

## COMMITTEE OF THE WHOLE - APRIL 30, 2007

### PEDESTRIAN SIGNALS – REVIEW OF CRITERIA

#### Recommendation

The Commissioner of Engineering and Public Works recommends:

That the proposed City Guidelines/Criteria for the installation of pedestrian signals as set out in this report be approved for use in assessing future pedestrian signal requests.

#### Economic Impact

Implementation of this policy will lead to individual project costs averaging \$50,000 depending on site conditions. Specific projects will come forward for consideration as part of future Annual Capital Budget deliberations.

#### Communications Plan

Requests were made to several southern Ontario Municipal and Regional Engineering and Public Works Departments in order to determine what criteria is currently being used or developed for the feasibility of pedestrian signal installations. If approved, copies of the NEW guidelines/criteria will be made available on demand to the various Community Ratepayer Groups, as well as to the School Boards (YDSB and YDCSB)

#### Purpose

To develop a set of criteria for the installation of pedestrian signals, in response to direction from Council.

#### Background - Analysis and Options

At its meeting on January 29, 2007 Council directed:

- “1. That staff review the current criteria for the installation of pedestrian signals and that staff develop a firm set of criteria for both areas in a school zone and areas not in school zones for the installation of pedestrian signals; and**
- 2. That staff report back to a future Committee of the Whole meeting.”**

The City of Vaughan currently does not have a firm criteria for the installation of pedestrian signals. However, a threshold volume of 100 pedestrians crossing during the peak time periods has been utilized, as well as field reviews to consider vehicular traffic, and crossing alternatives such as crossing at the nearest all-way stop or traffic signal controlled intersection.

Staff have requested feedback from other Municipalities and Regional Engineering and Public Works Departments to determine what criteria those departments are currently using. Responses have been received from a number of Municipal and Regional Departments and are briefly summarized below:

- The Town of Richmond Hill and the Town of Oakville currently have no policy or guideline and are not working to develop one.
- The City of Oshawa, the Town of Markham, and the Region of Durham all consistently follow the guidelines as provided in the Ontario Traffic Manual standards Book 12. There is no difference in criteria between school zones vs. non-school zones in this document.

- The City of Guelph generally follows the guidelines provided in the Ontario Traffic Manual standards Book 12 when a pedestrian signal is requested on an arterial roadway. However, if at or near a school, the City of Guelph has developed a separate criteria that incorporates a combination of pedestrian volumes, gaps in traffic, and alternative crossing possibilities (i.e. there is no single volume or delay requirement that would alone justify a pedestrian signal).
- The Region of York is developing a guideline for the installation of pedestrian signals, and is currently using a guideline for the installation of IPS (Intersection Pedestrian Signals).

The Ontario Traffic Manual Book 12 provides a guideline when determining the feasibility of installing a pedestrian signal which reviews the total pedestrian volumes crossing the main road over an 8-hour period. The data is compared for both volume and delay to meet warrant requirements. Typically, a minimum of 200 pedestrians during the 8-hour period must be met before any form of pedestrian crossing device is considered. The traffic volume of the road is also considered.

Most of the Vaughan street network is classified as local, feeder, or collector roadways which are lower in traffic volume than arterial roadways, thus raising the warrant requirements. (For example, if there were between 200 and 275 pedestrians crossing the street during the 8-hour period, the corresponding 8-hour traffic volume would have to exceed 7,000 vehicles). By using the rates provided by the OTM Book 12 standards, it is unlikely a pedestrian signal would be warranted on most Vaughan roadways.

As stated, the Region of York currently has a guideline for the installation of IPS (Intersection Pedestrian Signals). In an IPS configuration, signals are provided for pedestrians to cross the major road, while the minor road is controlled by stop sign control. The City of Vaughan has previously installed IPS configurations at two locations (Hilda Avenue/Jonathan Gate and Kipling Avenue/Burwick Avenue).

#### Proposed City Guidelines/Criteria for Placement of Pedestrian Signals

1. Consideration for pedestrian signal installation when there is a minimum of 100 pedestrians for a 23.0 metre right-of-way roadway over a 5 hour period, and the corresponding 5 hour volume is greater than 1,000 vehicles.
2. Consideration for pedestrian signal installation when there is a minimum of 200 pedestrians for roadways greater than a 23.0 metre right-of-way over a 5 hour period, and the corresponding 5 hour volume is greater than 3,000 vehicles.
3. That the time periods to be studied are 7:00am to 9:00am, and 3:00pm to 6:00pm., for a total 5 hour period
4. Consideration for pedestrian signal installations should be reserved for roadways with a 23.0 metre wide right-of way or greater (Arterial, Major and Minor Collector, Feeder, and Industrial roadways).
5. A pedestrian signal should not be considered where an opportunity for a safe crossing exists within 150 metres to either side of the proposed pedestrian signal location (e.g. at existing all-way stop controlled intersection or traffic signal controlled intersection).
6. Breakdown of pedestrian use should be classified into age groups, with special attention given to elementary school age children, and senior citizens.
7. Not to be installed in front of or between residential homes unless there is full support in writing by said owners.
8. Special consideration should be given for "campus" school settings, community centres/sports facilities/parks and the like, or other such high pedestrian generation sites, where the neighbourhood is in full support.

### **Relationship to Vaughan Vision 2007**

This Traffic Study is consistent with Vaughan Vision 2007 as to ensure enhanced safety standards are incorporated in community designs (1.1.2).

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

### **Regional Implications**

Nil.

### **Conclusion**

Based on staff's review, it is recommended that the proposed City Guidelines/Criteria for the installation of pedestrian signals as set out in this report be approved for use in assessing future pedestrian signal requests.

### **Attachments**

Nil.

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Respectfully submitted,

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