HALIFAX
REGIONAL MUNICIPALITY

Transportation Standing Committee
December 13, 2012

TO: Chair and Members of the Transportation Standing Committee

SUBMITTED BY: _____

Greg Keefe, Director of Finance/CFO, Finance & ICT

DATE: December 13, 2012

SUBJECT: Transit Stop Annunciation - Update

INFORMATION REPORT

ORIGIN

January 9, 2012, motion of the Transportation Standing Committee:

MOVED by Councillor Blumenthal, seconded by Councillor Fisher, that the Transportation Standing Committee request a staff report on moving forward with, and having a timeline set for, visual and audio announce system instalment for Metro Transit buses and ferries. MOTION PUT AND PASSED.

BACKGROUND

Research on Transit Stop Annunciation was submitted for discussion at the October 17, 2011 meeting of the Accessibility Advisory Committee. In a report to the Transportation Standing Committee on January 9, 2012 the Accessibility Advisory Committee requested the Transportation Standing Committee support and endorse having a timeline set for having visual and audio announcement systems installed on Metro Transit buses and ferries.

Metro Transit responded with an information report to the Transportation Standing Committee on May 24th, 2012 (see Attachment 1). That report recommended Manual Stop Annunciation not be considered and that more details around Automated Stop Annunciation would be made available after the completion of an Automated Vehicle Location (AVL) Roadmap.

With the assistance of ICT Planning and CRM, Metro Transit has recently completed the AVL

Roadmap. That initiative was strategic in nature, focused on determining the current state and desired future state of Transit's Automated Vehicle Location / Computer-Aided Dispatch (AVL/CAD) capabilities. The primary goal of the Transit AVL Roadmap was to determine the high level costs and timelines for Transit to have a robust AVL/CAD solution which can be used to deliver their current services more effectively and serve as a base to add on additional integrated services. The highest priority service, which was included in the scope of the AVL Roadmap, is Automated Stop Annunciation.

DISCUSSION

Automated Transit Stop Annunciation

Automated transit stop annunciation is used to visually and audibly announce upcoming transit stops. This feature makes transit more accessible to residents with visual impairments, and is also useful to passengers that are not familiar with the route, or in situations where visibility is reduced due to crowded buses or inclement weather. Automated transit stop annunciation is not currently available at Metro Transit.

As mentioned above, investigation of Automated Stop Annunciation was included in the Transit AVL Roadmap. The AVL Roadmap has targeted Stop Annunciation as the first enhanced service to be delivered on a new, much more robust, AVL/CAD solution. Based on the plan detailed in the AVL Roadmap, the project to deliver core AVL/CAD functionality would be initiated in Fiscal Year 2013/2014 and continue into early Fiscal Year 2014/2015. That project would be followed by the implementation of Automated Stop Annunciation capabilities with completion anticipated by the end of Fiscal Year 2014/2015.

Manual Transit Stop Annunciation

The conclusion of the previous May report to the Transportation Standing Committee regarding Manual Stop Annunciation was as follows:

"There is no timeline proposed for implementing manual stop annunciation, as it is not recommended for the reasons discussed above. Implementation of automated transit stop annunciation is dependent on the successful completion of other initiatives, and Council will be made aware of timelines and costing once available."

Our position on Manual Stop Annunciation has not been revised.

BUDGET IMPLICATIONS

There are no budget implications at this time. Any recommendations that have budget implications will be brought forward in future annual budgets for consideration by Regional Council. It is expected that the costs specifically related to Automated Stop Annunciation will be included in the Fiscal Year 2014/2015 Capital Budget.

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

Community Engagement was not deemed to be necessary in this process as this report is only providing Council with information.

ATTACHMENTS

Attachment 1   Stop Annunciation Report to Transit Standing Committee – May 24, 2012

A copy of this report can be obtained online at http://www.halifax.ca/boardsom/SCtransp/index.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.

