crossing Guard Guide every 5 years. The Town of Milton sits on the OTC School Crossing Programs Committee which was created to implement a One Voice Approach for collaboration, sharing, review, guidance, support and resources and to streamline School Crossing programs across the province for improved safety messaging, program delivery and support/promotion of safe and active travel to school.

Roundabouts are increasingly being used as traffic control measures due to their ability to reduce traffic delays and improve flow. However, concerns have arisen regarding pedestrian safety, particularly at roundabouts near schools. This report examines the feasibility of placing crossing guards at roundabouts near elementary and secondary schools, considering traffic patterns, pedestrian safety, and the potential benefits of crossing guard implementation.

Complete a review of traffic patterns and pedestrian safety data at roundabouts located near schools (elementary and secondary)



There are presently four elementary schools and two secondary schools that have roundabouts located with 150 metres of either side of the school's frontage: (See Appendix II)

Elementary School Locations:

Whitlock Avenue and Kennedy Circle West - Ward 3

- o Cedar Ridge Public Elementary School/ St. Veronica Catholic Elementary School
 - Level 2 Type D PXO to be installed in summer 2025 Kennedy Circle West and Ash Gate as a result of a PXO Study that was conducted in Fall 2024. (See Appendix III)
 - Level 2 Type D PXO will be installed in the summer 2025 at Whitlock Avenue and Hazel Way. In September of 2025, a crossing guard will be placed at Whitlock Avenue and Hazel Way as a result of a crossing guard study that was conducted in Fall 2024.
 - 1 reportable collision has occurred in the last 3 years. This was a rear end and no pedestrians were involved

Whitlock Avenue and Leger Way - Ward 4

- o St. Scholastica Catholic Elementary School
 - Existing School Crossing Location at Whitlock Avenue and Mulroney Heights to be converted to a Level 2 Type D PXO in summer 2025.
 - 3 reportable collisions have occurred in the last 3 years 2 rear end and 1 angled collision and no pedestrians were involved

Gordon Krantz Avenue and Kovachik Boulevard - Ward 4

- St. Josephine Bakhita Catholic Elementary School
 - No reportable collisions have occurred at this intersection within the last 3 years.

Secondary School Locations:

Louis St Laurent Avenue and Kennedy Circle (East Intersection) - Ward 3

- St Kateri Tekakwitha Catholic Secondary School
 - In Fall 2024, staff upgraded the pedestrian crossovers to a Level 2 Type C with Rectangular Rapid Flashing Beacons on both the east and west legs of Louis St Laurent Avenue and Kennedy Circle (East Intersection).
 - Passive traffic calming measures (pavement markings) have been installed along the west approach of the roundabout on Louis St Laurent Avenue
 - Portable Variable Message Signs were installed for 2 months on Louis St Laurent Avenue for the west approach to the roundabout reminding motorists to watch their speed and watch for students crossing.
 - 1 reportable collision has occurred in the last 3 years. This was an angled collision that involved a cyclist that did not dismount their bicycle or push the button to cross/wait for vehicles to stop.



Bronte Street South and Etheridge Avenue - Ward 4

- Elsie MacGill Secondary School
 - Portable Variable Message Signs were installed for 2 months on Louis St Laurent Avenue for the west approach to the roundabout reminding motorist to watch their speed and watch for students crossing.
 - The Level 2 Type C PXO in front of the secondary school was modified from a twostage crossing to a one-stage crossing for improved safety.
 - 5 reportable collisions have occurred in the last 3 years at the roundabout at Bronte Street South and Ethridge Avenue - 2 Single Motor Vehicle, 1 Sideswipe, 1 Angle and 1 Rear end and no pedestrians were involved
 - 1 reportable collision occurred at the PXO in front of the school. This collision involved a cyclist that did not dismount their bicycle or push the button to cross/wait for vehicles to stop.

Currently, there are no crossing guards at these roundabouts but there are other traffic control devices that are in place to provide protected crossings for students, as outlined above. It is a Town standard that at each roundabout within the Town of Milton that Level 2 Type D PXO's are installed at each leg of the roundabout. This ensures that pedestrians have the right of way when crossing.

