



**The Corporation of the
City of Sault Ste. Marie**

COUNCIL REPORT

September 22, 2025

TO: Mayor Matthew Shoemaker and Members of City Council
AUTHOR: Maggie McAuley, Manager of Design and Transportation
Engineering
DEPARTMENT: Public Works and Engineering Services
RE: Pedestrian Crossovers

Purpose

The purpose of this report is to address the Council resolution regarding pedestrian crossovers.

Background

On August 11, 2025, Council passed the following resolution:

Whereas pedestrian crosswalks have been installed throughout the community, commencing with the first ones being installed in 2019; and

Whereas in certain instances, flashing lights that identify a pedestrian crosswalk are installed on the roadside pole, and in other instances, are installed both on the roadside pole, and the overhead arm above the traffic lane; and

Whereas the Ontario Traffic Manual indicates the standard for pedestrian crossovers in Ontario is a flashing light on the roadside pole; and

Whereas it is an added, but not required, safety precaution to have a flashing light also installed on the overhead arm above the traffic lane;

Now Therefore Be It Resolved that Council of the City of Sault Ste. Marie request staff to review and report as to the feasibility of all pedestrian crossovers installed going forward having both flashing lights on the roadside pole, and flashing lights on the arm above the traffic lane; and

Further regarding the integration of overhead flashing lights into existing pedestrian crossovers as funds are available within existing operational budgets.

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A pedestrian crossover (PXO) is a type of crossing that requires drivers and cyclists to stop for pedestrians that are intending to cross the road. All PXOs have specific signs and pavement markings, while some have flashing lights and overhead signs. A crosswalk is a marked path typically at an intersection governed by pedestrian signals.

There are four types of PXO described in the Ontario Traffic Manual.

Level 1 Type A PXO are the traditional crossing with the overhead flashing beacons and push buttons that are recommended for high speed, high volume multi lane roads. This type of PXO has been replaced in many municipalities with mid-block pedestrian traffic signals or pedestrian intersection traffic signals due to concerns with drivers and pedestrians not understanding how to use them.

There are three types of Level 2 PXOs that are used in Ontario: Level 2 Type D, C, and B:

- Type D PXOs use the ladder crossing pavement markings, a yield to pedestrian line, and signage.
- Type C PXOs have all the same features as Type D, but also include the rapid flasher beacons and accessible pedestrian signal.
- Type B PXOs have all the features of Type C with the addition of the overhead sign.

Appendix A shows the typical PXO layouts and photos of select PXOs in the community. Appendix A also shows the typical layout of PXOs at a mid-block crossing.

PXOs are regulated by the Highway Traffic Act. The duties of a driver when a pedestrian is crossing on the roadway are to stop before entering the crossover; to not pass another vehicle already stopped at the crossover, and to not proceed into the crossover until the pedestrian is no longer in the roadway.

The duties of a pedestrian are to not leave the curb or place of safety at a pedestrian crossover and walk, run or move into the path of a vehicle that is so close that it is impracticable for the driver of the vehicle to stop. It takes compliance from both pedestrians and drivers for PXOs to function properly.

It is important to note that drivers are required to stop when there is a pedestrian showing an intent to cross due to the presence of the “stop for pedestrians” sign and not because the flashing beacons have been activated. The flashing beacons are to draw extra attention to a PXO only and are not intended to provide any other direction to the driver or pedestrian. A pedestrian can still use a PXO in accordance with their duties without activating the flashing beacons.

There are currently 12 PXOs installed throughout the community. Eleven of these are Level 2, Type B with rapid flashing beacons and the overhead sign, and one is a Level 2, Type C with only the rapid flashing beacons and no overhead sign.

Of the 12 PXOs installed, the City has used two different suppliers for the equipment: nine from the first supplier and three from the second supplier. The City switched suppliers because the first supplier's equipment is obsolete and it is difficult to repair. There were challenges with the equipment from the first supplier which includes the size of battery, the charging system, an increase in downtime, and susceptibility to vandalism and theft. The equipment from the second supplier is more economical, has a better battery and charging system, good customer support, and is manufactured in Canada. The second supplier has said that the equipment cannot support additional rapid flashing beacons. City staff have not completed a thorough review to see if modifications can be made.

The City has undertaken an extensive education campaign to educate the community about how to use PXOs. This includes a dedicated page on the City's website (www.saultstemarie.ca/PXO), multiple instructional videos, radio ads, social media posts and reels, media interviews, news releases with reminders, and a news release when a new PXO is installed.

Analysis

The PXO at Churchill Boulevard and Queen Street was previously modified to include a rapid flashing beacon on the overhead sign. This was a modification to the standard PXO layout as defined by the OTM and was recommended through a traffic safety analysis to address the non-standard pole location. Due to underground infrastructure, the north side pole was unable to be installed at the normal distance from the curb. Recently, rapid flashing beacons were added to the PXO at Pine Street and Pleasant Drive. A sketch showing the modified Level 2, Type B PXO with a rapid flashing beacon on the overhead sign is included in Appendix A.

Adding the additional rapid flashing beacon to the overhead sign would bring additional attention to a PXO when it is activated; however, this can only be completed at Level 2 Type B PXO that have the equipment from the first supplier which does not achieve Council's goal of uniformity across all PXOs. According to the OTM, if additional safety measures are required, a PXO should be replaced with a pedestrian traffic signal which provides the enhanced safety for pedestrians.

There is also some concern that local drivers are being trained to only respond to the flashing beacons and not respond to the presence of a pedestrian or obey the regulatory signage. Level 2, Type D PXOs, without flashing beacons and overhead signs, are well-used in other areas of the province, including low-volume roads, roundabouts, and right-turn channelization. While Type D PXOs are not currently in use in the community, they can be a useful tool in certain situations where flashing beacons are not allowed or warranted. If Level 2 Type D PXOs are

ever implemented, drivers will need to recognize the signage for PXO and obey without the presence of flashing beacons. Consistency and predictability of PXO features make them safer in the community and across the province.

The following steps are recommended to address the installation of an additional flashing beacon on the overhead sign at the existing PXO locations:

- Through data collection, staff undertake PXO compliance studies to prioritize locations that could benefit from additional flashing beacons, if supported by existing equipment.
- Install additional flashing beacons at locations recommended by the Manager of Design and Transportation Engineering.
- For future PXO installations, select equipment suppliers that eliminate or reduce the challenges experienced to date and that can support the additional flashing beacons. If no comparable options can be found, continue with the use of the current supplier.
- Continue with education campaigns.

Financial Implications

While there are no immediate financial implications attached to this report, the cost to add the flashing beacons ranges from \$2,000 to \$8,000 depending on the setup. The recent costs to replace the equipment at an existing PXO, if necessary, is approximately \$15,000. These additional costs can be accommodated within existing and future operations budgets.

Strategic Plan / Policy Impact / Climate Impact

Traffic related recommendations are related to the infrastructure and quality of life focus area of the Strategic Plan.

Recommendation

It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Design and Transportation Engineering dated September 22, 2025 concerning Pedestrian Crossovers be received and that staff perform PXO compliance studies to develop a list of priority locations that may be enhanced through the additional flashing beacons installed on the overhead sign.

Respectfully submitted,

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