

Pedestrian Crossing Protection - Renforth Drive and Toledo Road

Date: October 26, 2023

To: Etobicoke York Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 2 - Etobicoke Centre

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

Transportation Services has reviewed the need for pedestrian crossing protection at the intersection of Renforth Drive and Toledo Road. Based on the assessment undertaken, Transportation Services is recommending the installation of a pedestrian crossover (PXO) at the intersection of Renforth Drive and Toledo Road. The PXO will provide enhanced safety for vulnerable road users.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. Etobicoke York Community Council authorize the installation of a pedestrian crossover on Renforth Drive, immediately north of Toledo Road.
2. Subject to approval of Recommendation 1, Etobicoke York Community Council authorize the removal of the city owned tree located in the boulevard, in front of 295 Renforth Drive.

FINANCIAL IMPACT

The estimated cost for installing a PXO at Renforth Drive and Toledo Road is \$90,000.00. Funding would be subject to availability and competing priorities within the Transportation Services 2024 Capital Budget.

DECISION HISTORY

Etobicoke York Community Council at its meeting on June 27, 2022, adopted Item EY33.55 and, in so doing, directed Transportation Services to report back to the next Etobicoke York Community Council meeting on the suitability of implementing a Level 2 pedestrian crossover on Renforth Drive at Toledo Road.

<https://secure.toronto.ca/council/agenda-item.do?item=2022.EY33.55>

COMMENTS

The Etobicoke York Community Council requested Transportation Services staff, to review the suitability of a Level 2 PXO at the intersection of Renforth Drive and Toledo Road. This request is to address the long distance between protected pedestrian crossings on Renforth Drive, which is approximately 900 metres, and enhance safety for pedestrians.

Currently, the Level 2 PXOs that are in use are still in study through the pilot and the criteria is still being developed. Based on the work completed to date it is anticipated that the criteria to consider a Level 2 PXO will restrict use to roadways with operating speeds of 50km/h or less. Given the current operating speed is 50km/h on Renforth Avenue, a Level 2 PXO would not be suitable at this location. As such, staff evaluated the suitability of a Level 1 PXO.

Existing Conditions

Renforth Drive is characterized by the following conditions:

- It is a two-lane, north/south, collector roadway
- It operates two-way traffic on a pavement width of approximately 12 metres
- The daily two-way traffic volume is approximately 5,400 vehicles
- The speed limit is 50 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks located on both sides of the street
- There are bike lanes present for both directions on Renforth Drive

Toledo Road is characterized by the following conditions:

- It is a two-lane, east/west, local roadway
- It operates two-way traffic on a pavement width of approximately 8.5 metres
- The daily two-way traffic volume is approximately 2,600 vehicles
- The speed limit is 40 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks located on both sides of the street

North/south traffic on Renforth Drive is free-flow and eastbound traffic on Toledo Road is stop-controlled.

The adjacent land use in this area is residential. Bloordale Middle School is located on the north side of Toledo Road, 50 metres west of the intersection of Renforth Drive.

The closest adjacent traffic controls are located approximately 400 metres to the south at Bridgetown Drive in the form of a PXO and approximately 500 metres to the north at Burnhamthorpe Road in the form of traffic control signals.

A map of the area is shown in Attachment 2.

Transportation Services has reviewed the need for a PXO at this location to determine if this device should be recommended as an appropriate pedestrian crossing protection.

Pedestrian Crossover (PXO)

To determine the need for a PXO at Renforth Drive and Toledo Road, staff rely on the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria includes two main factors: the volume of vehicles and pedestrians; and pedestrian delay to cross traffic. Based on the traffic volume on Renforth Drive, the warrants require a minimum of 250 pedestrians crossing over eight hours. Also, based on the pedestrian crossing volume, at least 130 pedestrians must be delayed more than 10 seconds.

An eight-hour pedestrian volume and delay study was conducted on April 26, 2023, which recorded the total volume and delays of pedestrians crossing at Renforth Drive and Toledo Road. Seniors, unassisted children and people with disabilities that are observed crossing are given a higher weighting by a factor of two. The adjusted volume of pedestrians observed crossing was 113; of these, 60 experienced a delay greater than 10 seconds. However, in order to calculate the Pedestrian Delay portion of the warrant, there must be a minimum of 200 crossings. The compliance level of the study results in relation to the warrant criteria is shown in Table 1 below.

Table 1: Pedestrian Crossover Warrant Criteria and Compliance at Renforth Drive and Toledo Road

Justification	Compliance
Pedestrian Volume	45 percent
Pedestrian Delay	N/A

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 both the pedestrian volume and delays fail to meet the minimum requirements.

Staff also reviewed the collision history at this location. Collision statistics provided by the Toronto Police Service for the three-year period ending June 30, 2023, disclosed no reported collisions at the area of Renforth Drive and Toledo Road that involved crossing pedestrians.

In addition to the technical criteria, consideration of the surrounding area is given and in some cases engineering judgement may be applied to recommend a PXO even if the number of pedestrians do not meet the threshold of the technical warrants. Due to the spacing between controlled crossings, Transportation Services is recommending the installation of a PXO at Renforth Drive and Toledo Road.

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

Other Considerations

It should also be noted that the installation of a PXO at Renforth Drive and Toledo Road will result in the following impacts:

- There is potential for an increase in delays to vehicle volume on Renforth Drive.

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

CONTACT

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SIGNATURE

Roger Browne, M.A.Sc., P. Eng.
Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Environmental Safety Audit - PXO - Renforth Drive and Toledo Road
Attachment 2: Map - PXO - Renforth Drive and Toledo Road

Attachment 1: Environmental Safety Audit - PXO - Renforth Drive and Toledo Road

Standard	Comments	Standard Met/Not Met
Vehicle operating speed less than 60 km/h	The operating speed on Renforth Drive is 57 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	Renforth Drive operates with one vehicle lane in each direction and bike lanes for both directions.	Met
Traffic volume not more than 35,000 vehicles per day	Renforth Drive carries approximately 5,400 vehicles per day.	Met
No significant volume of turning movements	The volume of traffic turning to/from Renforth Drive is moderate (approx. 768 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 are no TTC stops located near Renforth Drive and Toledo Road	Met
No driveways or entrances nearby	Residential driveways are located within the vicinity of Renforth Drive and Toledo Road.	Not Met
Spacing is not less than 200 metres to another pedestrian crossover or traffic control signal	Burnhamthorpe Road (TCS) - 500 metres north Bridgetown Drive (PXO) - 400 metres	Met

Attachment 2: Map - PXO - Renforth Drive and Toledo Road