To review traffic patterns and pedestrian safety data, a Digital Smartwatch System was installed in early February 2025 at the roundabout on Louis St Laurent Avenue and Kennedy Circle (East Intersection/West Leg). This is a device that uses video analytics to collect information on PXO utilization and vehicle compliance. This device detects vehicle non-compliance when pedestrians and bicycles are in the crossing, including vehicle direction.

Staff has reviewed reports generated from the Smartwatch System to determine the number of pedestrian/cyclist conflicts with vehicles while within the crosswalk. The results are from a two week period after the staff completed educational outreach at St. Kateri Tekakwitha Catholic Secondary School:

| Location | Date and Time Period | # of Pedestrians Crossing PXO | # of Pedestrian/Vehicular Conflicts |
|--------------------------------------|--|-------------------------------------|--|
| PXO - Southeast Leg of Roundabout | February 24 - 28, 2025 7:00 a.m 4:00 p.m. | 1426 | 0 |
| PXO - Southeast Leg of Roundabout | March 3 - 7, 2025 7:00 a.m 4:00 p.m. | 1033 | 0 |



| Discussion | | | | | |
|--------------------------------------|--|------|---|--|--|
| PXO - Southeast Leg of Roundabout | April 21 - 25, 2025 7:00 a.m 4:00 p.m. | 1587 | 0 | | |
| PXO - Southeast Leg of Roundabout | May 5-9, 2025 7:00 a.m 4:00 p.m. | 2001 | 0 | | |
| PXO - Southwest Leg of Roundabout | February 24 - 28, 2025 7:00 a.m 4:00 p.m. | 1027 | 0 | | |
| PXO - Southwest Leg of Roundabout | March 3 - 7, 2025 7:00 a.m 4:00 p.m. | 675 | 0 | | |
| PXO - Southwest Leg of Roundabout | April 21 - 25, 2025 7:00 a.m 4:00 p.m. | 748 | 0 | | |
| PXO - Southwest Leg of Roundabout | May 5-9, 2025 7:00 a.m 4:00 p.m. | 880 | 0 | | |

The PXO's at this Roundabout are heavily used by students. Since September, staff have observed improvements in the number of students pushing the pedestrian push button to activate the Rectangular Rapid Flashing Beacons and dismounting/ walking their bicycles across the PXO.

Staff have also observed a significant improvement in vehicle stopping compliance, although at times vehicles do not remain fully stopped until the pedestrian has reached the curb. Motorists continue to demonstrate a lack of understanding in the proper use of PXO's.

The Town continues to work on a Road Safety Communications Plan which will involve items such as bus shelter ads, back of bus ads, portable information signs and social media and website content. PXO safety will be part of this communication plan.

The Digital Smartwatch System will remain in place at Louis St Laurent Avenue and Kennedy Circle until mid summer 2025, and it will then be relocated to the PXO on Bronte Street South in front of Elsie McGill Secondary School.

Going forward, the Digital Smartwatch Device will be relocated throughout the Town as a way to monitor various PXO locations.

Review the feasibility of removing roundabouts and replacing them with alternative forms of traffic control systems (e.g., traffic lights);



Roundabouts are circular intersections that improve road safety, manage increased traffic demand and help to improve air quality by eliminating unnecessary stops and idling. There are several safety benefits related to roundabouts which include reducing speeds of vehicles, eliminating right-angle crashes, and reducing the number of vehicle-vehicle and vehicle-pedestrian conflicts at an intersection. Reduced speeds allow for all users to better judge when they should enter the roundabout, and to detect and correct their mistakes, eliminate any type of high-speed collision, opposing left turn collisions, and head on collisions. Less serious injuries result from accidents at roundabouts compared to traffic signals due to reduced speeds.

