Attachment 3

History of Snow and Ice Program 2016-2026

2016

Corporate Restructuring

- Corporate restructuring resulted in the formation of a new City Operations department, appointment of new Deputy City Manager and staffing changes. Parks and Roads Services (PARS) branch was created by integrating the former Roadway Maintenance section with the former Parks Operations section.
  - New Infrastructure Operations section became responsible for Snow and Ice Control (SNIC) operations (previously divided between Roadway Maintenance and Parks Operations).
  - New Infrastructure Maintenance section became responsible to preserve/extend the life of infrastructure.

Budget Change

- No independent snow and ice information available (pre-reorganization all budget was organized under "Roads").

SNIC Employee Peak Season Headcount

- No information available.

Service Level Change

- The Winter Street Sand Recycling and Mixing Program audit[1] highlighted issues regarding program cost-effectiveness and management. The program was discontinued. Council motioned Administration to present options to manage used winter street sand. A calcium chloride pilot was implemented (three road sections).

2017

Council Report

- July 6, 2017, City Operations report CR_3805, Summary of Potential Service Improvements to Snow and Ice Control Policy C409I on potential improvements to the SNIC Policy, including winter maintenance practices, service level improvements based on public engagement, and anti-icing (2016-17 pilot). Council directed Administration to further explore use of anti-icing agents, river water monitoring results and potential policy amendments.

Budget Change

- Planned budget - $63,437,113
- Actual budget - $42,747,797

SNIC Employee Peak Season Headcount

- No information available.

Service Level Change

- Anti-icing pilot expansion included more roads, bus stops, bike lanes and sidewalks, with additional changes in application guidelines for salt-sand mix, increases in mechanical plowing and reduction in sand use.

2018

Council Report

- Two council reports presented in response to 2016-17 motions:
  - July 4, 2018, City Operations report CR_4147, Options to Manage the Used Winter Street Sand addressed the sand recycling audit recommendations.

[1] Office of the City Auditor. September 19, 2016. Winter Street Sand Recycling and Mixing Program Audit. https://www.edmonton.ca/sites/default/files/public-files/Winter_Street_Sand_Recycling_and_Mixing_Program_Audit.pdf

	○ July 4, 2018, City Operations report CR_5033, Alternative Practices to Address Snow and Ice Control included preliminary results of the 2017-18 anti-icing pilot, proposed amendments to the SNIC Policy, river water monitoring results, and environmental and safety studies planned for 2018-19 (environmental, materials and traffic safety). ● Council approved the updated SNIC Policy and voted to continue the anti-icing pilot, which expanded (2018-19). **Budget Change** ● Planned budget - $65,751,978 ● Actual budget - $63,060,555 **SNIC Employee Peak Season Headcount** ● No information available. **Service Level Change** ● Continuation of the anti-icing pilot.
2019	**Staffing** ● Winter Shift Structure project was initiated to improve staff schedules, staffing and equipment utilization, and service levels. Feedback was gathered from staff on the proposal of changing eight-hour shifts to 12-hour rotating shifts. ● Active Pathways staff voted to change to a straight 10-hour shift. ● Snow and ice operations were split into two teams to improve service delivery: ○ Roadways (freeways, arterial, collector and residential roads, etc.) ○ Active Pathways (sidewalks, bike lanes, bus stops, stairs, facilities etc.) **Program Measurement** ● Active Pathways began to measure performance against Service Level Agreements in the Policy. **Council Report** ● Multiple SNIC related Council reports were presented to Community and Public Services Committee including: updates on research and monitoring studies from the anti-icing pilot, public engagement on various elements of the SNIC program, volume of SNIC related calls received by 311 and complaints process for snow and ice on residential sidewalks that are maintained by residents ○ January 22, 2019, City Operations report CR_6774, Alternative Practices to Address Snow and Ice Control Update - Verbal report ○ June 26, 2019, City Operations report CR_6851, Snow and Ice Control - Pilot Update ○ September 4, 2019, City Operations report CR_6852, Snow and Ice Control - Pilot Results ● Administration presented a report (September 4, 2019, City Operations, CR_6852, Snow and Ice Control - Pilot Results) with results from monitoring studies and recommended to continue use of anti-icing to help achieve bare pavement. Council voted to discontinue use of anti-icing on roads. ○ As discussed at Council, anti-icing agent is still currently used on Core Pathways (Priority 1) divided bike lanes and active pathways inventory. It is also a pre-wetting agent added to loose sand/salt mix applied on roadways by sanders. The pre-wetting agent allows sand and salt to better stick to a hard snowpack. ○ Administration was asked to return in June 2020 with additional measures to achieve a safe winter road surface without the use of salt, calcium chloride and sand.

