

## SNOW AND ICE CONTROL 2022-23 WINTER SEASON RESULTS

### RECOMMENDATION

That the June 19, 2023, City Operations report CO01733, be received for information.

<b>Requested Council Action</b>		Information only	
<b>ConnectEdmonton's Guiding Principle</b>		<b>ConnectEdmonton Strategic Goals</b>	
<b>CONNECTED</b>		<b>Climate Resilience</b>	
<b>City Plan Values</b>	ACCESS. PRESERVE.		
<b>City Plan Big City Move(s)</b>	Greener as we grow	<b>Relationship to Council's Strategic Priorities</b>	Mobility Network Climate adaptation and energy transition
<b>Corporate Business Plan</b>	Serving Edmontonians		
<b>Council Policy, Program or Project Relationships</b>	<ul style="list-style-type: none"> <li>• Snow and Ice Control Policy C409K</li> <li>• Snow and Ice Control Administrative Procedure</li> </ul>		
<b>Related Council Discussions</b>	<ul style="list-style-type: none"> <li>• CO00778 Snow and Ice Control - Options to Increase Service Standards, Community and Public Services Committee, April 25, 2022</li> <li>• CO01277 Snow and Ice Control - Programmed Approach for the 2022-23 Winter Season, Community and Public Services Committee, June 27, 2022</li> <li>• Upcoming - CO01718 Community Sandbox Program Review, Community and Public Services Committee, June 19, 2023</li> <li>• Upcoming - CO01824 Bylaw Enforcement and Ticketing during Phase 2 Parking Bans (E. Rutherford), Community and Public Services Committee, June 19, 2023</li> </ul>		

### Executive Summary

- The Snow and Ice Control program enables Edmontonians to experience a safe and liveable winter city, where residents can connect to and access spaces, services, facilities and transportation networks no matter how they choose to travel.

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- Administration made several improvements to the Snow and Ice Control program for the 2022-23 winter season. These improvements included aligning service level standards to available resources, enhancing communications and increasing equipment utilization.
- Edmontonians will experience a decrease in service levels in the 2023-24 winter season from the 2022-23 winter season, as funding levels will reflect funding allocated in Budget 2023-26.
- Service levels will increase in alignment with the budget over the next three winter seasons, beginning with the 2024-25 season.
- Administration will focus service levels on high priority roads and active pathways to provide citywide safety, reliability and connectivity.
- Planned program improvements include further enhancements to communications and using weather prediction services to further tailor road maintenance.

## **REPORT**

The Snow and Ice Control program supports a safe and liveable winter city, where residents can access spaces, services, facilities and transportation networks. The City's Snow and Ice Control policy and operational procedures are reviewed regularly and updated to align with industry best practices, other City policies (e.g. parkland management, accessibility), traffic bylaw, changing weather patterns, in response to resident and Council feedback, and to improve the safety, mobility and livability of Edmontonians.

City Policy C409K - Snow and Ice Control, supports the following outcomes:

- **Safety:** To prevent or reduce collisions, slips, falls and injury to people, and to ensure that emergency responders can reach those that need help.
- **Reliability:** Edmontonians understand when active pathways and roadways are to be cleared and to what standard they are cleared to.
- **Connectivity:** Edmonton's snow clearing approach enables Edmontonians to move safely, whether walking, rolling, biking, using transit or driving, through a mobility network of active pathways and roadways.

## **Background**

In August 2021, Council directed Administration to bring forward options to deliver enhanced Snow and Ice Control service levels. In the April 2022 report CO00778 Snow and Ice Control - Options to Increase Service Standards, Administration's program analysis outlined that:

- There were insufficient resources and equipment to meet the majority of Snow and Ice Control Policy and Procedure service levels for the 2021-22 season.
- Service levels would be adjusted to attainable standards that aligned with available resources and performance would be reported on an annual scorecard.
- Detailed options to increase service standards for roadways and active pathways.

In the June 2022 report CO01277 Snow and Ice Control - Programmed Approach for the 2022-23 Winter Season, Administration outlined a proposed approach to be implemented over three winter seasons, pending 2023-26 budget approval. The goals of this approach were to:

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- Enable operational effectiveness and flexibility in responding to different types of weather events as a result of climate change impacts.
- Provide a consistent, stable level of service to Edmontonians for 2023 through 2026.
- Ensure sufficient resources were available to provide service coverage for a city that continues to grow in geographic size, population and mobility network inventory.

