



REPORT FOR ACTION

Pedestrian Crossing Protection Review - Milner Avenue and Executive Court/Mid-Dominion Acres

Date: March 27, 2019
To: Scarborough Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 23 - Scarborough North

SUMMARY

As the result of a legal claim, Transportation Services staff reviewed the feasibility of installing traffic control signals, or a pedestrian crossover at the intersection of Milner Avenue at Executive Court and Mid Dominion Acres.

This report recommends that neither traffic control signals, nor a pedestrian crossover be approved at the intersection of Milner Avenue and Executive Court/Mid-Dominion Acres, as the existing conditions do not meet the warrants for the installation of such traffic control devices.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services recommends that:

1. City Council not authorize the installation of traffic control signals at the intersection of Milner Avenue and Executive Court/Mid-Dominion Acres.
3. City Council not authorize the installation of a pedestrian crossover on Milner Avenue on either the west side or the east side of Executive Court/Mid-Dominion Acres.

FINANCIAL IMPACT

There would be no financial impact associated with the staff recommendation.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

As the result of legal claim, Transportation Services staff reviewed the feasibility of installing traffic control signals, or a pedestrian crossover at the intersection of Milner Avenue at Executive Court/Mid-Dominion Acres.

Existing Conditions

The following characteristics describe Milner Avenue at Executive Court/Mid-Dominion Acres:

- Milner Avenue is a four lane minor arterial road consisting of two eastbound and two westbound lanes with a regulatory speed limit of 50 km/h.
- A municipal sidewalk is located on the south side of Milner Avenue.
- The north leg of the intersection (Mid Dominion Acres) is a two-way, two-lane local road with a regulatory speed limit of 50 km/h. It stretches north for 170 metres and ends in a cul-de-sac.
- There are no sidewalks on either side of Mid-Dominion Acres.
- The south leg of the intersection, Executive Court, is a two way, two-lane local road with a regulatory speed limit of 50 km/h. It stretches south and then turns to the east for 360 metres and ends in a cul-de-sac.
- A municipal sidewalk is located on the east and north side of Executive Court.
- There are two nearside TTC bus stops on Milner Avenue located east and west from the intersection. One bus stop for eastbound, and one bus stop for westbound commuters.
- The nearest traffic control signal is located 282 metres to the east on Milner Avenue and Scunthorpe Road.
- The area surrounding the intersection of Milner Avenue at Executive Court/Mid-Dominion Acres mainly consists of commercial and industrial uses, and there is a place of worship located at the south-east corner.

Analysis

Pedestrian Crossing Protection Warrant Studies

Transportation Services staff conducted Pedestrian Crossing Protection warrant justification studies at the intersection of Milner Avenue at Executive Court/Mid-Dominion Acres. The studies provide an assessment of the need for traffic control signal, and a pedestrian crossover. The need for these traffic control devices is based on recent field observations determining existing pedestrian volumes, vehicle volumes, pedestrian delays, and conflicts. The results of the field observations and warrant justification studies are provided below.

Traffic Control Signal Justification Study

Using traffic volumes recorded during the peak eight hours on Tuesday, December 18, 2018 the following results were obtained:

Traffic Control Signal Warrant	Compliance Level
Minimum Vehicular Volume	49%
Delay To Cross Traffic	53%
Collision Hazard	13%

In order to meet the warrant for a traffic control signal, one of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" or "Collision Hazard" warrants must be 100% satisfied, or both the "Minimum Vehicular Volume" and "Delay to Cross Traffic" warrants must be at least 80% satisfied. Our review of the Collision Hazard is based on three years collision history starting from January 1, 2016 to December 31, 2018.

As outlined in the above table, none of the above compliance levels meet the requirements to install traffic control signals.

Type A - Pedestrian Crossover Warrant Studies

The table below summarizes results of traffic volumes collected during the peak eight hours on of a typical weekday on Tuesday, December 18, 2018.

Type A - Pedestrian Crossover Warrant	Compliance Level
Pedestrian Volumes	40%
Pedestrian Delays	75%

In order to meet the Type A - Pedestrian Crossover warrant, both the "Pedestrian Volumes" and "Pedestrian Delays" warrants must be 100% satisfied. As outlined above, the pedestrian volumes and delays do not satisfy the requirements to install a Type A Pedestrian Crossover at this intersection at this time.

The minimum required pedestrian volume to meet the "Pedestrian Volume" warrant is 293 pedestrians, however only 118 pedestrians (40%) were observed crossing the road over the eight hour study period.

Also, 130 pedestrian delays (>10 seconds) are required to meet the "Pedestrian Delay" warrant, however total of 98 pedestrian delays (75%) were observed crossing the road.

Furthermore, staff conducted a safety audit of the surrounding environmental characteristics and found there are two TTC bus stops in the immediate vicinity of the proposed pedestrian crossover on Milner Avenue located east and west from Executive Court/Mid-Dominion Acres. Also, eight hour turning movement counts revealed that there is a significant number of turning vehicles that would be conflicting with a pedestrian crossover. Because of the close proximity of TTC bus stops, and high number of turning vehicles, a pedestrian crossover is not a suitable traffic control device at this location as it can compromise the safety of the crossing pedestrians.

Collision History

An updated review of the available Toronto Police Service collision records for the three-year period for January 01, 2016 to December 31, 2018 are summarized below.

Three-Year Collision Information	Number of Reported Collisions (By Year)			
	2016	2017	2018	Total
Collisions potentially preventable by the Installation of Traffic Control Signal	0	1	1	2
Collisions potentially preventable by the Installation of Pedestrian Crossover	0	1	0	1

There was one motor vehicle collision involving a pedestrian 18 metres east of the intersection on Friday, November 23, 2017, where a pedestrian crossing from south to north side of Milner Avenue was hit near the centre lane by an eastbound vehicle.

In summary, as a result of the findings of the assessment, traffic control signals, or pedestrian crossover are not recommended on Milner Avenue at Executive Court/Mid-Dominion Acres since this location does not meet the justification/warrant requirements for such pedestrian crossing protection devices. The TTC has been consulted and concurs with these findings.

CONTACT

Shawn Dillon
Manager, Traffic Operations Area 1
Traffic Management
Transportation Services
Tel: 416-397-5021
Fax: 416-396-5641
E-Mail: shawn.dillon@toronto.ca

SIGNATURE

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

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ATTACHMENTS

1. Location Plan (Pedestrian Crossover and Traffic Control Signal Review
Executive Court/Mid-Dominion Acres)

Pedestrian Crossover and Traffic Control Signal Review Executive Court/Mid-Dominion Acres

