



REPORT

TO: Mayor Bonnette and Members of Council

FROM: Matt Roj, Traffic Coordinator

DATE: October 8, 2021

REPORT NO.: TPW-2021-0034

SUBJECT: Pedestrian Crossover Installations

RECOMMENDATION:

THAT Report No. TPW-2021-0034, dated October 8, 2021, regarding the Pedestrian Crossover Installations be received;

AND FURTHER THAT the implementation of future locations of Pedestrian Crossovers Level 2 be based on the Ontario Traffic Manual Book 15 Requirements.

KEY POINTS:

The following are key points for consideration with respect to this report:

- Pedestrian Crossovers (PXOs) Level 2 have been in effect since 2016.
- There are three (3) types (B, C, and D) of PXOs Level 2, with a variation of required safety measures to be implemented depending on the type installed.
- To improve pedestrian safety and visibility of Pedestrian Crossovers (PXOs), staff have been enhancing the PXOs with rectangular flashing beacons since 2018 and in some locations beyond the required PXO standards.
- Future PXO installations will be implemented in accordance with the Ontario Traffic Manual Book 15 – Pedestrian Crossing Facilities' Selection Matrix.
- There is a demand to implement additional pedestrian crossovers on local roads to provide access to schools, parks and trails.
- The use of Pedestrian Crossovers (PXO) Level 2 Type D will improve pedestrian safety, mobility, and network connectivity.
- The lower cost of PXO Level 2 Type D will allow staff to increase the number of pedestrian crossovers implemented during a year.

- The cost to implement the PXO Level 2 Type D is accommodated within the existing approved budget.

BACKGROUND AND DISCUSSION:

On January 1, 2016, the Province approved the use of Pedestrian Crossovers (PXOs) Level 2 by municipalities through the amendment of the Highway Traffic Act's Ontario Regulation 402/15. PXOs provide pedestrians with protected crossing opportunities by requiring motorists to yield to pedestrians within the crosswalks.

“A Pedestrian Crossover means any portion of a roadway distinctly identified for a pedestrian crossing by signs on the highway and lines or other markings on the surface of the roadway as prescribed by regulations and the Highway Traffic Act.”

There are three (3) types of PXOs Level 2 that include the following details:

- Type B – Signs mounted on the side of the road, “Ladder” style crosswalks, “Yield to Pedestrians” line markings, rectangle flashing beacons actuated by pedestrian pushbuttons and overhead signs
- Type C - Signs mounted on the side of the road, “Ladder” style crosswalks, “Yield to Pedestrians” line markings and rectangle flashing beacons actuated by pedestrian pushbuttons
- Type D - Signs mounted on the side of the road, “Ladder” style crosswalks, “Yield to Pedestrians” line markings

Attachment 1 illustrates the above-noted PXO types.

In 2017, the Town implemented its initial three (3) PXOs Level 2 at the following locations:

- Mill Street East (Highway 7) and Fellows Street – Type B
- Main Street South and Church Street (Georgetown) – Type D
- 22 Side Road and Fifth Line (East) – Type D

As part of the introduction and education to the public about the new traffic control devices, staff developed PXO pamphlets, provided website and various media resources, onsite engagements, and worked with elementary schools.

Following the initial installations, staff implemented only PXOs Type B and C that include the rectangular flashing beacons. It was determined that motorists required additional time to familiarize themselves with the new traffic control devices to improve compliance. As a result, the PXO at the intersection of Main Street South and Church Street was upgraded from Type D to Type C with flashing beacons in January 2019.

Since 2018, staff have been enhancing the PXOs with rectangular flashing beacons (Type B and C) as a minimum, in some locations beyond the required standards

identified in the Ontario Traffic Manual Book 15 – Pedestrian Crossing Facilities’ Selection Matrix.

The rectangular flashing beacons provide an additional visual warning to motorists about pedestrian activity at PXO locations. Also, the pushbuttons used to activate the beacons provide the audible “Lights are Flashing” message to visually impaired persons. Both installations (Type B and C) require base-mounted aluminum poles.

