TORONTO

STAFF REPORT
ACTION REQUIRED
with Confidential Attachment

Update on the City's Accessible Pedestrian Signals (APS) Retrofit Program and an Ontario Human Rights Complaint Involving the City's Provision of APS

Date:	January 21, 2008
To:	Public Works and Infrastructure Committee
From:	City Solicitor and General Manager, Transportation Services
Wards:	All
Reason for Confidential Information:	This report is about litigation or potential litigation that affects the City and contains advice or communications that are subject to solicitor-client privilege.
Reference Number:	AFS 2767

SUMMARY

The purpose of this report is to establish a clear policy on the installation of accessible (formerly audible) pedestrian signals (APS) for the City of Toronto, and to respond to Council's request to report on new technologies to address the needs of the blind and visually-impaired pedestrians.

This report also provides a summary of the current status of APS installations, and recommends that steps be taken to be more responsive to the needs of blind and visually-impaired pedestrians.

The report further describes a complaint that was filed with the Ontario Human Rights Commission (the "Commission") by a resident against the City with respect to the City's provision of APS (the "Complaint"). The Complaint is discussed in the confidential portion of this report.

RECOMMENDATIONS

The City Solicitor and General Manager, Transportation Services recommend that:

1. Council adopt the confidential instructions to staff in Attachment 1;

2. City Council authorize the public release of the recommendation in Attachment 1 if a settlement to the Complaint is achieved in accordance with Council's instructions and in a form satisfactory to the City Solicitor.

3. All new traffic control signal installations approved by City Council, after the adoption of this report, include accessible pedestrian signals as an integral component of the intersection equipment and operation;

4. Transportation Services staff eliminate the existing backlog of 51 requested accessible pedestrian signal retrofit locations by December 31, 2010;

5. Funds totalling $670,000 be transferred within the Transportation Services 2008 Approved Capital Budget from projects CTP708-03 Traffic Signal Modifications ($335,000) and CTP707-07 Traffic Plant Requirements ($335,000) to Capital project CTP708-06 Audible Signals to increase the $680,000 included in the budget for the Accessible Pedestrian Signal Program (APS) improvements in 2008 to $1,350,000 in order to address the backlog of intersections in 2008;

6. The General Manager, Transportation Services, be requested to revise the Transportation Services five year Capital plan as part of the 2009 Capital Budget process to include the funds required to eliminate all of the remaining APS backlog in 2009 and 2010; and

7. Commencing January 1, 2011, Transportation Services establish as a performance target and basis for Capital Budget requests, the retrofit and activation of an accessible pedestrian signal within 12 months of receipt of a request, assuming that no major physical intersection modifications are required.

FINANCIAL IMPACT

The addition of accessible pedestrian signal equipment to the installation of a new traffic control signal will add approximately $10,000, or approximately seven per cent to the cost of a new signal installation. Funding of new traffic control signals is provided within Capital Budget CTP708-01.

Funding for the retrofit of accessible pedestrian signal equipment to an existing traffic signal controlled intersection is included in CTP708-06. In 2007, the $670,000 budget provided funding for the retrofitting of accessible pedestrians signals to 15 intersections. In order to achieve 81 retrofits in the next three years, an average of $1,350,000 will need to be allocated annually to this program. For 2008, the required funding can be

accommodated through funding of $680,000 in CTP 708-06 Audible Signals approved in the 2008 Transportation Services Capital Budget and by reallocating cash flow in the amount of $335,000 each from the approved cash flow of CTP 708-03 Traffic Signal Modifications and CTP 707-07 Traffic Plant Requirements to CTP 708-06 Audible Signals. Funding for this project is detailed in the table below;

Capital Account	2008 Approved Cash Flow	2008 Cash Flow Reallocation	New 2008 Cash Flow
CTP 708-06 Audible Signals	$680,000		$680,000
CTP 708-03 Traffic Signal Modifications		$335,000	$335,000
CTP 707-07 Traffic Plant Requirements		$335,000	$335,000
Total Cash Flow	$680,000	$670,000	$1,350,000

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting on April 25, 26, and 27, 2006, City Council requested that the General Manager, Transportation Services, report to the Works Committee on the audible signalization program, such report to include the new technology being developed whereby the audible signal can be manually activated.

Toronto City Council September 28, 2005, Works Committee Report 8 Clause 14k Audible Pedestrian Signals – Noise Mitigation Efforts

(http://www.toronto.ca/legdocs/2005/agendas/council/cc050928/wks8rpt/cl014.pdf, http://www.toronto.ca/legdocs/2005/agendas/committees/wks/wks050914/it015.pdf)

Toronto City Council, July 24, 2001, Works Committee Report 12 Clause 18d Noise Mitigation Efforts for Audible Pedestrian Signals

(http://www.toronto.ca/legdocs/2001/agendas/council/cc010724/wks12rpt/cl018.pdf, http://www.toronto.ca/legdocs/2001/agendas/committees/wks/wks010704/it005.pdf)

Toronto City Council, December 16, 1998, UEDC Report 14 Clause 11a Audible Pedestrian Signals Program

(http://www.toronto.ca/legdocs/agendas/committees/ud/ud981130/it003d.htm)

ISSUE BACKGROUND

Accessible Pedestrian Signals (or APS) are types of technology used to facilitate the use of signal-controlled pedestrian crossings for the blind and visually-impaired. APS may include both audible and vibro-tactile technology that supplement the crossing information provided by traditional "visual" pedestrian signal displays.

