

Snow and Ice Control

2022 Operational Update

RECOMMENDATION

That the January 31, 2022, City Operations report CO01051, be received for information.

Report Purpose

Information only. Council is being provided an update on Snow and Ice Control activities to inform future reports related to policy and service delivery.

Executive Summary

- Snow and Ice Control is an essential service that allows the City to deliver on the goals of The City Plan and the Safe Mobility Strategy.
- At the August 16, 2021, City Council meeting, Policy C409K - Snow and Ice Control Policy, and accompanying administrative procedures were approved.
- This is the first year the City has made use of the two phase parking ban to allow crews to clear more effectively and efficiently. At the November 30/December 1/8/10/14/15/17, 2021, City Council meeting, Council also directed the initiation of a pilot to blade Priority 4 (residential) roads to as close to bare pavement as possible.
- This winter season, extreme weather events including a prolonged period of extreme cold temperatures, frequent bouts of freezing rain, and greater than average snowfall volumes have created challenging snow and ice control conditions.
- When Administration resumed the City Council directed pilot to clear Priority 4 (residential) roads to as close to bare pavement as possible, significant snow volumes resulted in large windrows.
- Administration initiated a trial to assess the cost and operational feasibility of windrow removal and will include results, recommendations and resourcing requirements in a forthcoming report to Community and Public Services Committee on April 25, 2022.

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- This report provides a holistic, programmed approach to Snow and Ice Control with a GBA+ framework and social equity lens. It will incorporate the feedback heard from Council, residents and stakeholders over this past winter season.

REPORT

Background

Snow and Ice Control is a key service the City delivers to ensure safe travels for all users of the over 11,000 lane kilometers of roadways and over 5,000 kilometers of active pathways plays an important role in supporting ConnectEdmonton's strategic goals of creating a healthy city that embraces equity for all with vibrant urban places with mobility options for everyone.

Prior to the implementation of enhanced service levels on residential roads, Administration met the service levels as outlined in the Snow and Ice Control Policy and Procedure (C409K). For the 2021/2022 season, several new tools and procedures were implemented, including:

- The recently updated, Council-approved Snow and Ice Control Policy (C409K), approved at the August 16, 2021, City Council meeting.
- This is the first season the City has made use of the two phase parking ban to allow crews to clear more effectively and efficiently.
- Late in 2021, Administration was directed to initiate an enhanced snow clearing standard on the Priority 4 roadway network, specifically directing that roadways be maintained as close to bare pavement as possible.

This season, crews have been challenged with extreme weather events including frequent bouts of freezing rain, a prolonged period of extreme cold temperatures, and greater than average snowfall volumes. Administration and contractors were cautious in deploying equipment during extreme temperatures due to the likelihood of equipment damage, and supply chain issues for which could lead to not being able to address future extreme snow events due to increased timelines to repair equipment. Residential snow removal was subsequently paused due to the extreme cold.

As outlined in the Snow and Ice Control Procedure, Administration uses a priority hierarchy to address different components of both the Roadway and Goods Movement Network as well as the Active Pathways and Public Amenities Network. Residential roadways are assigned as Priority 4, are maintained to a five centimetre snowpack and are completed within seven to nine days once a residential blading cycle is initiated. The Snow and Ice Control Policy and program elements have undergone a number of changes and discussions with previous Councils, as outlined in Attachment 1.

Current State

Residential clearing, including a phase two parking ban, resumed on January 10, 2022. Given the significant snowfall volumes in the interim period, residents observed an increase in the presence and height of windrows. Standards for windrow encroachment are outlined in the Snow and Ice Control Procedures, however Administration initiated a trial on January 21, 2022, to clear all windrows from a selected neighbourhood to evaluate the cost and operational feasibility of full

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windrow removal in a future winter season. The neighbourhood of Griesbach in Ward Anirniq was selected as it allows Administration to test and monitor the full removal approach on 2.4 km of different types of roadway inventory.

Given the recent rise in temperatures and presence of windrows and ice, crews are working closely with EPCOR drainage to identify and mitigate any potentially blocked catch basins to address pooling and flooding. Residents are encouraged to report blocked catch basins through 311. Administration continues to monitor compliance with the two phase parking ban and encourages drivers to move their vehicles off the road when crews are scheduled to be in their neighborhoods.

Next Steps

The full costs for the trial windrow removal in Griesbach are being evaluated and finalized. Once these financials are finalized, Administration will evaluate the results of both the enhanced Priority 4 clearing pilot as well as the full windrow removal pilot and include results and recommendation in the upcoming City Operations report CO00778, Snow and Ice Control - Options to Increase Service Standards, scheduled to be presented at the April 25, 2022, Community and Public Services Committee meeting. The report will take a holistic, programmed approach to Snow and Ice Control with a GBA+ framework and social equity lens.

As a part of this programmed approach, Administration will address four key service delivery elements within the Snow and Ice Control program:

- arterial and collector roads;
- residential roads and cul de sacs;
- active pathway removal; and
- additional snow and ice control services such as assisted snow support.

At that time, Council may evaluate recommendations and trial results and direct further enhancements to the Snow and Ice Control Policy for future seasons. Any resource changes would be advanced through the Spring 2022 Supplemental Budget Adjustment or 2023-2026 Operating and Capital Budget processes.

Budget/Financial Implications

Total spending for Snow and Ice Control, as of December 31, 2021, was \$53.5 million, which represents the end of last winter season and the beginning of this winter season. Annual budgets follow the calendar year, however the winter season extends into two fiscal years. The total annual budget for Snow and Ice Control in 2021 was \$58.5 million and is \$57.2 million in 2022.

Administration has the flexibility to spend above the budgeted amounts to ensure the safety of the mobility network. Program spending in excess of budget results in a deficit in the program. Funding within the Financial Stabilization Reserve is a backstop where the corporation runs a deficit in the fiscal year.

In 2021, the November year-to-date results showed that the Snow and Ice Control program had a positive variance of \$13.4 million mainly due to the favourable weather conditions in the first part of the year. However preliminary financial results indicated that the Snow and Ice Control

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program ended 2021 with a favorable variance of only \$4.9 million as operational costs were \$8.5 million over the December monthly budget as a result of the increased snow/rainfall and freeze/thaw conditions.

A request will be made to carry forward the remaining funds into 2022 to cover contracted spends regarding sand pile removal (\$2.2 million), and the remaining surplus (\$2.7 million) allocated to partially fund Council's direction to clear Priority 4 roadways to as close to bare pavement as possible.

COMMUNITY INSIGHT

Administration incorporates feedback from Council, residents and key stakeholder groups to inform Snow and Ice Control Program policy development and operations. More information will be shared verbally as a part of Administration's accompanying presentation.

GBA+

As part of the City Operations report CO00778, Snow and Ice Control - Options to Increase Service Standards, Administration is consulting with Women's Advocacy Voice of Edmonton (WAVE), the Accessibility Advisory committee, Edmonton Transit Service Advisory Board and the Seniors Coordinating Council. Feedback from these and other equity seeking groups will be incorporated into the options presented for further enhancements to the Snow and Ice Control Program.

A key principle of Policy C409K, Snow and Ice Control, is equity, stating that "prioritization of winter maintenance activities based on equity is required to provide a mobility network that is accessible to people of all abilities and needs, and for all modes of transportation."

Administration recognizes the barriers that snow and ice present to residents with mobility challenges. Windrows provide a particular challenge to these populations. Options for assisted snow removal and program changes to better serve equity seeking groups may be included as part of the April 25, 2022 report.

ATTACHMENT

1. Snow and Ice Control Previous Council Reports