Road Network Assessments (RNA) are completed for Secondary Plan areas which analyze traffic volumes and patterns to determine the most suitable traffic control devices for intersections. Along Louis St Laurent Avenue for example, the Boyne RNA recommended the installation of roundabouts at both legs of Kennedy Circle in order to keep traffic flowing. When installing traffic control signals within close proximity to each other it is very difficult to maintain progression along a corridor creating unnecessary delays for motorists. To properly assess the feasibility of removing a roundabout and replacing it with a traffic signal, a corridor functionality analysis, traffic analysis, land impact and cost assessment would need to be completed. Staff estimate this analysis would cost a minimum of \$25K to complete as staff would engage a technical expert to complete the feasibility assessment. In terms of anticipated construction costs, a new set of signals (without any wide scale geometric modifications) is estimated at a minimum \$350K plus ongoing maintenance costs (estimated at \$5,350 per year). In addition, converting a roundabout to a signalized intersection would require geometric adjustments, drainage re-design, utility relocations (including and not limited to watermain, sanitary, underground hydro duct banks, telecommunications, and natural gas) and lighting modification. The cost of these additional modifications is difficult to estimate and would vary based on the specific intersection location and context, but a very hi-level estimate is that this would be in the range of \$2.5M-\$4M.

It is the opinion of staff, that the roundabouts located within the Town are functioning as they should and there is no need to change these devices to traffic control signals. Currently there are no plans to remove any roundabouts in the Town and replace with traffic control signals.

Included in the Town's road safety strategy communication plan is a piece to educate both motorists and pedestrians on how to properly navigate a roundabout. This is a yearly road safety campaign that has launched in the spring of 2025.

Complete a jurisdictional scan of municipalities in Ontario regarding the implementation of crossing guards for secondary schools near roundabouts:

A jurisdictional survey was conducted to determine how various municipalities handle the placement of School Crossing Guards in relation to roundabouts and secondary school students. The survey was posted on the OTC website, and the following 29 municipalities responded:



| Discussion | | | | | |
|---------------------|----------------------------|--|--|--|--|
| Municipalities | | | | | |
| City Niagara Falls | City of Hamilton | | | | |
| Town of Gravenhurst | Town of Shelburne | | | | |
| Town of Tillsonburg | Township of Springwater | | | | |
| City of Thorold | Town of East Gwillimbury | | | | |
| City of Brampton | City of Vaughan | | | | |
| Town of Caledon | City of Markham | | | | |
| City of Waterloo | Town of Halton Hills | | | | |
| Town of Fort Erie | Municipality of Clarington | | | | |
| Town of Ajax | City of Mississauga | | | | |
| Township of Scugog | City of Kingston | | | | |
| Thunder Bay | Town of New Tecumseth | | | | |
| Town of Lincoln | City of Guelph | | | | |
| Town of Orangeville | Town of Oakville | | | | |
| City of Cambridge | City of Kitchener | | | | |
| City of Windsor | | | | | |

Of the 29 survey responses received, only one municipality has crossing guards at a roundabout for secondary school students, as follows:

 City of Kitchener (Roundabout PXO - Level 2 Type D - Homer Watson Boulevard (Regional Road 28) and Block Line Road) - This location has extremely high volumes of traffic along Homer Watson Boulevard as it is a Regional Road with heavy truck volumes. The north leg of Homer Watson Boulevard has 3 entry lanes into the roundabout. The remaining legs are 2 lanes. Homer Watson Boulevard also transitions from a rural cross section to an urban cross section in this area. Staff attended the site to observe how the roundabout functioned with



crossing guards and found that the secondary school students generally seemed to obey the crossing guards. There are a total of two guards at this roundabout, both at the north leg - one guard facilitates crossings at the 3-lane entry and the other facilitates crossings at the 2-lane exit.

While not located at a roundabout, it should be noted that the Town of Caledon does provide a crossing guard at one signalized intersection for secondary school students. This signalized intersection is located at Hwy 50 & Bolton Heights Rd & Cross Country Blvd. Caledon staff have indicated that the secondary school students do not listen to the crossing guard, will cross the road on their own and are disrespectful to the guard at times.

As a result of the jurisdictional scan, the Town does not recommend guards for secondary school students. Both the Town's Crossing Guard Policy and the OTC Crossing Guard Guide indicate that crossing guards should be implemented for students in JK-6. Secondary School students are at an age where they have the knowledge to properly cross a roadway using the given traffic control devices. As per current practise, when a secondary school is located within close proximity to a multi lane roundabout and that is the designated crossing device, the PXO's will be upgraded to a Level 2 Type C with Rectangular Rapid Flashing Beacons.