	Snow and Ice Audit ● A letter of complaint purportedly authored by 23 PARS employees was sent to City Council, the contents of which was the impetus for the Snow and Ice Audit. **Budget Change** ● Planned budget - $63,726,866 ● Actual budget - $53,980,525 **SNIC Employee Peak Season Headcount** ● No information available. **Service Level Change** ● N/A
2020	**Council Report** ● February 19, 2020, City Operations report CR_8089, Snow and Ice Removal Update - Verbal report update provided to Council after concerns were raised about challenging residential road conditions in February. ● Motion made to include windrow removal options in an upcoming report. ● Two council reports were presented: ○ July 6, 2020, City Operations report CR_7694, Alternative Approaches to Snow and Ice Control, including a new citywide parking ban, program strategic framework, and options with costing for service levels and ice control products. ○ July 6, 2020, City Operations report CR_8194, Cost of Clearing Bike Lanes. A motion to de-prioritize bike lanes was defeated. ● October 14, 2020, City Operations report CR_8506, Snow and Ice Control - 2019/2020 Monitoring Results ○ Included results from the 2019-20 monitoring program and unanimous passing of the new parking ban bylaw. The two-phase parking ban was introduced for the 2020-21 season. **Snow and Ice Audit** ● The SNIC program audit was launched. **Staffing** ● Implemented 12-hr rotating winter shifts for Roadways staff. **Budget Change** ● Planned budget - $59,716,763 ● Actual budget - $60,663,170 **SNIC Employee Peak Season Headcount** ● The count of permanent and seasonal staff part of the Roadways and Active Pathways units is 461. **Service Level Change** ● The two-phase parking ban was introduced for the 2020-21 season.
2021	**Council Report** ● SNIC Audit results presented to Council (February 11, 2021, City Operations report CO00180, Administration Response - Snow

	and Ice Control Program Audit). Administration accepted all 12 recommendations from the City Auditor. ● Council approved SNIC Policy Refresh[2] (C409K). Operational content was moved into a new SNIC Procedure[3] document. Minimal changes in service levels; updates reflect clearer language, descriptions and definitions. ● In August, Council directed Administration to bring a report identifying options for SNIC enhanced service standards and resources needed to support these options (due April 2022). **Communications** ● Updates and enhancements to Communications plan, tools and web page updates were completed for the start of the 2021-22 SNIC season. Budget updates and approvals were completed in December. **Program Measurement** ● Roadways began to measure performance against Service Level Agreements in the Procedure. **Snow and Ice Audit** ● Six out of 12 Audit recommendations were closed, including process improvements to Standard Operating Procedures, development of Key Performance Indicators, monitoring dashboards and benchmarking plans. **Budget Change** ● Planned budget - $58,006,701 ● Actual budget - $53,546,000 **SNIC Employee Peak Season Headcount** ● The count of permanent and seasonal staff part of the Roadways and Active Pathways units is 507. **Service Level Change** ● In December, Council directed Administration to undertake a bare pavement blading pilot project in residential neighbourhoods until April 30, 2022.
2022	**Council Report** ● SNIC presented options to increase service standards to Council. ● In April, Council directed Administration to consult with EPCOR to examine whether flood mitigation storage areas can also be used as snow dumps. ● In May, Council directed Administration to bring a report outlining budget considerations to support enhanced service delivery. Administration presented this report in June. **Budget Change** ● Planned budget - $79,410,910 ● Actual budget - $97,571,000 **SNIC Employee Peak Season Headcount** ● The count of permanent and seasonal staff part of the Roadways and Active Pathways units is 649.

[2] City of Edmonton. August 16, 2021. Snow and Ice Control Policy. https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/Snow-Ice-Control-Policy_C409K.pdf

[3] City of Edmonton. August 16, 2021. Snow and Ice Control Procedure. https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/Snow-Ice-Control-Procedure_C409K.pdf

	Service Level Change ● Increased hired equipment usage for approved residential Bare Ground Pilot.
2023	**Council Report** ● In February, Administration presented a report based on the consultation with EPCOR about whether flood mitigation storage areas can also be used as snow dumps (as directed in April 2022). ● In February, Council directed Administration to provide a report regarding snow removal programs. Administration presented the report in July. ● In November, Council directed Administration to provide a report regarding accessibility and assisted snow clearing programs (due April 2024). **Budget Change** ● 20 per cent of ask Base Service Increase as a part of the 2023-26 budget cycle. ● Planned budget - $63,597,258 ● Actual budget - $54,916,809 **SNIC Employee Peak Season Headcount** ● The count of permanent and seasonal staff part of the Roadways and Active Pathways units is 580. **Service Level Change** ● N/A
2024	**Council Report** ● In April, Administration presented a report about accessibility and assisted snow removal programs (as directed in November 2023). **Budget Change** ● Planned budget - $67,177,447 ● Actual budget - $72,086,364 **SNIC Employee Peak Season Headcount** ● The count of permanent and seasonal staff part of the Roadways and Active Pathways units is 647. **Service Level Change** ● N/A
2025	**Committee Direction** ● In May, the Community and Public Services Committee directed Administration to provide a report outlining options and budget implications for amending the Snow and Ice Control procedures and Sidewalk Maintenance Program. Administration presented this report in August. **Corporate Restructuring** ● PARS reorganization, assigned SNIC into a new section Mobility Infrastructure Services. **Budget Change** ● Planned budget - $67,553,814

	• Actual budget - $76,648,039 **SNIC Employee Peak Season Headcount** • The count of permanent and seasonal staff part of the Roadways and Active Pathways units is 645. **Service Level Change** • N/A
2026	**Council Report** • In January, suggested amendments to the Bylaw 5590 - Traffic Bylaw were presented by the Community and Public Services Committee to Council. **Budget Change** • Planned budget - $71,247,972 • Actual budget information not yet available **SNIC Employee Peak Season Headcount** • To be confirmed. **Service Level Change** • N/A