

COMMITTEE OF THE WHOLE - OCTOBER 11, 2005

MELVILLE AVENUE FROM ROSEHEATH DRIVE TO CUNNINGHAM DRIVE PEDESTRIAN CROSSING REVIEW

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That a Pedestrian Signal be installed at the existing raised crosswalk located on Melville Avenue between Divine Mercy Catholic School and Michael Cranny Public School.
2. That funding for the subject Intersection Pedestrian Signal (IPS) be included in the Draft 2006 Capital Budget for Council's consideration and approval.

Economic Impact

The cost to install the Pedestrian Signal, pavement markings and signs will be an initial impact on the 2006 Capital Budget. The on-going costs to maintain the signals, pavement markings and signs would be an impact to future operating Budgets.

Purpose

To review the feasibility of implementing a Pedestrian Signal at the raised crosswalk located on Melville Avenue between Divine Mercy Catholic School and Michael Cranny Public School.

Background - Analysis and Options

Several requests from residents were received to review the traffic at three major intersections along Melville Avenue South of Cunningham Drive. The three intersections are at Roseheath Drive, at Carron Avenue, and at Cunningham Drive. At the three locations, children cross Melville Avenue to either Divine Mercy or Michael Cranny Elementary Schools and Melville Park. The area is shown on Attachment No.1.

Melville Avenue is a major collector roadway with a 26.0 meter right-of-way. Roseheath Drive and Cunningham Drive are feeder roadways with a 23.0 meter right-of-way and Carron Avenue is a local roadway with a 20.0 meter right-of-way. The speed limit on the three roadways is posted at 40 km/h.

On Melville Avenue between Roseheath Drive and Cunningham Drive there are two elementary schools and a Park; Divine Mercy Catholic School and Michael Cranny Public School and Melville Park. There currently exists three all-way stop controls on Melville Avenue in the area being reviewed; one each at Roseheath Drive, Cunningham Drive and Carron Avenue. There are two existing crossing guards at Melville Avenue and Roseheath Drive; one on the west side and one crossing guard on the south side. The crossing guards at Melville Avenue and Carron Avenue, and Melville Avenue and Cunningham Drive are located on the south side. The purpose of the crossing guards is to assist children at the intersections during the arrival/dismissal, morning and afternoon periods. There are eight existing curb extensions along Melville Avenue between Roseheath Drive and Cunningham Drive. There is an existing raised crosswalk located on Melville Avenue between Divine Mercy Catholic School and Michael Cranny Public School leading to Melville Park.

Traffic studies were conducted for an 8-hour time period on Melville Avenue; at Roseheath Drive, at Cunningham Drive and at Carron Avenue to assess the feasibility of implementing a traffic signal at each intersection. The traffic counts were conducted on Thursday, September 8, 2005

during the peak time periods from 7:00 a.m. to 9:00 a.m., 11:00 a.m. to 2:00 p.m., and from 3:00 p.m. to 6:00 p.m.. The following is a summary of the results:

Melville Avenue at Roseheath Drive

Warrant 1 – Minimum Vehicular Volumes	Warranted 71%
Warrant 2 – Delay to Cross Traffic	Warranted 70%
Warrant 3 – Accident Hazard	Warranted 0%

Melville Avenue at Carron Avenue

Warrant 1 – Minimum Vehicular Volumes	Warranted 22%
Warrant 2 – Delay to Cross Traffic	Warranted 33%
Warrant 3 – Accident Hazard	Warranted 0%

Melville Avenue at Cunningham Drive

Warrant 1 – Minimum Vehicular Volumes	Warranted 67%
Warrant 2 – Delay to Cross Traffic	Warranted 46%
Warrant 3 – Accident Hazard	Warranted 0%

Traffic signals are recommended when one of the above warrants are satisfied 100% or more. There are no recorded vehicle collisions at these intersections susceptible to prevention by a traffic signal over the last three years. Traffic signals at Melville Avenue and Roseheath Drive, Melville Avenue and Carron Avenue and Melville Avenue and Cunningham Drive are not warranted at this time.