Further related to crossing guards at roundabouts, of the 29 survey responses it was determined that 9 municipalities do provide crossing guards for elementary students at roundabouts. These municipalities include Towns of Caledon, Ajax, Halton Hills and Cities of Hamilton, Vaughan, Mississauga, Kingston, Guelph and Kitchener.

Staff have visited locations within the Town of Halton Hills and the City of Hamilton to observe how the roundabouts function with having one crossing guard cross two legs per roundabout location. It should be noted that these intersections are single lane roundabouts. It was observed that children at some points did not wait for the crossing guard before crossing the roadway, as they were crossing children at the other leg of the roundabout. Therefore, should crossing guards be warranted within the Town at roundabout locations for elementary school students, it is recommended that one crossing guard be placed per warranted leg of the roundabout.

Review the feasibility of assigning crossing guards to roundabouts near schools within the municipality and identify potential schools and roundabouts where crossing guards could be implemented based on current traffic and pedestrian volumes, and the warrants identified in the Town's Crossing Guard Policy, along with a proposed implementation plan for the assignment of crossing guards.



As a result of observations made in other municipalities it is recommended that crossing guards would only be implemented at the legs the warrants are fulfilled, and they would only cross one leg of the roundabout.

The following roundabout locations have been studied to determine if crossing guards are warranted:

- Gordon Krantz Avenue and Kovachik Boulevard at this time, due to low traffic and pedestrian volumes, crossing guards are not warranted along any legs of this roundabout. Staff will continue to monitor this roundabout as this area develops and pedestrian traffic patterns become more established
- Whitlock Avenue and Leger Way Two crossing guards will be implemented at this roundabout. One crossing guard will cross the South Leg and one crossing guard will cross the West Leg. These crossing guards will be placed in September of 2025 when school resumes.

Whitlock Avenue and Kennedy Circle West will be studied in the Fall of 2025 after the implementation of the PXO's at Whitlock Avenue and Hazel Way and Kennedy Circle West and Ash Gate.

At this time, the 2025 crossing guard budget can accommodate an additional two crossing guards for the period between September - December 2025. At the time of writing this report, these two crossing guards have been allocated to start in September 2025. The cost per crossing guard from September - December 2025 would be approximately \$4,500.

The Town of Milton remains committed to ensuring the safety and well being of children by implementing school crossing guards where needed, based on thorough evaluations, in line with the Town's Crossing Guard Policy.

Road Safety Initiatives

The Town continues to implement road safety initiatives throughout the year as well as providing educational awareness to secondary school students.

Since the opening of our new secondary schools, staff have made ongoing efforts to educate both students and drivers on how to use the traffic infrastructure properly. Educational efforts have included distributing PXO brochures during arrival/dismissal times at both St. Kateri Tekakwitha and Elsie MacGill Secondary Schools. To-date, staff have also set up information tables at four of the six secondary schools within the Town of Milton during lunch periods to further educate students. This education included pamphlets on correct ways to cross at a signalized intersection and PXO brochures if the secondary schools have a PXO near the school. Staff also engaged in conversation with the students about general traffic and pedestrian safety, and the student observations in this regard.

It should be noted that since the upgrades to the PXO's were completed at Louis St Laurent Avenue and Kennedy Circle (East Intersection), students have seen an improvement from motorists approaching the area with higher stopping compliance and the students are now pushing the pedestrian buttons to activate the Rectangular Rapid Flashing Beacons. Students and staff from the secondary schools have expressed gratitude to Town staff for being on site and providing in person education.



Financial Impact

Included in the 2025 operating budget is \$630,077 associated with the provision of crossing guard services. The additional crossing guards recommended within this report can be accommodated within the 2025 budget. The annualized cost of the new guards will also then be considered as part of the development of the 2026 Budget.

Respectfully submitted,

Doug Sampano Commissioner, Community Services

| For questions, please contact: | Heide Schlegl, C.E.T, MITE, Dipl.M.M. Manager Traffic | Phone: Ext. 2506 |
|--------------------------------|--|------------------|
| | Jessica van Ravens, Road Safety Specialist | Phone: Ext. 2531 |

Attachments

Appendix I - School Crossing Guard Policy

Appendix II - Roundabout Locations within School Zone Frontage

Appendix III - Pedestrian Crossover Types

Approved by CAO 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 Huron-Wendat 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.