Parks and Roads Services

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Snow and Ice Control Annual Report

2022-23 Winter Season

edmonton.ca/safetravels

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SEASONAL HIGHLIGHTS FOR 2022-231



¹ Most of the 2022-23 data included in this report is from October 2022 - April 2033 unless stated otherwise. In most instances, up to the last three seasons' results are provided for comparison unless historical data or averages are based on a longer time period.

INTRODUCTION

The City of Edmonton is committed to ensuring a safe, reliable and accessible winter mobility network for people walking, rolling, biking, using transit and driving.

The City's Snow and Ice Control Policy and Administrative Procedure can be found at <u>edmonton.ca/safetravels</u>. They support the following outcomes:

- **Safety:** Prevention and reduction of collisions, slips, falls and injury to people, and ensuring emergency responders can reach those that need help.
- **Reliability:** Edmontonians understand when active pathways and roadways are to be cleared and what service standards can be expected through public awareness.
- **Connectivity:** Edmonton's snow clearing approach enables Edmontonians to move safely however they move around the city and use the entire mobility network.

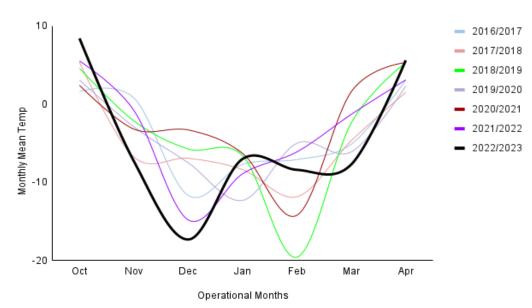


WEATHER

The Snow and Ice Control program typically runs from the last week of October to mid-April, since this is when the majority of snow, freezing rain and freeze-thaw cycles are likely to occur. The amount and type of precipitation influences:

- The type and frequency of maintenance activities, such as plowing and sanding
- Equipment and materials usage
- When a parking ban may be needed

2022-23 Winter Season Temperature and Precipitation



January is the coldest month of the year, on average.² The 2022-23 winter season had lower than average precipitation, both in terms of the number of precipitation days and total precipitation amounts. The majority of precipitation occurred in November and December 2022, primarily as snow.

² Historical and current data from Government of Canada <u>https://climate.weather.gc.ca/</u>

The 2022-23 winter

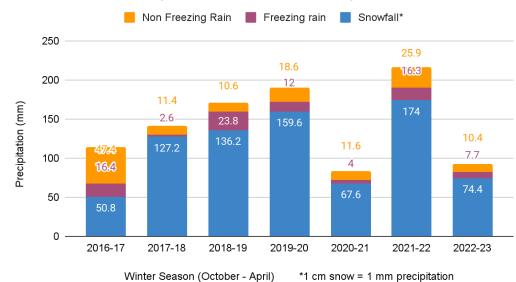
season was colder

average, compared

and drier on

with recent

seasons.



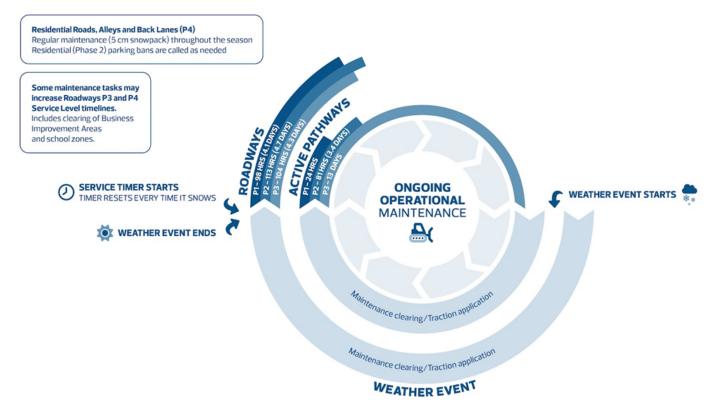
Comparison: Total Amounts of Precipitation

SERVICE LEVEL DELIVERY



The Snow and Ice Control program uses a priority system to complete winter maintenance. There are separate staff and equipment for Roadways and Active Pathways, and service levels for each group of inventory are completed independently of one another.