Report Prepared by :   Jim Kirk, Manager, ICT Planning and CRM, Finance & ICT, 490-7297

Report Approved by: Donna Davis, Chief Information Officer, Finance & ICT, 490-4417

Report Approved by: Eddie Robar, Director, Metro Transit, 490-6720

HALIFAX
REGIONAL MUNICIPALITY

P.O. Box 1749
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Transportation Standing Committee
May 24, 2012

TO: Chair and Members of the Transportation Standing Committee

SUBMITTED BY: _____
               Eddie Robar, Director, Metro Transit

DATE: April 13, 2012

SUBJECT: Transit Stop Annunciation

INFORMATION REPORT

ORIGIN

January 9, 2012, motion of the Transportation Standing Committee:

MOVED by Councillor Blumenthal, seconded by Councillor Fisher, that the Transportation Standing Committee request a staff report on moving forward with, and having a timeline set for, visual and audio announce system instalment for Metro Transit buses and ferries. MOTION PUT AND PASSED.

BACKGROUND

Research on Transit Stop Annunciation was submitted for discussion at the October 17, 2011 meeting of the Accessibility Advisory Committee. In a report dated December 1, 2011 (Attachment 1), the Accessibility Advisory Committee requested that the Transportation Standing Committee support and endorse having a timeline set for having visual and audio announcement systems installed on Metro Transit buses and ferries.

DISCUSSION

Automated Transit Stop Annunciation

Automated transit stop annunciation is used to visually and audibly announce upcoming transit stops. This feature makes transit more accessible to residents with visual impairments, and is also useful to passengers that are not familiar with the route, or in situations where visibility is reduced due to crowded buses or inclement weather. The only Metro Transit service that currently uses some form of automated stop annunciation is the ferry system.

Although automated transit stop annunciation would be a valuable asset, there are no immediate plans for implementation. The 2012/2013 Council approved budget for Finance and Information, Communications and Technology includes the completion of an AVL (Automated Vehicle Location) roadmap. This roadmap is considered a precursor for future investment in transit technology. Once complete, it is anticipated that there will be more opportunity to investigate the way forward with other transit related technologies, which includes automated transit stop annunciation. Assigning any proposed timeline to automated transit stop annunciation would be premature prior to the completion of the AVL roadmap and other future transit specific explorations, and without details on interdependencies, implementation, and costs for these measures.

Manual Transit Stop Annunciation

Acknowledging that the installation of Automated Transit Stop Annunciation is not planned in the short term, the research prepared on August 18, 2011 for the Accessibility Advisory Committee proposes manual stop announcements by transit operators as an interim measure. Presumably, this service would consist of transit operators announcing the location of the next bus stop as they approach it, allowing passengers to indicate if they wish for the vehicle to stop.

Metro Transit does not currently provide routine manual stop annunciation. Transit operators are encouraged to provide good customer service to all passengers, and when requested, this includes advising riders of the route number and destination of the bus they are driving, and, letting passengers know when they have reached their stop. This assistance, although not fully inclusive, is helpful to some passengers and does take place throughout the system.

Requiring the manual announcement of all bus stops is challenging and ultimately unmanageable. Metro Transit has 61 conventional bus routes, and 2297 unique bus stops. Many of Metro Transit's routes are interlined, which means that one bus and operator may drive several routes in one day. For example, in one shift an operator could drive four different routes and pass 298 unique bus stops. It would be unrealistic for transit operators to memorize the bus stops and remember the names accurately. The names of bus stops themselves are problematic, as it is difficult to develop naming conventions that are both meaningful to passengers and relatively easy for operators to recall, particularly in areas where there are no cross streets or landmarks to reference. As a result, there is no way to consistently call out bus stops without reading the names from a page or screen.

The reality of this situation is that the transit operators' attention would be divided between operating the vehicle safely and reading bus stops. For example, on the Route 60, Eastern Passage, the operator would be required to announce 115 bus stops per hour. This is an average of one bus stop every 32 seconds. Accidents can happen quickly, and the operator must remain focused on the road. Constantly diverting attention away the road to look up and read the name of the next stop while driving, while potentially travelling at speeds of 50 km/hr or greater in some locations, is a major safety concern. Operators are instructed to drive in a manner that is safe, prudent, and reasonable, and in many cases this would not be realistic while providing manual transit stop annunciation. The alternative would be to require the operator to pull over at every bus stop, regardless of whether any passengers wish to get on or off the bus, and stop the vehicle to read the next stop out. This would have a significant impact on the schedule adherence and reliability of the entire transit system.

The success of manual stop annunciation relies on the individual transit operator's ability and level of commitment and even with the best intentions is subject to human error. The reliability of providing the service is greatly compromised when there are adverse road conditions, motor vehicles or pedestrians are behaving unexpectedly, there are detours in place, passengers are speaking to the operator, or in any scenario that temporarily diverts the operator's attention. Often in these cases, bus stop announcements would be missed. Errors or gaps between announcements would create significant challenges for passengers that depend on the service.

