Transportation and Works Department
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MEMORANDUM

TO: Chair and Members of the
Accessibility Advisory Committee

FROM: Kees Schipper, P.Eng.
Commissioner, Transportation and Works

DATE: March 4, 2004

RE: Pedestrian Accessibility at Traffic Control Signals

PURPOSE

At the Accessibility Advisory Committee (ACC) of May 29, 2003, the committee requested information regarding the feasibility of expanding the Region's audible/visual traffic control signals program.

This memorandum provides background information and the status of the following two policies which assist pedestrians with disabilities at traffic control signals:

- The Audible Pedestrian Signal program.
- The Pedestrian Countdown Signal Display program.

BACKGROUND

Over the last few years, staff has developed policies in order to improve the accessibility at traffic control signal pedestrian crossings for the disabled.

Audible Pedestrian Signals

At its meeting of December 9, 1999, Regional Council adopted a policy, Clause 8, embodied in Report No. 16. This policy provides staff with criteria to determine the suitability of audible pedestrian signals (APS).

APS are usually installed above the traffic heads that display the walk and don't walk indications to pedestrians. During the walk indication, they create an audible "chirping" sound for north-south crossings and a "cuckoo"-like sound for east-west crossings. They are activated by pressing the pedestrian button continuously for three or more seconds. In this way, the audible tones do not contribute to background noise levels when visually impaired and blind people are not in the area.

Pedestrian Countdown Signal Displays
Typically, the Region uses standard pedestrian crosswalk displays at signalized intersections. The standard pedestrian signal indications provide a symbolic display. The display consists of a walking man silhouette, a flashing hand and a solid hand indication. These displays convey to the pedestrian of when to walk (walking man), when not to start walking (flashing hand) and when not to walk (solid hand) across the road. By comparison, pedestrian countdown signal displays (PCSD) operate using standard signal indications with an additional indication showing a descending numerical countdown of the duration of time for each symbolic display in seconds.

As a result, at its meeting of December 19, 2002, Regional Council adopted a policy, Clause 5, embodied in Report No. 11 to outline a process for the installation of PCSD.

ANALYSIS

Audible Pedestrian Signals
The Region first began installing APS in the early spring of 1999, on a trial basis. In 1999, Regional staff and the Canadian National Institute for the Blind (CNIB) prepared a guideline for the installation of APS devices.

Since then, there have been 26 installations of APS devices at traffic control signals. Typically, the Region installs APS at five traffic control signals annually. These installations follow the guideline identified within the policy, with the input of the CNIB.

The CNIB has since reported significant safety benefits for the visually impaired and blind people using the audible signals in each community. These benefits are a result of the increased safety for visually impaired and blind people through additional auditory information. The CNIB reports that these safety benefits have improved the quality of life for a number of their patrons and they anticipate more successes as the confidence and self esteem of the visually impaired continues to grow. Training programs on the proper use of these devices is provided by the CNIB in their mobility-training programs.

Pedestrian Countdown Signal Displays
At the Regional Council meeting of November 8, 2001, a recommendation was adopted directing staff to conduct a one-year implementation and evaluation of the PCSD at three intersections. Since the one-year evaluation, Regional Council adopted staff recommendation to consider PCSD at:

- Intersections characterized with wide intersection pedestrian crossings distances.
- Proximity to schools.
- Proximity to senior centres having a high percentage of pedestrian usage.

Today, there are nine traffic control signals with PCSD. Regional staff considers the installation of PCSD when a request satisfies a guideline for implementation.

Program Expansion

As previously mentioned both the APS and PCSD policies have been successfully implemented.

The APS program serves the community and each request received is reviewed by the CNIB and the Region. Typically, through the year, the CNIB and the Region receive a total of four to five requests for APS devices. As a result, the program expansion is based upon requests received and budget constraints. Typically, our budget is prepared for five APS per year.

The PCSD are reviewed as requested. Our review applies the criteria identified within our policy. PCSD are typically installed in central business district areas because of the proximity to schools and high percentage of pedestrian usage. The Regional road network does not have significant central business district areas. Therefore, expansion of this program is limited to the characteristics of the Regional road network.

KS/ls

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