

Pedestrian Crossing Protection - Lawrence Avenue East

Date: June 22, 2026

To: Scarborough Community Council

From: Director, Enforcement and Street Management, Transportation Services

Wards: Ward 25, Scarborough-Rouge Park

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Lawrence Avenue East, City Council approval of this report is required.

Transportation Services is requesting approval to install pedestrian crossovers at the following locations:

- Lawrence Avenue East and Portwine Drive (west intersection)
- Lawrence Avenue East and a point 280 metres west of Starspray Boulevard

Based on the assessments undertaken, the installation of pedestrian crossovers at these locations are recommended and should enhance safety for all road users.

RECOMMENDATIONS

The Director, Enforcement and Street Management, Transportation Services recommends that:

1. City Council authorize the installation of a pedestrian crossover at the intersection of Lawrence Avenue East and Portwine Drive (west intersection).
2. City Council authorize the installation of a pedestrian crossover at Lawrence Avenue East and a point 280 metres west of Starspray Boulevard.

FINANCIAL IMPACT

The estimated cost for installing pedestrian crossovers at the subject locations is as follows:

- \$130,000.00 at Lawrence Avenue East and Portwine Drive (west intersection)
- \$130,000.00 at Lawrence Avenue East and a point 280 metres west of Starspray Boulevard

Funding would be subject to availability and competing priorities within the Transportation Services 2026 Capital Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services staff were requested by a local resident to review the need for pedestrian crossing protection at the intersection of Lawrence Avenue East and Portwine Drive (west intersection). As part of the investigation, staff expanded the review to include a second location at Lawrence Avenue East, approximately 280 metres west of Starspray Boulevard, as it exhibits similar environmental and contextual characteristics to the first location identified by the resident.

The two location reviews are summarized below.

Existing Conditions

Lawrence Avenue East, between East Avenue and Starspray Boulevard, is characterized by the following conditions:

- It is a two-lane, east-west, collector roadway
- It operates two-way traffic on a pavement width of approximately 9.5 metres
- The daily two-way traffic volume is approximately 3,200 vehicles
- The speed limit is 40 km/h
- Heavy trucks are permitted at all times
- There is TTC service provided by the 54 Lawrence East and 954 Lawrence East Express bus routes
- There is a sidewalk present on the north side only
- There are bike lanes present on both sides of the street

A map of the area is included in Attachment 3.

A. Lawrence Avenue East and Portwine Drive (west intersection)

Portwine Drive is characterized by the following conditions

- It is a two-lane, north-south roadway with a pending road classification
- It operates two-way traffic on a pavement width of approximately 8 metres
- The daily two-way traffic volume is approximately 200 vehicles
- The speed limit is 50 km/h

- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks present on both sides of the street

Lawrence Avenue East and Portwine Drive (west intersection) intersect to form a "T" type of intersection, with right-of-way controlled by a stop sign for southbound traffic on Portwine Drive, while Lawrence Avenue East is uncontrolled free-flow.

The adjacent land use in this area is generally comprised of single-family residential dwellings, railway tracks and a waterfront trail. Along Lawrence Avenue East, adjacent traffic controls are located approximately 370 metres to the west, at East Avenue in the form of traffic control signals, and approximately 950 metres to the east at Rouge Hills Drive, in the form of all-way stop sign control. TTC stops are located at the southeast corner of the intersection as well as at the north side of Lawrence Avenue East, approximately 45 metres east of Portwine Drive (west intersection).

Pedestrian Crossover (PXO)

To determine the need for a PXO on Lawrence Avenue East and Portwine Drive (west intersection), pedestrian data was analysed against the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria include two main factors: the volume of vehicles and pedestrians and pedestrian delay to cross traffic. Based on the traffic volume on this section of Lawrence Avenue East, the warrant requires a minimum of 969 pedestrians crossing over eight hours. Also, based on the pedestrian crossing volume, at least 75 pedestrians must be delayed more than 10 seconds.

Eight-hour pedestrian volume and delay studies were conducted on Lawrence Avenue East and Portwine Drive (west intersection) on July 22, 2025. The studies recorded the total volume and delays of pedestrians crossing Lawrence Avenue East at this intersection. Seniors, unassisted children and people with disabilities who are observed crossing are given a higher weighting by a factor of two. The adjusted volume of pedestrians observed crossing was seven; of these, one experienced a delay greater than 10 seconds. No individual with disabilities, unassisted children or seniors were observed.

The compliance level of the study results in relation to the warrant criteria at the intersection is shown in Table 1 below.

Table 1: Pedestrian Crossover Warrant Criteria and Compliance on Lawrence Avenue East at Portwine Drive (west intersection)

Pedestrian Volume	1 percent
Pedestrian Delay	1 percent

In order to meet the warrant criteria, 100 percent compliance is required in both categories. Based on the results of the study, a PXO is not technically justified, as this intersection does not meet the minimum requirements; both the pedestrian volumes and delays are below the required thresholds.