On busy routes with crowded buses, or when public announcement (PA) equipment malfunctions, these announcements may still not be clear or audible to all passengers. Also of note, the PA systems on existing transit vehicles are not used on a regular basis, and a number are no longer operational; there may be significant costs associated with re-instating this equipment.

Conclusion

There is no timeline proposed for implementing manual stop annunciation, as it is not recommended for the reasons discussed above. Implementation of automated transit stop annunciation is dependent on the successful completion of other initiatives, and the Transportation Standing Committee of Council/Regional Council will be made aware of timelines and costing once available.

BUDGET IMPLICATIONS

There are no budget implications at this time. Any recommendations that have budget implications will be brought forward in future annual budgets for consideration by Regional Council.

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.
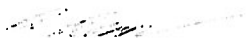
COMMUNITY ENGAGEMENT

Community Engagement was not deemed to be necessary in this process as this report is only providing Council with information.

ATTACHMENTS

Attachment 1   December 1, 2011 Accessibility Advisory Committee Report

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A copy of this report can be obtained online at http://www.halifax.ca/boardsom/SCtransp/index.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.

Report Prepared by :   Patricia Hughes, MCIP, LPP, Supervisor, Service Design & Projects, Metro Transit, 490-6287

Report Approved by: Dave Reage, MCIP, LPP, Manager, Planning & Scheduling, Metro Transit, 490-5138

Report Approved by: Philip Herritt, Manager, Technical Services, Metro Transit, 490-6649

Report Approved by: Erin Flaim, Manager, Bus Operations, Metro Transit, 490-6272

HALIFAX
REGIONAL MUNICIPALITY

P.O. Box 1749
Halifax, Nova Scotia
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Transportation Standing Committee
January 9, 2012

TO: Chair and Members of the Transportation Standing Committee

SUBMITTED BY: _____

Theresa Horwill, Chair,
Advisory Committee for Accessibility in HRM

DATE: December 1, 2011

SUBJECT: **Transit Stop Annunciation**

ORIGIN

Research on Bus Stop Annunciation was submitted for the October 17, 2011 Advisory Committee for Accessibility in HRM meeting.

RECOMMENDATION

The Advisory Committee for Accessibility in HRM recommend that the Transportation Standing Committee support and endorse moving forward with – and having a timeline set for – visual and audio announce system instalment for Metro Transit buses and ferries.

BACKGROUND

See the attached research for further background on announced transit stops, as well as recent Canadian Human Rights case law, and Regional Council/Committee reports and discussions on the subject.

DISCUSSION

On October 17, 2011, the Advisory Committee for Accessibility in HRM reviewed Mr. Rutt's research and held a discussion on this issue. It was noted that the Committee has discussed the need for a bus stop annunciation system on numerous occasions over the past few years, and there is a general consensus with members that it should be a priority to put audio and visual annunciation into HRM's buses and ferries.

BUDGET IMPLICATIONS

Budget implications of this report will be outlined in detail in a future staff report which will be submitted to Halifax Regional Council together with this report.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

Compliance with the Financial Management Policies/Business Plan will be outlined in detail in a future staff report which will be submitted to Halifax Regional Council together with this report.

COMMUNITY ENGAGEMENT

The Advisory Committee for Accessibility in HRM (ACA) is a Committee of Council, reporting directly to the Transportation Standing Committee. The ACA is comprised of eight (8) residents of HRM, who bring varied experience with disabilities to the Committee, along with two duly elected members of Regional Council. ACA meetings are held monthly, and are open to the public. Agendas, reports, and minutes are posted online.

ALTERNATIVES

The Transportation Standing Committee may choose to request a staff report on this subject, to be submitted to Regional Council.

ATTACHMENTS

1.   Bus Stop Annunciation research dated August 18, 2011 prepared by Laughie Rutt, Diversity Consultant, HRM Human Resources

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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.

Report Prepared by :   Jennifer Weagle, Legislative Assistant, Municipal Clerk's Office, 490-6517

Bus Stop Annunciation Research
August 18, 2011

Introduction

The Chair of the advisory Committee for Accessibility in HRM requested assistance with research on the best practices associated with bus stop annunciation. This matter was previously discussed by the Committee but not finalized by the Committee.