Crews are out 24/7 maintaining Roadways and Active Pathways. The service level 'timer' starts once a weather event ends and resets at the start of a new weather event.







	2022-23 Service Levels and Priority Plan							
Network Type	Priority 1	Priority 2	Priority 3	Priority 4				
Roadways	Freeways, arterials, business districts: Bare pavement within 4 days . Alleys in business districts: 5 cm snowpack within 4 days .	Collector roads, Transit Park and Ride access roads: Bare pavement within 5 days Service fully provided by contractors.	Industrial roads: Bare pavement within 5 days. Rural roads: Level snowpack within 5 days.	Residential roads and alleys: 5 cm snowpack within 8 days once residential blading cycle is initiated				
	Phase 1 parking ban when applicable	Phase 1 parking ban when applicable	Phase 2 parking ban when applicable	Phase 2 parking ban when applicable				
Active Pathways	Paths adjacent to City facilities, transit centres and LRT stations; prioritized bike route network: Bare pavement within 24 hours.	All other City maintained active pathways: Safe and passable surface within 4 days .	Manually cleared active pathways and public amenities: Safe and passable surface within 13 days. Community sandboxes: Refill within 13 days after snowfall, once active paths cleared (courtesy service).	N/A				

Crews are responsible for clearing and maintaining pathways around City of Edmonton facilities and bus stops adjacent to City property. Sidewalks adjacent to private property are the responsibility of property owners, as are areas around bus stops adjacent to private property (Community Standards Bylaw 14600).

2022-23 Winter Season Performance Results

A total of three snow events were declared for Roadways and 20 snow events for Active Pathways.³ Overall, service completion rates in 2022-23 improved over the previous year. Contributing factors included:

- Additional staff were hired for the 2022-23 season due to available funding
- Adjustment of service levels for 2022-23 were based on the number of available resources
- Fewer snow days, precipitation and a lack of freezing rain

The following scorecards indicate the per cent of total inventory completed within the service level timeframe. A score of 100 per cent means that crews were able to complete all roads or areas within the service level timeframe for the entire season.

³ For Roadways, a snow event is declared when there is an accumulation of 2 cm or more. For Active Pathways, a snow event is declared when any amount of snowfall occurs.

Overall, crews were able to complete a higher percentage of inventory within service level timelines, compared to the previous season.

ROADWAYS SCORECARD									
	2021-22 Wir	nter Season	2022-23 Winter Season						
Priority Level	Service Level (not aligned to budget)	On-time % Completion	Service Level (aligned to budget)	On-time % Completion					
P1 - Arterial, Business Improvement Areas	1.5 days	76%	4 days	98%					
P2 - Collector, bus routes	2 days	37%	5 days	90%					
P3 - Industrial, rural	5 days	89.1%	5 days	97%					
P4 - Residential	9 days	59.98%	8 days	80%					
P4 - School zones	9 days	not measured	8 days	97%					









ACTIVE PATHWAYS SCORECARD								
Priority Level	2021-22 Wir	nter Season	2022-23 Wir	nter Season				
Phonty Level	Service Level (not aligned to budget)	On-time % Completion	Service Level (aligned to budget)	On-time % Completion				
P1 - City facilities/ centres, some bus stops, stairs	1 day	99%	1 day	99%				
P1 - Prioritized bike routes	1 day	91%	1 day	96%				
P1 - LRT Stations	1 day	99%	1 day	99%				
P1 - Hard surface trails (river valley)	1 day	87%	1 day	85%				
P2 - Parking lots	2 days	not measured	4 days	85%				
P2 - Non-prioritized, separated bike lanes	2 days	87%	4 days	95%				
P2 - Pedestrian bridges	2 days	90%	4 days	95%				
P2 - All-season stairs (separate from City facility areas)	2 days	88%	4 days	88%				
P2 - City maintained sidewalks, wheelchair ramps, shared paths	2 days	68%	4 days	80%				
P3 - Manually cleared areas (bus stops, paths, etc)	5 days	69%	13 days	96%				
P3 - Bus stops	5 days	42%	13 days	81%				
P3 - Community sandboxes	5 days	58%	13 days	92%				

Indicates on-time completion rate of 80% or higher (target).