On July 4, 2022, Council approved a one-time, \$4.7 million in-year funding increase from the Financial Stabilization Reserve to begin the process of improving service standards towards the service levels as outlined in the report. Administration updated the Snow and Ice Control Procedure and hired additional temporary seasonal staff for the 2022-23 winter season.

In December 2022, Council amended the proposed service package to be funded at 20 per cent of the budget request over the 2023-26 budget cycle. Despite the budget change from 2022 to 2023 (as the operational periods overlap the budget years), Administration retained the additional seasonal staff that were hired in 2022 on a one-time basis to maintain enhanced service levels for the remainder of the 2022-23 winter season.

### **2022-23 Seasonal Performance**

Performance results of the 2022-23 winter season (Attachment 1) include:

- This winter season was slightly cooler and had less precipitation compared with the past few seasons. There were no freezing rain events from November 1, 2022 to March 30, 2023.
- Roadway service level standards were met over 90 per cent of the time on arterial, collector and industrial roads, 80 per cent of the time on residential roads and 98 per cent of the time in school zones.
- Active pathways service level standards were met over 95 per cent of the time on most inventory (e.g. City facilities, stairs, bike lanes, LRT stations) and over 80 per cent on all inventory.
- Roadway equipment utilization rate increased in 2022-23 compared with the previous season due to increased staffing resources. Active pathways equipment utilization rate remained similar; however, leasing more equipment allowed Administration to optimize additional active pathways staff and clear sidewalk inventory more quickly.
- Administration improved communications around parking bans, including the launch of an updated parking ban notification service for Edmontonians with approximately 31,000 subscribers to date. Additional details about the process for communication and enforcement of parking bans is available in CO01824 Bylaw Enforcement and Ticketing during Phase 2 Parking Bans (Community and Public Services Committee, June 19, 2023).
- Administration continued to improve environmental performance and source control with sand and salt inventory, snow storage site management and infrastructure upgrades.

Administration will continue to present an evaluation of the program to Council at the end of each winter season. Performance measures and feedback from Council and the public would inform improvements for the following season. Using these feedback mechanisms and inputs, through flexible and adaptable service delivery, Administration will make adjustments within

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policy and budget to ensure that Snow and Ice Control services best meet the needs of Edmontonians.

### **2023-26 Service Levels**

Edmontonians will experience a decrease in service levels from the 2022-23 winter season to the 2023-24 winter season, as funding levels will reflect the funding allocated in Budget 2023-26. Service levels once at the new baseline will then increase incrementally every year until 2026, in alignment with the budget (Attachment 2).

- For the 2023-24 winter season, there will be an overall decrease in priority service levels for both roadways and active pathways as compared to 2022-23. Some key differences include:
  - Priority 1 roadways (freeways, arterial roadways, roads and alleys in business districts) will be completed within five days instead of four. The timeframe for completing Priority 4 roadways (residential) will increase from eight days to ten when a blading cycle is initiated.
  - Priority 2 active pathways (City sidewalks, ramps, staircases, shared paths, pedestrian bridges, bus stop access) will be cleared in six days instead of four. Priority 3 active pathways (manually cleared paths, bus benches, sandboxes) work will be completed within 22 days instead of 13.
- Roads and active pathways will continue to receive essential Snow and Ice Control services based on the priority service levels to ensure safety, reliability and connectivity across Edmonton's mobility network.
- Staff support for enforcement of parking bans will be reduced from 15 dedicated Snow and Ice Control Enforcement Officers (2022-23 winter season) to five, with no tow services.
- The Snow and Ice Control budget in 2026 will be comparable to what was spent in 2022, however this may not result in the same service levels due to regular inventory growth (i.e. more roads and surfaces to maintain).

### **Program Improvements**

The realities of climate change are at the forefront of planning and analysis when it comes to adapting the Snow and Ice Control program. Administration continuously monitors, evaluates and adjusts operational service delivery to respond to and anticipate new weather events and ambient temperature changes.

- Resource allocations in residential areas are being evaluated in response to increased early season freeze-thaw cycles and thaw events.
- Administration is working with vendors to improve weather prediction resources to better adjust services for climate change, and shift from a citywide model to a micro-climate model, to enable a more tailored approach to winter road maintenance.
- Administration will continue environmental monitoring and reporting of sand and salt inventory management, snow storage site management and the development of a watershed management framework.