Collision statistics provided by the Toronto Police Service for the three-year period ending April 30, 2026, indicate that one collision occurred at Lawrence Avenue East and Portwine Drive (west intersection) that involved a crossing pedestrian.

An environmental safety audit was completed to ensure that the potential installation of a PXO would be appropriate at this location. Based on the evaluation, a PXO would be a suitable type of pedestrian crossing protection at this location. Details of the evaluation are included in Attachment 1.

Traffic Control Signals

The intersection of Lawrence Avenue East and Portwine Drive (west intersection) was also reviewed for traffic control signals. Staff rely on the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria includes factors such as volume of vehicles and pedestrians, delay to cross traffic, and collision history. In addition to these technical justifications, staff consider an environmental checklist which includes consideration of road width, posted speed limit, operating speeds, adjacent land uses, pedestrian desire lines and demographics, presence of transit stops, sight lines, and distance between existing crossing opportunities.

The "Collision hazard" criterion is based on the number of collisions potentially preventable by the installation of traffic control signals. The collision history provided by the Toronto Police Service for the three-year period ending April 30, 2026, was reviewed for collisions that were potentially preventable by the installation of traffic control signals. The review disclosed that there was one collision on Lawrence Avenue East and Portwine Drive (west intersection) that was potentially preventable by the installation of traffic control signals. This collision involved a pedestrian.

As part of the investigation, staff conducted vehicle and pedestrian counts on July 22, 2025, at the intersection of Lawrence Avenue East and Portwine Drive (west intersection). The results of the counts and collision hazard are summarized in Table 2.

Table 2: Warrant Criteria and Compliance on Lawrence Avenue East and Portwine Drive (west intersection)

Justification	Compliance level
Minimum vehicular volume	1%
Delay to cross traffic (pedestrians and vehicles)	1%
Collision hazard	7%

To meet the justification criteria for the installation of traffic control signals, one of the justifications must be 100 percent satisfied or both the minimum vehicular volume and delay to cross traffic justifications must be at least 80 percent satisfied. Based on the results in Table 2, the numerical warrants for the installation of traffic control signals are not satisfied at the intersection of Lawrence Avenue East and Portwine Drive (west intersection).

Notwithstanding the numeric warrants not being met, in view of the potential safety and connectivity concerns in the subject section of Lawrence Avenue East and the long spacing between existing controlled crossings (~ 1.3 km), Transportation Services further considered the installation of pedestrian crossover at Lawrence Avenue East and Portwine Drive (west intersection) for the following reasons:

- the long spacing between pedestrian crossing protection on Lawrence Avenue East
- the presence of transit stops in both directions on Lawrence Avenue East at Portwine Drive (west intersection) that attract pedestrians to cross the street
- access to the pedestrian path at Portwine Drive that connects to the northern neighbourhood streets such as Maberley Crescent and Wheeling Drive
- the presence of bike lanes on both sides of Lawrence Avenue East, which create additional conflict points
- the operating speed of 55 km/h on Lawrence Avenue East that may discourage pedestrians from crossing

In considering the above reasons, Transportation Services recommends the installation of a pedestrian crossover at Lawrence Avenue East and Portwine Drive (west intersection) as it will provide enhanced safety for all road users.

B. Lawrence Avenue East and a point 280 metres west of Starspray Boulevard

Lawrence Avenue East and a point 280 metres west of Starspray Boulevard is a mid-block location. The adjacent land use in this area is generally comprised of single-family residential dwellings, railway tracks and waterfront trail. Along Lawrence Avenue East, adjacent traffic controls are located approximately 835 metres to the west, at East Avenue in the form of traffic control signals, and approximately 485 metres to the east, at Rouge Hills Drive in the form of all-way stop sign control. TTC stops are located at the north and south sides of Lawrence Avenue East in the subject area.

Pedestrian Crossover (PXO)

To determine the need for a PXO on Lawrence Avenue East and a point 280 metres west of Starspray Boulevard, pedestrian data was analysed against the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria include two main factors: the volume of vehicles and pedestrians and pedestrian delay to cross traffic. Based on the traffic volume on this section of Lawrence Avenue East, the warrant requires a minimum of 969 pedestrians crossing over eight hours. Also, based on the pedestrian crossing volume, at least 75 pedestrians must be delayed more than 10 seconds.

Eight-hour pedestrian volume and delay studies were conducted on Lawrence Avenue East and a point 280 metres west of Starspray Boulevard on May 20, 2026. The studies recorded the total volume and delays of pedestrians crossing Lawrence Avenue East at this mid-block location. Seniors, unassisted children and people with disabilities who are observed crossing are given a higher weighting by a factor of two. The adjusted volume of pedestrians observed crossing was 16; of these, none experienced a delay greater than 10 seconds. No individual with disabilities, unassisted children or seniors were observed.

The compliance level of the study results in relation to the warrant criteria at the intersection is shown in Table 3 below.

