

Pedestrian Crossing Protection - Gilder Drive

Date: October 2, 2023

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 21, Scarborough 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 on Gilder Drive, east of Midland Avenue. Based on the assessment undertaken, Transportation Services is recommending the installation of a pedestrian crossover (PXO) on Gilder Drive. The proposed PXO will provide enhanced safety for vulnerable road users crossing at this location, which include an elementary school and a park among the adjacent land uses.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. Scarborough Community Council authorize the installation of a pedestrian crossover on Gilder Drive at a point 324 metres east of Midland Avenue.

FINANCIAL IMPACT

The estimated cost for installing a PXO is \$120,000.00. Funding would be subject to availability and competing priorities within the Transportation Services 2024 Capital Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

In response to a request from an area resident, Transportation Services staff reviewed the need to install pedestrian crossing protection on Gilder Drive, east of Midland Avenue. Concerns were reported for pedestrian crossing safety as the existing painted, but uncontrolled, crossing provides access to a number of pedestrian generators, including a nearby elementary school and park.

Existing Conditions

Gilder Drive is characterized by the following conditions:

- The subject segment is an 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 about 1,700 vehicles
- The speed limit will be reduced to 30 km/h from 40 km/h in the future, as per SC24.15 - Vision Zero Road Safety Plan Speed Limit Reductions to 30 km/h on Local Roads and Public Lanes - Scarborough Area (Ward 21 and Ward 23)
- Heavy trucks are prohibited at all times
- There is no Toronto Transit Commission (TTC) services provided on Gilder Drive
- There are sidewalks located on both sides of the street

The adjacent land use in this area is generally multi-family residential, with pedestrian generators including immediate access to a pedestrian path, Glen Ravine Park and Glen Ravine Junior Public School on the north side of the existing crossing.

Currently, there are crossing lines painted on Gilder Drive, approximately 324 metres east of Midland Avenue. These crossing lines connect the sidewalk on the south side of the street to the sidewalk and noted pedestrian path on the north side of the street that leads to the school and park. Curb depressions are provided on both sides of the street. As per provincial guidelines, this type of painted pedestrian crossing is not recommended without a crossing guard or other traffic control device. Currently, there is no crossing guard stationed or plans to have one deployed at this location.

A map of the area is shown in Attachment 2.

Pedestrian Crossover (PXO)

To determine the need for a PXO, staff assess crossing volumes against justification criteria outlined in the Ontario Traffic Manual (OTM) Book 12, contextual consideration and collision history.

OTM Book 12 Analysis

The existing justification criteria include two main factors: the volume of vehicles and pedestrians and pedestrian delay to cross traffic. The warrants require a minimum of 1,500 vehicles over eight hours. Depending on vehicular volumes, the warrant requires a certain amount of pedestrians crossing over eight hours and being delayed more than ten seconds.

An eight-hour pedestrian delay and classification study was conducted at the existing painted Gilder Drive crossing on September 13, 2023, where pedestrians crossing Gilder Drive were observed. The number of pedestrian crossings, the classification of the pedestrians and whether the pedestrians were delayed longer than 10 seconds were recorded during the study. Seniors, unassisted children and people with disabilities that are observed crossing are given a higher weighting by an adjustment factor of two. The adjusted volume of pedestrians observed crossing was 170; of these, 9 experienced a delay greater than 10 seconds. Of the 170 pedestrians, 36 (18 unadjusted) crossing pedestrians were classified as unassisted children and 10 (5 unadjusted) were classified as senior citizens. The compliance level of the study results in relation to existing warrant criteria is shown in Table 1 below.

Table 1: Pedestrian Crossover Warrant Criteria and Compliance on Gilder Drive

Justification	Compliance
Pedestrian Volume	0 percent
Pedestrian Delay	0 percent

In order to meet the technical warrant criteria, 100 percent compliance is required in both categories. Due to vehicular volumes being below the warrant requirements (1,500 vehicles over eight hours), the pedestrian justification criteria is not defined and produced 0 percent compliance results. Based on technical warrant analysis, a PXO is not technically justified.

In addition to the technical criteria, consideration is given to engineering judgement in relation to context and collision history may be considered to recommend a PXO if the number of pedestrians does not meet the threshold of the technical warrants.

Collision History

Staff also reviewed the collision history at this location. Collision statistics provided by the Toronto Police Service for the three-year period ending August 31, 2023, disclosed that zero collisions had occurred within the subject segment of Gilder Drive.

Contextual Consideration and Environmental Audit

The surrounding area provides contextual considerations that support a controlled crossing. Specifically, the following considerations support installing pedestrian crossing protection:

- Immediate access to the pedestrian path on the north side of Gilder Drive
- Pedestrian desire lines between south side of Gilder Drive and sites south along the pedestrian path (Glen Ravine Park and Glen Ravine Junior Public School)
- Notable volumes of vulnerable pedestrians, most notably unassisted children

Environmental safety characteristics were also evaluated to ensure that the 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.

Although the technical warrants were not fully met, there is a significant number of pedestrians crossing at this location. Based on the existing volumes and the above noted contextual considerations, which include the network connectivity and presence of vulnerable road users, Transportation Services recommends the designation of this crossing through the approval of a PXO.

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

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Environmental Safety Audit - PXO - Gilder Drive
Attachment 2: Map - Pedestrian Crossover - 51 Gilder Drive

Attachment 1: Environmental Safety Audit - PXO - Gilder Drive

Standard	Comments	Standard Met/Not Met
Vehicle operating speed less than 60 km/h	The current speed limit on Gilder Drive is 40 km/h (will be 30 km/h posted in near future).	Met
Not more than four lanes wide on a two-way street or more than three lanes wide on a one-way street	Gilder Drive operates with one lane in each direction.	Met
Traffic volume not more than 35,000 vehicles per day	Gilder Dr carries approximately 2,300 vehicles per day.	Met
No significant volume of turning movements	Location is midblock, therefore no intersection turning movements.	Met
No visibility problems exist for either pedestrians or motorists	There are no visibility concerns along this segment of Gilder Dr.	Met
No loading zones (including TTC) in the immediate area	No loading zones are present within immediate area.	Met
No driveways or entrances nearby	There are no driveways or entrances nearby.	Met
Spacing is not less than 200 metres to another pedestrian crossover or traffic control signal	Midland Avenue (traffic control signals) - 324 metres west Eglinton Avenue East (traffic control signals) - 220 metres east/south	Met

Attachment 2: Map - Pedestrian Crossover - 51 Gilder Drive