The cost to implement Type B and C PXOs ranges between \$35,000 to \$55,000, depending on the road and sidewalk conditions.

At the present time, the Town has implemented 14 Level 2 PXOs across the community and retrofitted three (3) roundabouts with PXO (Type D) signs and markings.

Two (2) PXOs, at the intersections of Barber Drive and Killaloe Crescent/Smith Drive (Type B), and Mill Street West and Victoria Avenue (Type C) are under construction.

Pedestrian Crossovers Level 2 Type D

The community has a demand for additional PXOs on local roads to provide safe access to destination locations such as schools, parks and trails.

Pedestrian Crossover Level D can be implemented on most of the Town’s local streets based the existing traffic volumes compared to the Pedestrian Crossover Selection Matrix, Table 7 included in the Ontario Traffic Manual Book 15 – Pedestrian Crossing Treatments.

After five (5) years of operation, staff are of the opinion that the compliance with these traffic control devices has improved, as motorists are more familiar and aware of the requirements of the driver as it relates to PXOs.

Staff recommend the installation of the PXOs Level 2 Type D as part of the 2022 Traffic Engineering Work Plan. To improve compliance at the PXO Type D locations, staff will seasonally (April to November) install “Stop for Pedestrians within the Crosswalk” flexible bollard signs in the middle of the road.

The following PXO Type D locations are being considered as part of the 2022 Traffic Engineering Work Plan:

- 1) Moore Park Crescent and Joycelyn Crescent (Ward 3)
- 2) Meadowglen Boulevard and Herb Wild Street (Ward 3)
- 3) McNally Street and Grist Mill Drive (Ward 3)
- 4) Robinson Road between Bowman Street and Orchid Avenue (Ward 4)

Additional locations will continue to be assessed with the appropriate PXO Level 2 Type and will also be added to the 2022 Traffic Engineering workplan.

The cost of implementing a PXO Type D ranges between \$8,000 to \$15,000. All PXO locations are required to meet the Accessibility for Ontarians with Disabilities Act (AODA) and proper illumination levels, which sometimes require additional sidewalk improvements and installation of new streetlights.

The proposed PXOs Type D will improve pedestrian safety and network connectivity within the neighbourhoods by providing the right-of-way to pedestrians accessing parks, schools, trails, and destination areas. Due to the reduced cost of the PXO Level 2 Type D, staff will be able to implement additional PXOs on an annual basis.

Staff recommend that future PXO installations be consistent with the Pedestrian Crossover Screening Matrix that is included in the OTM Book 7 – Pedestrian Crossing Facilities. Staff will continue to assess each location on an individual basis and may enhance the PXO Level 2 Type based on site specific safety considerations and engineering judgement.

STRATEGIC PLAN ALIGNMENT:

This report aligns to the Town's Strategic plan recognizing the value to foster a healthy community that provides a clean environment and range of economic and social opportunities to ensure a superior quality of life in our community.

This report also identifies transportation as one of the Town's Strategic priorities.

RELATIONSHIP TO CLIMATE CHANGE:

This report impacts and/or helps address climate change and the Town's Net Zero target through climate mitigation.

PUBLIC ENGAGEMENT:

Public Engagement will be required; consultation with Communications staff to follow.

INTERNAL CONSULTATION:

The report was discussed internally within the Transportation and Public Works Department.

FINANCIAL IMPLICATIONS:

This report will be funded through an existing approved budget source.

The cost to implement the various PXO's Level 2 Type B, C, D ranges from \$8,000 to \$55,000 depending on the roadway, sidewalk conditions and streetlighting requirements.

All future locations are included in the approved capital budget on an annual basis.

Reviewed and approved by,

Maureen Van Ravens, Director of Transportation

Bill Andrews, Commissioner of Transportation and Public Works

Chris Mills, Acting Chief Administrative Officer