Table 3: Pedestrian Crossover Warrant Criteria and Compliance on Lawrence Avenue East at a point 280 metres west of Starspray Boulevard

Pedestrian Volume	2 percent
Pedestrian Delay	0 percent

In order to meet the warrant criteria, 100 percent compliance is required in both categories. Based on the results of the study, a PXO is not technically justified, as this intersection does not meet the minimum requirements; both the pedestrian volumes and delays are below the required thresholds.

Collision statistics provided by the Toronto Police Service for the three-year period ending April 30, 2026, did not disclose any collisions in the area of Lawrence Avenue East and a point 280 metres west of Starspray Boulevard that involved crossing pedestrians.

An environmental safety audit was completed to ensure that the potential installation of a PXO would be appropriate at this location. Based on the evaluation, a PXO would be a suitable type of pedestrian crossing protection at this location. Details of the evaluation are included in Attachment 2.

Notwithstanding the numeric warrants not being met, in view of the potential safety and connectivity concerns in the subject section of Lawrence Avenue East and the long spacing between existing controlled crossings (~ 1.3 km), Transportation Services further considered the installation of pedestrian crossover at Lawrence Avenue East and a point 280 metres west of Starspray Boulevard for the following reasons:

- the long spacing between pedestrian crossing protection on Lawrence Avenue East
- the presence of transit stops in both directions on Lawrence Avenue East at the subject location that attract pedestrians to cross the street
- access to the pedestrian path at north side of Lawrence Avenue East that connects to the northern neighbourhood streets such as Ridgewood Road and Greybeaver Trail

- the presence of bike lanes on both sides of Lawrence Avenue East, which create additional conflict points
- the operating speed of 55 km/h that may discourage pedestrians from crossing

In considering the above reasons, Transportation Services recommends the installation of a pedestrian crossover at Lawrence Avenue East and a point 280 metres west of Starspray Boulevard as it will provide enhanced safety for all road users.

The TTC has been consulted and concurs with these findings.

The Ward Councillor has been advised of the recommendations in this report.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Environmental Safety Audit - PXO - Lawrence Avenue East and Portwine Drive (west intersection)

Attachment 2: Environmental Safety Audit - PXO - Lawrence Avenue East and a point 280 metres west of Starspray Boulevard

Attachment 3: Map - Pedestrian Crossover - Lawrence Avenue East and Portwind Drive (west intersection), Lawrence Avenue East and a Point Approximately 280 metres west of Starspray Boulevard

Attachment 1: Environmental Safety Audit - PXO - Lawrence Avenue East and Portwine Drive (west intersection)

Standard	Comments	Standard Met/Not Met
Vehicle operating speed less than 60 km/h	The posted speed limit on Lawrence Avenue East is 40 km/h and the operating speed is 55 km/h	Met
Not more than four lanes wide on a two-way street or more than three lanes wide on a one-way street	Lawrence Avenue East operates with one lane in each direction	Met
Traffic volume not more than 35,000 vehicles per day	Lawrence Avenue East carries approximately 3,200 vehicles per day	Met
No significant volume of turning movements	The volume of traffic turning to/from Lawrence Avenue East is low (approx. 110 vehicles over busiest eight hours)	Met
No visibility problems exist for either pedestrians or motorists	No vertical or horizontal curves.	Met
No loading zones (including TTC) in the immediate area	There is a TTC stop located at the south side of Lawrence Avenue East immediately east of Portwine Drive (west intersection)	Not Met
No driveways or entrances nearby	No driveways in the vicinity.	Met
Spacing is not less than 200 metres to another pedestrian crossover or traffic control signal	East Avenue (TCS) - 370 metres west Rouge Hills Drive (AWS) - 950 metres east	Met

Attachment 2: Environmental Safety Audit - PXO - Lawrence Avenue East and a Point 280 Metres West of Starspray Boulevard

Standard	Comments	Standard Met/Not Met
Vehicle operating speed less than 60 km/h	The posted speed limit on Lawrence Avenue East is 40 km/h and the operating speed is 55 km/h	Met
Not more than four lanes wide on a two-way street or more than three lanes wide on a one-way street	Lawrence Avenue East operates with one lane in each direction	Met
Traffic volume not more than 35,000 vehicles per day	Lawrence Avenue East carries approximately 3,200 vehicles per day	Met
No significant volume of turning movements	This is a mid-block location	Met
No visibility problems exist for either pedestrians or motorists	No vertical or horizontal curves	Met
No loading zones (including TTC) in the immediate area	There are TTC stops located on both side of Lawrence Avenue East in the immediate of subject area	Not Met
No driveways or entrances nearby	No driveways in the vicinity	Met
Spacing is not less than 200 metres to another pedestrian crossover or traffic control signal	East Avenue (TCS) - 835 metres west Rouge Hills Drive (AWS) - 485 metres east	Met

Attachment 3: Map - Pedestrian Crossover - Lawrence Avenue East and Portwind Drive (west intersection), Lawrence Avenue East and a Point Approximately 280 metres west of Strarspray Boulevard

