

DECISION/DIRECTION NOTE

Title: Sidewalk Snow Clearing Service Levels

Date Prepared: September 3, 2020

Report To: **Committee of the Whole**

Councillor and Role: **Councillor Ian Froude, Public Works & Sustainability**

Ward: N/A

Decision/Direction Required:

To seek direction on increasing the level of service provided by the current sidewalk snow clearing program.

Discussion – Background and Current Status:

Winter sidewalk maintenance activities are an important component of an active transportation network and help to improve the commuter experience. The City of St. John's snow clearing program is intended to assist vehicles that are properly equipped for winter driving and operated using good winter driving practices as well as pedestrians using proper winter footwear.

Challenges

The local climate is one of the biggest challenges we face for snow clearing sidewalks. St. John's is one of the snowiest cities in Canada, but also has a very temperate climate which results in a lot of rain and/or snowmelt immediately after a snowfall. That rain and melt causes our snow to get wet and heavy very quickly. The snow subsequently freezes, turning into ice. This hard, heavy snow creates an incredibly difficult challenge for our equipment.

It is important to recognize that the level of service for snow clearing and ice control will not be the same on sidewalks as it is in the roadway for the following reasons:

1. The physical characteristics of sidewalks such as limited width, obstructions (utility poles, guy wires, and fire hydrants), and lack of drainage.
2. The effect of pedestrian traffic compared to vehicular traffic (vehicles help move salt around once adjacent ice is melted).
3. Limitations of sidewalk equipment such as size, power, and speed. To match the same level of service would require double or triple the operator/equipment resources.
4. Smaller equipment tends to become damaged more easily than larger equipment when used in the hard packed and icy snow that is common in St. John's.

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A significant challenge to achieving the level of service is the ability to recover completely from an event before the next event begins. It is important that expectations are managed during the winter season with resource constraints.

Current Service

The sidewalk snow clearing program is designed to provide the highest level of service during the daytime hours and it provides minimal overnight coverage. This time varies with snowfall amounts, time between snow events, and ice accumulation. This document outlines the existing structure and supplies options to consider that will enhance the level of service.

Outline of the current sidewalk snow clearing program:

- 161 kilometers of sidewalk including 36 schools (primary to post-secondary)
- 12 routes (9 using internal forces and 3 contracted), averaging 13.4km per route
- 18 operators and 2 supervisors are assigned to the sidewalk snow clearing program from December 1 to March 21
- The current resources allocated to sidewalk snow clearing result in a four to seven-day completion timeline, for a **typical** St. John's winter. This time varies with snowfall amounts, time between snow events, and ice accumulation.

Public Engagement

On August 14, 2020, the City shared the results of a public engagement process conducted over the summer on the sidewalk snow clearing issue. The feedback gathered was shared in a What We Heard document and encapsulated in an infographic (attached). In general, the public rated winter walkability high; safety and the overall condition of sidewalks are significant concerns; and while improvements to snow clearing have been noticeable in the past few years, route connectivity, consistency, and ice control were noted as problematic. 88% of those engaged in the process support increasing investment in sidewalk snow clearing, with 70% indicating they would support a \$25 increase in taxes for those improvements.

Staff carefully reviewed the results of the public engagement process. To address any improvements in 2020, urgency is required in order to purchase additional equipment and hire additional resource. While the public engagement process offers valuable ideas on route reconfiguration and other improvement opportunities which staff are considering, this decision note focuses solely on options that have financial implications. (Please note that neither option removes any portion of the 161km of sidewalks that are currently serviced.)

Proposed Options

The following options are provided for Council's consideration. Neither option removes any portion of the 161km of sidewalks that are currently serviced.

Option 1

- Increased attention to priority 1 sidewalks. Staff will not begin working on lower priority sidewalks until all priority 1 segments are passable and have adequate traction.
- Increase the rate and frequency of salt applications.

Operating Cost	\$50,000
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Option 2

- Clear all pedestrian activated signals within 48 hours of the snow stopping.

Operating Cost	\$700,000
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Option 3

- Create three new routes, the average route length is shortened to 11km (18% decrease), the overall network remains at 161km.
- 4 additional pieces of sidewalk equipment
- 6 additional staff, 3 per shift

Capital Cost	\$900,000
Operating Cost	\$300,000

Option 4

- Add an evening shift (50% increased time working on network), route lengths are unchanged, and the overall network remains at 161km.
- 4 additional pieces of sidewalk equipment
- 9 additional staff + 1 additional supervisor

Capital Cost	\$900,000
Operating Cost	\$450,000

Option 5

- Create five new routes, the average route length is shortened to 9.5km (30% decrease), the overall network remains at 161km.
- 7 additional pieces of sidewalk equipment

- 10 additional staff, 5 per shift

Capital Cost	\$1,500,000
Operating Cost	\$500,000

Option 6

- Create 9 new routes, the average route length is shortened to 8 km (40% reduction), the overall network remains at 161km.
- 12 additional pieces of sidewalk equipment
- 4 loader/blower units to move large snow accumulations
- 18 additional staff, 9 per shift + 2 additional supervisors, 1 per shift

Capital Cost	\$3,300,000
Operating Cost	\$1,200,000

Key Considerations/Implications:

1. Budget/Financial Implications:
 - Various options and associated costs are outlined above.
2. Partners or Other Stakeholders:
 - All commuters in the City of St. John's including pedestrians and motorists
3. Alignment with Strategic Directions/Adopted Plans:
 - A City that Moves
4. Legal or Policy Implications: N/A
5. Privacy Implications: N/A
6. Engagement and Communications Considerations:
 - The decision of council must be communicated via all channels and to all stakeholder groups, especially advisory committees, who contributed to the engagement process. Further engagement and communications are anticipated on this matter in the 2021 budget development process.
7. Human Resource Implications: N/A
8. Procurement Implications: N/A

9. Information Technology Implications: N/A

10. Other Implications: N/A

Recommendation:

Despite the fact that staff, Council and the public have a clear interest in improving winter walkability in the City of St. John's, staff are unable to recommend further investment in this service at this time, given the serious financial situation the City finds itself in at the end of the 2020 fiscal year. The minimal cost option to produce a noticeable difference to residents is 700k per year which is not budgeted. Given anticipated budget challenges going into 2021, enhancing the level of service for sidewalks is not recommended. Instead, staff recommend that Council commit to maintain the status quo for the 2020-21 winter season and consider future investments as part of the 2021 budget development process.

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Approved by: Kevin Breen

Report Approval Details

Document Title:	Sidewalk Snow Clearing Service Levels.docx
Attachments:	
Final Approval Date:	Sep 10, 2020

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to David Crowe was completed by workflow administrator Karen Chafe

David Crowe - Sep 10, 2020 - 12:20 PM

Lynnann Winsor - Sep 10, 2020 - 12:41 PM