Staff conducted stop sign compliance studies at Melville Avenue at Roseheath Drive and Melville Avenue at Cunningham Drive on Thursday, September 8, 2005 and at Melville Avenue at Carron Avenue on Tuesday, September 13, 2005 during the peak time periods of 7:30 a.m. to 9:00 a.m. and from 3:30 p.m. to 5:00 p.m.. Results show that the majority of motorists (44% to 66%), 'practically stopped' (motorists slowing down to 0-5 km/h) at the intersection of Melville Avenue and Roseheath Drive. At Melville Avenue and Carron Avenue, and at Melville and Cunningham Drive, the majority of motorists (57% to 81%) and (38% to 53%) respectively, made a 'voluntary full stop'. This indicates that the majority of motorists at the three intersections do not fail to observe the stop compliance. York Regional Police carry out stop sign compliance enforcement as their resources permit. Staff has notified York Regional Police for enforcement of the stop signs on Melville Avenue back in June, 2005.

Staff also conducted Pedestrian Crossing Studies at Melville Avenue and Roseheath Drive, Melville Avenue and Carron Avenue and Melville Avenue and Cunningham Drive during school arrival/dismissal, morning and afternoon periods. The following is a summary of the results:

Table 4 - Summary of Pedestrian Studies on Melville Avenue

Location	Date	Time	Crossing north side	Crossing south side 1	Crossing east side	Crossing west side
Melville Avenue at Roseheath Drive	Wednesday, September 14, 2005	7:30 am to 9:00 am	4 (assisted) 2 (unassisted)	7 (assisted) 29 (unassisted)	18 (assisted) 51 (unassisted)	0
		2:25 pm to 4:00 pm	3 (assisted) 8 (unassisted)	5 (assisted) 16 (unassisted)	16 (assisted) 61 (unassisted) existing guard location	14 (unassisted)
Melville Avenue at Carron Avenue	Wednesday, September 14, 2005	7:55 am to 9:00 am	0	12 (assisted) 52 (unassisted)	N/A	6 (unassisted)
		2:45 pm to 4:00 pm	0	14 (assisted) 11 (unassisted)	N/A	5 (assisted) 4 (unassisted)
Melville Avenue at Cunningham Drive	Tuesday, September 13, 2005	7:30 am to 9:00 am	2 (assisted)	56 (assisted) 61 (unassisted)	9 (assisted) 3 (unassisted)	20 (assisted) 30 (unassisted)
		2:25 pm to 4:00 pm	8 (assisted) 8 (unassisted)	65 (assisted) 49 (unassisted)	36 (assisted) 52 (unassisted)	14 (assisted) 15 (unassisted)

1 Existing Crossing Guard Location, all intersections noted.

2 Children crossing Melville Avenue 'assisted' indicates that children were accompanied by a parent or guardian in addition to a crossing guard present; whereas 'unassisted' indicates that a parent or guardian did not accompany the children, however, a crossing guard was still present.

A Pedestrian Signal will provide drivers with greater identification and warning of pedestrians crossing Melville Avenue. Approximately 415 children would be expected to cross Melville Avenue at the existing raised crosswalk during the arrival/dismissal, morning and afternoon periods, daily. This number includes both assisted and unassisted children. With the proposed Pedestrian Signal in place, the crossing guard at Roseheath Drive assisting pedestrians on the east side would remain while the existing crossing guards on the south sides of Roseheath Drive and Cunningham Drive at Melville Avenue could be re-located to a future approved location. In addition, the crossing guard currently at Carron Avenue would be re-located to the existing raised crosswalk to assist the children during the arrival/dismissal, morning and afternoon periods. Staff will discuss this recommendation if approved with both schools and will assist with the parents to encourage the use of this crossing location as their childrens' primary route rather than to cross at Roseheath Drive, Carron Avenue and Cunningham Drive.

Therefore, it is recommended that a Pedestrian Signal be installed at the raised crosswalk on Melville Avenue located between Divine Mercy Elementary School and Michael Cranny Elementary School. Encouraging pedestrians to cross at the raised crosswalk is a safer alternative and will reduce confusion of motorists with the pedestrian activity in this area by encouraging the use of this consolidated crossing location.

Relationship to Vaughan Vision 2007

This traffic study is consistent with Vaughan Vision 2007 as to identify and implement innovative traffic management alternatives to improve general traffic safety (1.1.3).

This report is consistent with the priorities previously set by Council.

Conclusion

Based on staff's review, it is recommended that a Pedestrian Signal be installed at the existing raised crosswalk on Melville Avenue between Divine Mercy Elementary School and Michael Cranny Elementary School.

Attachments

1. Location Map

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Respectfully submitted,

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Gary Carroll, P. Eng.
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ATTACHMENT No. 1

