

**Pedestrian Crossing Protection Review –  
Birchmount Road and Beswick Park Court Area**

<b>Date:</b>	February 4, 2016
<b>To:</b>	Scarborough Community Council
<b>From:</b>	Director Transportation Services
<b>Wards:</b>	Ward 39 – Scarborough-Agincourt
<b>Reference Number:</b>	P:\2016\Cluster B\TRA\Scarborough District\sc1616.docx D15-6635754 PXP – Birchmount Road and Beswick Park Court

**SUMMARY**

---

It is recommended that neither traffic control signals, a pedestrian crossover, nor a pedestrian refuge island be installed at this time on Birchmount Road in the vicinity of Beswick Park Court as the justifications/warrants are not met. Currently, the area around this intersection is not controlled.

**RECOMMENDATIONS**

---

**Transportation Services recommends that:**

1. City Council not approve the installation of traffic control signals, a pedestrian crossover, or a pedestrian refuge island at the intersection of Birchmount Road and Beswick Park Court.
2. City Council not approve the installation of traffic control signals, a pedestrian crossover, or a pedestrian refuge island on Birchmount Road at a point approximately 85 metres north of Beswick Park Court.

**Financial Impact**

There is no financial impact associated with this report. However, should City Council approve Traffic Control Signals at either location, the cost would be approximately \$150,000. Should City Council approve a pedestrian crossover at either location, the cost would be approximately \$100,000. Should City Council approve a pedestrian refuge island at either location, the cost could be upward of \$500,000 due to the necessary road widening required to accommodate such an island. Funding for any of these possibilities has not been requested in the Transportation Services 2016 Capital Budget.

## ISSUE BACKGROUND

At the request of Councillor Jim Karygiannis, Transportation Services staff have reviewed the feasibility of providing pedestrian crossing protection at or near the Birchmount Road/Beswick Park Court intersection. This location has been studied on two separate occasions in the last five years, most recently on June 11, 2015. The studies included the TTC stops located approximately 85 metres north of the intersection of Birchmount Road and Beswick Park Court.

## COMMENTS

The following characteristics describe the area in the vicinity of the Birchmount Road and Beswick Park Court:

- Birchmount Road in the vicinity of Beswick Park Court is a four-lane minor arterial roadway. The pavement width is 15.3 metres.
- Birchmount Road has a speed limit of 60 kilometres per hour (km/h), an operating speed of approximately 70 km/h, and a daily traffic volume of approximately 16,700 vehicles per day (vpd).
- Traffic control signals are located at the Birchmount Road and Sanwood Boulevard/Wintermute Boulevard intersection approximately 360 metres north of Beswick Park Court.
- Traffic control signals are also located at the Birchmount Road and Ivy Bush Avenue/Fundy Bay Boulevard intersection approximately 260 metres south of Beswick Park Court.
- Sidewalks are located on both sides of Birchmount Road in the vicinity of Beswick Park Court.
- The land uses on this section of Birchmount Road is primarily single family residential and a park.

## Pedestrian Crossing Protection Warrant Studies

Transportation Services staff conducted a Pedestrian Crossing Protection Warrant Study at the intersection of Birchmount Road and Beswick Park Court. The study provides an assessment of the need for a signalized pedestrian crossover based on crossing pedestrian volumes and delays and are expressed in terms of percent compliance with accepted thresholds. The 100% threshold is approximately 200 pedestrian crossings in an eight-hour period. Using traffic volumes recorded over the peak eight hours of a typical weekday, the following results were obtained:

### *Pedestrian Crossover Warrant Studies and Historical Counts*

Pedestrian Crossover Warrant	Compliance Level	
	Wednesday, June 1, 2011	Thursday, June 11, 2015
Pedestrian Volume (8 hours)	40%	31%
Pedestrian Delays	48%	23%

As outlined in the above table, the installation of a pedestrian crossover is not justified because both categories must be met 100%. Only 62 pedestrians (representing 31% of the warrant) were observed crossing Birchmount Road during the most recent study period on Thursday, June 11, 2015.

In addition, Transportation Service staff conducted a Traffic Control Signal Justification Study at the intersection of Birchmount Road and Beswick Park Court. The study provides an assessment of the need for Traffic Control Signals based on volumes and delays to cross vehicular traffic and pedestrians, and are expressed in terms of percentages so as to be comparable over time. For traffic control signals to be numerically justified, one of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" or "Collision Hazard" warrants must be 100 % satisfied, or both "Minimum Vehicular Volume" and "Delay to Cross Traffic" must be at least 80% satisfied.

#### *Traffic Control Signal Justification Studies*

Traffic Control Signal Warrant	Compliance Level	
	Wednesday, June 1, 2011	Thursday, June 11, 2015
Minimum Vehicular Volume	2%	2%
Delay to Cross Traffic	19%	14%
Collision Hazard	0%	0%

As outlined in the above table, the traffic volumes do not satisfy the requirements to install traffic control signals at the subject intersection and in the immediate area, including at the TTC stops located approximately 85 metres to the north, at this time.

#### *Pedestrian Refuge Island Warrant Study*

With only 62 pedestrian crossings in an 8-hour period (2015 study), this location does not meet the Divisional warrant for a pedestrian refuge island. In addition, the operating speed of 70 km/h is too fast and the pavement width of 15.3 metres is too narrow to safely consider a refuge island in this area.

### **Collision History**

The results of a review of the Toronto Police Service collision records for the five-year period ending December 31, 2014 on Birchmount Road at Beswick Park Court are summarized below.

Five-Year Collision Information	Number of Reported Collisions					
	2010	2011	2012	2013	2014	Total
Collisions Potentially Preventable by the Installation of Traffic Control Signals	0	*1	0	0	0	1

Five-Year Collision Information	Number of Reported Collisions					
Collisions Involving Pedestrian Crossings of Birchmount Road in the vicinity of Beswick Park Court	0	*1	0	0	0	1

\*pedestrian struck by a southbound vehicle sustaining major injuries.

This collision record is not indicative of a safety problem at this location.  
The TTC has been consulted regarding this matter and have not raised any concerns.

## CONTACT

Marko A. Oinonen, B.A.Sc., DPA, P.Eng.  
Manager, Traffic Operations, Scarborough District  
Tel: 416-396-7148  
Fax: 416-396-5641  
E-mail: [moinone@toronto.ca](mailto:moinone@toronto.ca)

## SIGNATURE

---

John Mende, P.Eng.  
Director, Transportation Services, Scarborough District

FJB/MAO:cr

## ATTACHMENTS

1. Location Plan (Pedestrian Crossing Protection Review – Birchmount Road and Beswick Park Court Area)