The City's comprehensive winter communication strategy will continue to be improved based on Council and resident feedback, to educate residents about service levels and the shared

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responsibility of snow removal. Parking ban signage color and quantity have also been updated to better inform residents of parking bans.

### **Budget/Financial Implications**

Administration anticipates an unfavourable variance of approximately \$6 million over the 2022-2023 winter season. The seasonal staff hired in 2022 were funded with one-time funding of \$4.7 million from the Financial Stabilization Reserve for the 2022 portion of the 2022-23 winter season. In order to not have an adjustment in service levels mid-season these staff were retained with servicing continuing for the remainder of the 2022-23 winter season.

This variance will be absorbed as a one-time cost and will not influence future budget planning or resource allocation for the 2023-24 season. As a part of the 2022 budget deliberations, Council approved an increase to the Snow and Ice Control program budget annually from 2023 to 2026 by \$4 million, \$3.7 million, \$2.5 million and \$0.72 million respectively. This results in a \$68.5 million Snow and Ice Control budget in 2026, which includes operational funding for Parks and Roads Services and Community Standards and Neighbourhoods. Attachment 2 includes further details on the Snow and Ice Control program budget from 2022-2026.

Administration is committed to continued analysis, refinement and improvement of the Snow and Ice Control program within an approved budget and will present an evaluation of the program to Council at the end of each winter season. Performance measures and feedback from Council and the public would inform improvements or changes for the following season. To accommodate necessary planning and preparation, budget adjustments to the Snow and Ice Control program would need to be made by Q2 to be operationalized for that winter season. Budget adjustments made to the program in Q3 or Q4 would be operationalized the following winter season.

## **COMMUNITY INSIGHT**

This report includes 2022-23 winter season results and the 2023-26 programmed approach for Snow and Ice Control; additional public consultation is not required as part of this regular update.

Previous public and stakeholder engagement was completed in 2022 to inform reports CO00778 Snow and Ice Control - Options to Increase Service Standards (Community and Public Services Committee, April 25, 2022) and CO01277 Snow and Ice Control - Programmed Approach for the 2022-23 Winter Season (Community and Public Services Committee, June 27, 2022).

A City of Edmonton Service Satisfaction survey in 2022 captured Edmontonians' perceptions of overall service quality, satisfaction and importance of visible services, such as winter maintenance of roads and sidewalks. These results were presented as part of FCS01414 City of Edmonton Service Satisfaction Survey and Results (City Council, October 31, 2022). Summary of key findings related to Snow and Ice included:

- The largest proportion of Edmontonians see winter road maintenance as important.
- Compared to other services, Edmontonians believe winter road maintenance (snow and ice removal) should receive either "more" or "much more" financial investment.

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- Edmontonians see winter road maintenance services as one of the City's primary opportunities, meaning that they see this service as being important but are generally less satisfied with the service.

### **GBA+**

Policy C409K lists equity as a core guiding principle, stating “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 conducted an in-depth GBA+ report as part of CO00778 Snow and Ice Control - Options to Increase Service Standards. Key findings from this analysis included:

- Persons with mobility and accessibility challenges (including seniors, persons with disabilities, parents with strollers and active transportation users), as well as those who use multiple modes of transportation, have greater difficulty moving around in snowy and icy winter conditions, and may face additional barriers to clearing snow. This results in safety hazards (e.g. increased slips and falls) and day-to-day barriers to mobility for themselves and others in the community.
- Persons with limited mobility are disproportionately affected by Snow and Ice Control measures and face the risk of increased injuries with icy conditions.
- People who use active pathways and public transportation are affected differently by snow and ice, compared with those who use roads and vehicles. These individuals face increased barriers and risk of injury with snow and ice accumulation along any part of their route.

These findings and GBA+ will continue to be used to help identify inequalities that may exist in the Snow and Ice Control program. This approach considers residents' lived experiences, protects vulnerable mobility network users, addresses unintentional systemic service delivery inequity and contributes to Vision Zero.

### **ATTACHMENTS**

1. Snow and Ice Control - Operational Performance (2022-23)
2. Snow and Ice Control Budget (2022-26)