Background

Announced bus stops on Transit systems are not new. The service was provided on many early systems not specifically carried out for persons with visual disabilities but as a service to all passengers. This role was filled by the conductor on the tram system.

Announced bus stop information is provided both manual and automated forms in many countries. The Americans with Disabilities Act requires it by law in the United States. There is no such national act of law in Canada. Such announcements benefit all citizens as well as visitors that are unfamiliar with a specific geographic area.

The issue resurfaced in Canada specifically focusing on persons with visual disabilities.

In July 2007 the case "Lepofsky versus The Toronto Transit Commission", the Human Rights Tribunal of Ontario *"found that the failure of the Toronto Transit Commission (TCC) to ensure announcement of all stops on buses and streetcars violated the human rights of persons with disabilities. In particular, the Tribunal found that the TCC failed to establish that alleged risks associated with drivers verbally announcing stops would amount to undue hardship, while the costs associated with implementing such a program would be relatively minor."*

In October 2007, the Ontario Human Rights Commission began preparing a report on Public Transit Stop Announcements in Ontario. This was the result of *"recent developments and ongoing concerns in the area of transit accessibility"*. The conclusion of the report stated, *"We have heard that stop announcements provide improved service for many community members, such as persons with visual or cognitive disabilities, people who find it hard to read street signs, tourists and others visiting unfamiliar areas, and passengers who are distracted or unable to see outside due to bad weather or full vehicles." "We have also heard, from some transit organizations and vehicle operators, as well as from transit riders both with and without disabilities, that announcing all stops simply makes sense."*

Following the "Lepofsky versus Toronto Transit Commission" decision most Ontario transit systems immediately began taking action and changing their practice. By the time the Ontario Human Rights final report was released in April 2008, most of the 41 Ontario Transit systems identified in the report were actively providing stop announcements.

In the August 4th, 2009 report to HRM Council, the Acting CAO Wayne Anstey noted that "Automated Bus Stop Annunciation technology is being introduced in other Canadian transit systems and Metro transit will be evaluating this technology for future implementation."

During the same timeframe, the Advisory Committee for Persons with Disabilities had spoken of the matter at multiple meetings and indicated to senior management of Metro Transit that automated announcements should be implemented.

The October 7th, 2009 Metro Transit Five Year Strategic Operations Plan, prepared by the IBI Group, did not contain any comments on bus stop annunciation. In a supplemental report to Council by CAO Dan English on January 6th, 2010 it was stated, *"The Plan speaks to improving accessibility through increasing accessible infrastructure at bus stops and terminals, purchasing additional low floor buses, and increasing the number of routes providing accessible service."*

The "GO Times" publication of Metro Transit of February 2010 stated that, *"a further budget item will be added in 2010/2011 to conduct an overall accessibility study of the entire Metro Transit system and will help guide future decisions surrounding accessibility, including items such as Automated Bus Stop Annunciation"*

Managers from Metro Transit attended the May 17th, 2010 meeting of the Advisory Committee for Persons with disabilities and indicated, *"that staff is not in a position at this time to implement an annunciation system."*

On August 16th, 2010 the Advisory Committee for Persons with Disabilities passed a motion recommending *"that Halifax Regional Municipality give consideration to the implementation of an automated audio and visual bus stop announcement system as a first step to improving all accessibility on HRM Metro Transit routes."*

Advantages

The advantages include:
1. Moving Metro Transit towards enhanced customer service for all citizens.
2. Provision of a specific benefit to the groups represented by the Advisory Committee on Accessibility in HRM.
3. Provision of a specific benefit to tourists and visitors; persons with low literacy.
4. Decrease potential of complaints on this subject under the Nova Scotia Human rights Act.

Risk Related Information

The Lepofsky Case formed a precedent decision that would likely be considered when assessing similar human rights complaints in Nova Scotia.

Considerations

1. An interim measure requiring manual bus stop announcements by operators until an automated system of voice and visual bus stop announcements is implemented. How long to implement this option? (30 days, 60 days, 120 days)

2. Implementation of an automated system of visual and voice bus stop annunciation. How long before it should be done? (1 year, 18 months, 2 years)

3. Consultation with Transit Management, the unions involved and Labour Relations of Human Resources as to the potential effect on labour / management relations.

Prepared by Laughie Rutt
Diversity Consultant.