

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

Info Item No. 4
Transportation Standing
Committee April 28, 2016

| то: | Chair and Members of Transportation Standing Committee Original Signed | | | | | |
|---------------|---|--|--|--|--|--|
| SUBMITTED BY: | V/ r | | | | | |
| | Dave Reage, Acting Director, Halifax Transit Original Signed | | | | | |
| | | | | | | |
| | Bob Bjerke, Director and Chief Planner, Planning & Development | | | | | |

DATE:

April 18, 2016

SUBJECT:

Transit Priority Opportunities Study

INFORMATION REPORT

ORIGIN

At its meeting of October 29, 2014, Halifax Regional Council approved a motion to enter into an agreement with the Province of Nova Scotia to undertake a number of cost-shared projects including the Transit Priority Measures Study.

The approved 2015-16 Planning & Development Business Plan included this deliverable: "
On-street opportunities for transit priority measures will be evaluated and ranked for future implementation."

LEGISLATIVE AUTHORITY

The Halifax Regional Municipality Charter Section 322(1) states that "Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality."

BACKGROUND

In January 2015 contract 14-348 was awarded to WSP Canada to undertake the Transit Priority Measures Study. That study was completed in April, 2016.

Increasing the priority of transit in the road network is one of the principles of the Moving Together Forward Plan approved by Halifax Regional Council on April 12, 2016.

DISCUSSION

Transit priority measures are physical measures constructed into streets or modifications to traffic control that provide priority to transit buses. A number of priority measures have been constructed over the past fifteen years and continue to operate safely and effectively. The aim of the Transit Priority Measures Opportunities Study was to identify a number of opportunities to implement measures, to develop a methodology to assess cost-effectiveness of each measure, and to create a prioritized list for implementation.

The study began by identifying nineteen potential locations where transit priority opportunities may be available. Following a screening process, the list was narrowed to thirteen locations for more detailed evaluation. Functional layout plans were developed for each location and estimates for capital and operating cost were developed. Both in-field measurement and computer simulation were used to determine changes in delay for both buses and vehicles. Total time saving was calculated on a perperson basis. The results of the comparative analysis are provided in Appendix A and were used to develop a five-year implementation plan.

It should be noted that the functional designs produced were intended to inform the cost benefit analysis, and are subject to final detailed design and analysis. Some variations may exist between the measures proposed by the study and measures that are implemented.

One of the measures identified in the study (see Attachment A – Transit Priority Measures Study – Cost Summary Table), specifically the measure identified at Main Street and Hartlen Street, was implemented in July 2015. Halifax Transit intends to implement the measure identified at Robie Street and Almon Street in the coming months. In addition, design work has been completed for the measure along Windmill Road southbound near Seapoint Road, and construction of this measure may proceed during the 2016 construction season. Additional measures will be considered as budget permits.

The top nine projects on the list have been demonstrated in the study to provide tangible transit benefits with no substantive impact on traffic flow. These projects will form the basis for preparing future Project Budgets for approval by Regional Council. The remaining projects on the list will require further assessment or design modification before being considered for future implementation.

The full report is available at www.halifax.ca/transit/TransitPriorityMeasures.php

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report as it is only providing information to the Transportation Standing Committee.

As part of the approved 2016/17 Capital Budget, \$200,000 was allocated to Halifax Transit project CM000009 Transit Priority Measures to commence implementation of the measures identified in the report.

COMMUNITY ENGAGEMENT

No community engagement has been undertaken as part of this study.

<u>ATTACHMENTS</u>

Attachment A - Transit Priority Measures Study - Cost Summary Table

A copy of this report can be obtained online at http://www.halifax.ca/commcoun/index.php then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by:

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Original Signe

Report Approved by:

Patricia Hughes, Acting Manager, Planning & Scheduling, 902.490.6287

Table 3-1 - Cost Summary Table

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|---|-------|-------------------------------------|---|--|------------------|---|-----------------|--|--|
| TPM Location | TPM # | Estimated Capital Cost ¹ | Annual Change in Cost to Transit Agency ² | Annual Change in Cost to road users (including Transit Riders) | Estimated Annual | Payback Period to the Transit Agency (years) ³ | Overall Payback | | |
| Macdonald Bridge @ Wyse Road | 1 | \$12,000 | -\$2,800 | -\$25,100 | \$0 | 4.3 | 0.4 | | |
| Windmill Road @ Victoria Road (NB) | 2 | \$299,000 | -\$15,200 | -\$132,700 | \$800 | 18.7 | 2.0 | | |
| Windmill Road @ Seapoint Road (SB) | 3 | \$276,000 | -\$14,100 | -\$114,000 | \$800 | 18.5 | 2.2 | | |
| Main Street @ Gordon Avenue | 4 | \$4,000 | -\$7,200 | \$260,900 | \$0 | 0.6 | (0.02) | | |
| Portland Street @ Woodlawn Road | 5 | \$68,000 | -\$3,200 | -\$18,200 | \$0 | 21.3 | 3.2 | | |
| Barrington Street @ Macdonald Bridge Ramp | 6 | \$83,000 | -\$2,000 | -\$19,400 | \$0 | 41.5 | 3.9 | | |
| Windmill Road @ Akerley Boulevard | 7 | \$332,000 | -\$1,500 | -\$16,000 | \$300 | 184.4 | 19.3 | | |
| Robie Street @ Almon Street | 8 | \$6,000 | -\$2,000 | -\$14,800 | \$0 | 3.0 | 0.4 | | |
| Main Street @ Hartlen Street | 9 | \$4,000 | -\$10,700 | -\$40,500 | \$0 | 0.4 | 0.08 | | |
| Chebucto Road @ Connaught Avenue | 10 | \$99,000 | -\$3,600 | -\$34,200 | \$300 | 25.4 | 2.6 | | |
| Mumford Road @ Chebucto Road | 11 | \$10,000 | -\$3,800 | \$1,400 | \$0 | 2.6 | 4.2 | | |
| Robie Street @ Quinpool Road | 12 | \$20,000 | -\$3,200 | \$655,400 | \$0 | 6.3 | (0.03) | | |
| Cobequid Terminal @ Cobequid Road | 13 | \$4,000 | -\$1,400 | \$29,900 | \$0 | 2.9 | (0.1) | | |

^{1.} This estimate of probable construction cost is approximate only. Actual cost may vary significantly from this estimate due to market conditions. Details for each shown in Appendix B.



^{2.} Annual Change in Cost to the Transit Agency does not include Change in Cost of ridership delay.

^{8.} The Payback Period to the Transit Agency is the Capital Cost divided by the Annual Savings to Transit minus the Annual Maintenance. This does not include time savings to transit riders.