

### P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

# Active Transportation Advisory Committee February 16, 2012

**TO:** Chair and Members of the Active Transportation Advisory Committee

SUBMITTED BY: Mandau

Phillip Townsend, Director, Planning & Infrastructure

**DATE:** January 27, 2012

**SUBJECT:** Push Button Activated Pedestrian Lights

### INFORMATION REPORT

#### **ORIGIN**

Item 6.2, "Push Button Activated Pedestrian Lights", at the October 20, 2011, Active Transportation Advisory Committee.

### **BACKGROUND**

The issue of push button activated lights for pedestrians has been raised at the Active Transportation Advisory Committee due to resident concerns that they inhibit or delay pedestrian crossings in favour of motor vehicles. There is also a concern that they prompt unsafe pedestrian behaviour. This may happen when confused or impatient pedestrians chose to cross an intersection when the don't walk signal is activated at the same time that vehicles traveling in the same direction have a green light.

Note: The issue that was raised by the committee relates solely to full signalized intersections, and does not pertain to signals that are installed solely for pedestrian crossings ("half-signals").

The Chair requested a report from staff on:

- how and why push button activated signals are used in HRM;
- the process if residents or Councilors want to request that signals be programmed to automatically display the walk/flashing don't walk signals during certain hours; and
- if Councilors could be advised when new push button activated signals are being installed in their districts.

The Chair and committee were also interested in issues identified with push button pedestrian crossing systems for the visually impaired. Another information report may be provided for the Committee on this issue following a discussion on the topic at a forthcoming meeting of the Committee.

### **DISCUSSION**

The standard for all new and upgraded traffic signal installations in HRM is to install pedestrian push buttons and vehicle detector loops on at least the minor street approaches and, in some cases, all approaches. One of the primary reasons for this is to enable the operation of the signals in what is known as semi or fully actuated control instead of fixed or pre-timed operation, which services each signal phase in a programmed sequence that is repeated throughout the day. Actuated control allows the signals to remain continuously green on the major street when there are no vehicles and/or pedestrians waiting to enter from the minor streets. Also, because pedestrian signal phases normally need to be longer than vehicular signal phases, pedestrian signal indications (walk/don't walk) are displayed only when required. This results in more efficient signal operation which can benefit traffic and pedestrians alike. Traffic signal optimization helps to:

- Improve air quality and reduce fuel consumption and noise pollution.
- Reduce congestion and save time for commercial and emergency vehicles, buses, and the public.
- Reduce the number of serious accidents.
- Reduce aggressive driving behavior, including red-light running.
- Postpone or eliminate the need to construct additional road capacity.

Another benefit with using actuated control instead of fixed timing plans, is that flashing operation is no longer needed when traffic volume is lower late at night, which previously resulted in pedestrian signals being rendered inoperative.

Push buttons are not installed at all signalized intersections. In particular, most intersections in the peninsula area of Halifax continue to operate under fixed time control. In the downtown core, for example, it would not be practical to install push buttons as traffic and pedestrian volumes are steady throughout the day, which makes these locations more suited for fixed time signal operation.

At select locations that are equipped with push buttons, the signals may be programmed to automatically display the walk/flashing don't walk signals during certain hours if the intersection has heavy or moderate pedestrian volumes. At night or during off peak times, push button activation would be required in order for the walk/flashing don't walk signals to be displayed.

If residents or Councilors want to request that signals be programmed to automatically display the walk/flashing don't walk signals during certain hours, a request can be made to the Traffic Authority.

The Traffic Authority had previously committed to inform peninsula area councilors when they are planning to install push buttons at a particular intersection. This has not been an issue for areas outside the peninsula since push buttons have been installed in most locations for over 20 years.

# **BUDGET IMPLICATIONS**

There are no budget implications.

# FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

## **COMMUNITY ENGAGEMENT**

There is no requirement to conduct community engagement on this issue.

#### **ATTACHMENTS**

There are no attachments.

A copy of this report can be obtained online at http://www.halifax.ca/commcoun/cc.html then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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