APS were first introduced to Toronto in August 1994 at the intersection of Lawrence Avenue and Chatsworth Drive. In July 1997, the former Municipality of Metropolitan Toronto adopted a program to retrofit existing signal-controlled intersections with APS on an as-requested basis. An advisory committee was also established consisting of representatives of organizations for the blind and visually-impaired community to establish the guidelines and priorities for APS retrofits, and to receive, validate and prioritize requests.

The City of Toronto Accessibility Design Guidelines sections 1.5.1 and 1.5.6 identify APS as essential for blind and visually-impaired pedestrians.

In February, 2003, a resident filed a complaint with the Ontario Human Rights Commission, which deals with the City's provision of APS (the "Complaint"). The Complaint specifically deals with a request that the resident made in December, 2002 for APS at an intersection near his home. The City did not address the resident's request for APS until August, 2007, over 4 ½ years after the request was made.

Transportation Services has assessed the current state of the City's APS Retrofit Program and proposes certain changes be made to the program in an effort to resolve the Complaint and improve the way in which the City provides APS throughout the city to assist all blind and visually impaired pedestrians.

COMMENTS

As of December 31, 2007, 188 of the 2082 signal-controlled intersections in the City of Toronto include the APS feature.

Handheld Receiver-based Systems

Handheld receiver-based systems which provide remote directional human voice messages are used at many public and private buildings. These devices require the user to scan the space in front of them to locate a special transmitter which will then provide a human voice message through the receiver's speaker.

The Canadian National Institute for the Blind (CNIB) uses this type of system to provide voice direction to visitors to their building in Toronto. CNIB provides visitors a receiver to carry with them while they are in the building. This type of system only benefits users carrying the receiver. Currently there is no interoperability standard for these devices. As a result, the user's receiver must be from the same vendor that sold the installed

transmitter equipment. As such, the CNIB has recommended that this equipment be viewed only as a supplement to the existing APS at signal-controlled intersections rather than as an alternative. The City of San Francisco, California has adopted this strategy for handheld receivers. San Francisco has the largest number of buildings and facilities equipped for use with handheld receiver technology in North America. Many of their museums, libraries, auditoriums, and train terminals are equipped; however, San Francisco is continuing to install APS equipment similar to Toronto's at its 1200 signal-controlled intersections.

Establishment of Performance Target for APS Retrofits

Since the APS retrofit program was first introduced in 1997, the number of requests for additional intersections has outpaced the rate of APS retrofits. Currently, there is a backlog of 51 intersections where APS has been requested but due to funding constraints the equipment has not yet been installed. At the current funding level, this backlog represents an average three to four year delay between receipt of a request and the retrofitting of an intersection.

In comparison, the capital funding for new traffic control signals provides sufficient money, in an average year, to install traffic control signals at all intersections approved by City Council for that year.

Establishing a target of fulfilling all retrofit requests (excluding those requiring major physical road modifications) within the following budget year will demonstrate Toronto's commitment to accessibility for blind and visually-impaired pedestrians.

Over the past three years, the City has received an average of ten new requests for APS retrofits each year. Annual capital funding of $1,350,000 for the period 2008 to 2010 would provide sufficient funds to erase the backlog of 51 intersections and also address the 30 new requests that are anticipated to be received during this period. If the number of requests remains stable at ten per year, the annual capital funding could be reduced to $500,000 beginning in 2011, by which time the existing backlog would have been eliminated.

This performance target will also bring the City in line with what is being accomplished by other American and Canadian cities with respect to APS. In May of 2007, the City of San Francisco entered into an agreement with representatives of the blind and visually impaired community to avert litigation in a dispute concerning whether San Francisco provides blind and visually impaired people the legally required access to information provided by pedestrian signals in the city. According to the terms of that agreement, San Francisco is committing $1.6 million to install APS at a minimum of 80 intersections over the next two and a half years (by December 31, 2009).

As for Canadian cities, Ottawa's website indicates that approximately 10 intersections are retrofitted with APS each year. There is no mention on the website of the city's budget with respect to APS. However, the website does indicate that, in addition to the retrofitted intersections, Ottawa installs APS at all new intersections as well as at signals where major rehabilitation road projects are taking place. As a result, approximately 30 new signals are installed every year. There is no mention on the city's website of a backlog of requests for APS installations.

Cost Differential of Installing APS at a new intersection versus Retrofitting an Existing Intersection

The average cost, of retrofitting APS to an existing signal-controlled intersection is approximately $50,000. Retrofitting APS can be quite complex and includes the following tasks:

- Preliminary field investigation
- Detailed Design
- Civil Construction (including installation of underground duct, cables, poles, adjustment of/corrections to sidewalk ramps/crosswalks, replacement of pavement/sidewalk damaged during underground plant installation)
- APS pushbutton installation and traffic controller cabinet wiring

In contrast, if the APS is added as an integral component of a new traffic signal control installation, the only additional cost, which is approximately $10,000, is for the supply of the APS equipment.

The addition of APS as an integral component of new traffic signal control installations would increase the existing average cost per intersection by approximately seven per cent to $160,000.

In the long term, the addition of APS with all new traffic signal control installations will reduce the need for APS retrofits, and on average five new intersections can be equipped for the same cost as one retrofit.

CONTACT

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SIGNATURES

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City Solicitor, Legal Services	General Manager, Transportation Services

ATTACHMENTS

Attachment 1 – Confidential Information