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Chebucto Community Council  
January 5, 2009

**TO:** Chair and Members of Chebucto Community Council

**SUBMITTED BY:**   
Mike Labrecque, P. Eng., Director of Transportation and Public Works

**DATE:** December 10, 2008

**SUBJECT:** Crosswalk at the Armdale Rotary - Quinpool Leg - Request for Lights or RA-5 - Councillor Mosher

**INFORMATION REPORT**

**ORIGIN**

Item 10.1.4 that was raised at the October 6, 2008, meeting of Chebucto Community Council.

**BACKGROUND**

At the meeting of Chebucto Community Council it was MOVED by Councillor Mosher, seconded by Deputy Mayor Adams, that Chebucto Community Council request that an RA-5 push button crosswalk or lights be installed at the Armdale Roundabout/Quinpool intersection for safety reasons. MOTION PUT AND PASSED.

## DISCUSSION

The design of the Armdale Rotary/Roundabout like most multi-lane roundabouts, does not lend itself to the installation of overhead flashing amber pedestrian signals at the designated crosswalks. Pedestrian crossing locations at roundabouts are a balance among pedestrian convenience, pedestrian safety and roundabout operations. Pedestrians generally desire crossing locations as close to a roundabout as possible to minimize out-of-direction travel. The further that a crossing location is from the roundabout, the less likely that pedestrians will use it, usually preferring to take the shortest most direct route. Locating crosswalks too close to the yield line, however, is not recommended because at this point driver attention is diverted to the left to look for gaps in the circulating traffic stream. Crosswalks should be located to take advantage of the splitter island; crosswalks located too far from the yield line require longer splitter islands. The purpose of splitter islands, in addition to guiding and physically separating entering and exiting traffic streams and assisting in controlling speeds, is to minimize crossing distance and provide a refuge area for pedestrians to be able to cross one direction of traffic at a time.

Signalization of roundabout pedestrian crossings has been discouraged both in Canada and in the U.S. Ourston Roundabouts Canada, the design consultants for the Armdale Roundabout, indicated that to their knowledge there was only one roundabout in Canada and one in the U.S. with signal controlled crosswalks. The one in Hull, Quebec was not placed based on pedestrian volume but on perceived safety issues. Observations of the operation of the signals (which are split with the push buttons to cross either entry or exit sides) indicate that most of the time pedestrians don't push the buttons or if they do they often cross before the light changes. Rarely is there ever congestion that creates too much delay for a pedestrian to cross.

The perception of safety for pedestrians is lower at roundabouts but in fact the recorded safety statistics suggest that roundabouts are significantly safer than signalized intersections. At a signalized intersection, a pedestrian needs to be aware of turning vehicles from several directions but unfortunately often simply watches the Walk light and neglects to scan for vehicles before and during the crossing. Waterloo Region in Ontario experiences approximately 65 pedestrian collisions per year at its 475 traffic signals (1 pedestrian collision for every 7 signals). To date the Region of Waterloo has had no reported pedestrian collisions at any of its 11 roundabouts. In the Melbourne Metro area of Australia approximately 268 pedestrian collisions are reported per year at its 2500 traffic control signals (1 pedestrian collision for every 9 signals) but only 11 pedestrian collisions per year occur at its more than 4000 roundabouts (1 pedestrian collision for every 364 roundabouts).

In a 2007 report titled "Synthesis of Literature Relevant to Roundabout Signalization to Provide Pedestrian Access" prepared for the U.S. Access Board (an independent Federal Agency devoted to accessibility for people with disabilities), it was noted that no jurisdiction surveyed, with the exception of France, recommended traffic signals to improve roundabout access for pedestrians. The two primary operational rationales offered for signalization were: (1) to meter entering traffic when the vehicular volume is so high as to obstruct downstream entrances, or (2) to meter pedestrians so that traffic flow can be maintained. Even the French guidelines, that allow for pedestrian

signalization at roundabouts under certain conditions, suggest that signals are not likely to make pedestrians safer, and that signals might have the effect of making pedestrians over confident and thus less careful when crossing.

### **BUDGET IMPLICATIONS**

There are no budget implications.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

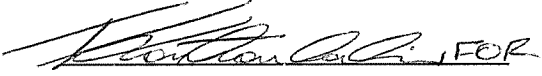
This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

### **ALTERNATIVES**

There are no alternatives recommended.

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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