

Pedestrian Crossing Protection - Coronation Drive

Date: October 2, 2023

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 24, Scarborough-Guildwood

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 Coronation Drive, east of Galloway Road. Based on the assessment undertaken, Transportation Services is recommending the installation of a pedestrian crossover (PXO) on Coronation Drive. The proposed PXO will provide enhanced safety for vulnerable road users crossing the street and complete a connection of controlled crossings for area pedestrians destined to/from the park and an elementary school on the south side of Coronation Drive.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. Scarborough Community Council authorize the installation of a pedestrian crossover on Coronation Drive at a point 115 metres east of Galloway Road.

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 Coronation Drive, east of Galloway Road. 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

Coronation 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 8.2 metres
- The daily two-way traffic volume is about 2,300 vehicles
- The speed limit will be reduced to 30 km/h from 50 km/h in the future, as per SC32.11 - Vision Zero Road Safety Plan Speed Limit Reductions to 30 kilometres per hour on Local Roads and Public Lanes - Scarborough Area (Ward 20 and Ward 24)
- Heavy trucks are prohibited at all times
- There is no Toronto Transit Commission (TTC) service provided on Coronation Drive
- There are sidewalks located on the north side of the street

The adjacent land use in this area is generally residential, with pedestrian generators including immediate access to a pedestrian path, Eastview Park, Eastview Public School and Eastside Child Care Centre.

Currently, there are crossing lines painted on Coronation Drive, approximately 115 metres east of Galloway Road. These crossing lines connect the sidewalk on the north side of the street to the noted pedestrian path on the south 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.

As there is no sidewalk on the south side of Coronation Drive, all pedestrians approaching from the east and west must cross Coronation Drive to access the pedestrian path. The adjacent controlled crossings on the road network are as follows:

- Pedestrians approaching from the east can cross Poplar Road with a PXO that is located immediately north of Coronation Drive
- Pedestrians approaching from the west cross can Galloway Road with a PXO that is located immediately north of Coronation Drive

A map of the area is shown in Attachment 2.

Pedestrian Crossover (PXO)

To determine the need for a PXO, staff assesses crossing volumes and delays 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 pedestrian, 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 observation and classification study was conducted at the existing painted crossing on Coronation Drive on June 21, 2023, where pedestrians crossing Coronation Drive were observed. The number of pedestrian crossings, the classification of the pedestrians and motorist behaviour during crossings use was recorded. 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 304. Of the 304 pedestrians, 118 (59 unadjusted) crossing pedestrians were classified as unassisted children. Unfortunately, the studies did not include the pedestrian delays. 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 Coronation Drive

Justification	Compliance
Pedestrian Volume	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. The pedestrian delay requirement was not recorded and has not been included. 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 Coronation Drive.

Contextual Consideration and Environmental Audit

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

- Immediate access to the pedestrian path on the south side of Coronation Drive
- Pedestrian desire lines between north side of Coronation Drive, between Galloway Road and Poplar Road, and sites south along the pedestrian path (Eastview Public School, Eastview Park and Eastside Child Care Centre)
- Notable volumes of vulnerable pedestrians, most notably unassisted children
- Absence of sidewalk on south side of Coronation Drive for pedestrian to use to access other crossings

Environmental safety characteristics were also evaluated to ensure that the installation of a PXO would be appropriate at this location. Nearby driveways were noted, however they are expected to be low volume and should not result in any safety or operational concerns. 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 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.

Other Considerations

It should be noted that the installation of a pedestrian crossover on Coronation Drive will result in the loss of up to five on-street parking spaces due to statutory stopping prohibitions around PXOs.

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 - Coronation Drive
Attachment 2: Map - Pedestrian Crossover - 15-19 Coronation Drive

Attachment 1: Environmental Safety Audit - PXO - Coronation Drive

Standard	Comments	Standard Met/Not Met
Vehicle operating speed less than 60 km/h	The current speed limit on Coronation Drive is 50 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	Coronation Drive operates with one lane in each direction.	Met
Traffic volume not more than 35,000 vehicles per day	Coronation Drive carries approximately 2,300 vehicles per day.	Met
No significant volume of turning movements	Location is midblock, therefore no intersection turning movements. Driveways mentioned below.	Met
No visibility problems exist for either pedestrians or motorists	There are no visibility concerns along this segment of Coronation Drive.	Met
No loading zones (including TTC) in the immediate area	No loading zones are present within immediate area.	Met
No driveways or entrances nearby	Driveways are present on the north and south side, however volumes are expected to be very low.	Not Met
Spacing is not less than 200 metres to another pedestrian crossover or traffic control signal	There are no pedestrian crossovers or traffic control signals within 200 metres of the segment Galloway Road (stop control) - 115 metres west Poplar Road (stop control) - 285 metres east	Met

Attachment 2: Map - Pedestrian Crossover - 15-19 Coronation Drive