Safety, Accessibility and Mobility

The Snow and Ice Control program ensures the mobility network is safe, reliable, connected and accessible for all users. During the 2022-23 winter season, crews:

- Prioritized windrow pick-up over the holiday break within Business Improvement Areas
- Completed additional bike lane windrow pick-ups
- Completed school zone windrow pick-up and residential cul-de-sac clearing earlier in the season to proactively address safety concerns developing from unseasonably warm temperatures
- Contracted small equipment to clear residential curb cuts and proactively clear catch basins
- Monitored bridge decks and hills closely for ice and frost formation
- Maintained and widened pathways as needed to reduce snow and ice and to improve pedestrian mobility

INFRASTRUCTURE INVENTORY AND GROWTH

Edmonton is a growing city. The amount of maintained roads and pathways is trending upward, particularly residential roads, machine cleared paths, bike lanes, trails in natural areas and manually cleared areas, such as around bus stops and benches. As inventory continues to grow, more staff and resources may be required to provide consistent service levels year-over-year.

Changes in inventory are affected by several factors:

- New construction of neighbourhoods and bike lanes, road widening and installation of traffic calming measures, which can increase the amount and complexity of surfaces to be maintained
- Annual review, evaluation and possible recategorization of inventory and routing within Snow and Ice Control
- Continual process improvements and accuracy with mapping and inventory data
- Citywide changes with services and roadway classification

Roadways	% Change in Inventory (2020-21 to 2022-23)	Active Pathways	% Change in Inventory (2020-21 to 2022-23)
P1	0% (arterials)	P1	111.7% (machine cleared paths) 33.6% (bike lanes) 18.5% (civic walkways)
P2	8.6% (collector routes)	P2	 211.2% (natural areas) 35.5% (bridges) 14.7% (bike lanes) ↓ -19.7% (parking lots)
Р3	-11% (industrial, rural) ¹	Р3	138.3% (manually cleared areas) 7.8% (community sandboxes) 12.6 (parking lots)-11% (facilities) - 23% (bus stops beside city property)²
Ρ4	23.3% (residential)		

¹ Decrease due to recategorization of inventory between priority categories.

² Decrease due to: reprioritization and recategorization of inventory; Edmonton Transit Service bus route redesign (changes in number of bus stops)



Traffic Calming Infrastructure

Traffic calming measures are designed to help reduce traffic speeds, reduce non-local traffic and improve pedestrian visibility and safety at crossings. This work aligns with the Safe Mobility Strategy 2021-2025. More information about these features can be found on <u>edmonton.ca/communitytraffic</u>.

Due to the unique structures and locations of these features, Snow and Ice crews must clear and maintain these areas by hand, rather than using sidewalk machines or road plows. This impacts overall service timelines for Priority 3 Active Pathways. As additional calming measures are built in future years, additional Snow and Ice Control staff will be needed to maintain the same level of service.

The number of curb extensions, parklets and rubber speed humps increased the most in 2022.

	Traffic Calming Measures ¹	2021	2022	Average Change in Number (across all types)
9	Total Number	17	163	18.3 (859% increase)

¹ Includes eight types of structures: curb extensions, parklets, centreline hardening, centre medians, two-stage crossings, road narrowing, rubber speed humps and traffic diverters.

PERSONNEL AND EQUIPMENT



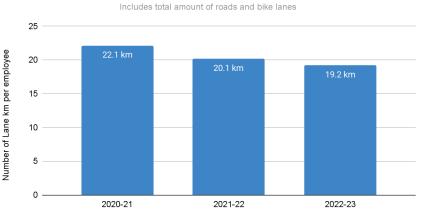
Dedicated, trained staff and access to necessary equipment are critical to the success of the Snow and Ice Control program.

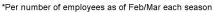
Personnel

	2020-21	2021-22	2022-23
Number of Employees	461	507	649

Total Number of Lane km Per Employee*

Additional staff were hired for the season as a result of one-time Council-approved funding. Increasing the number of available staff enabled the City to increase service delivery, and allowed for better utilization of available equipment.





Distances are represented in lane kilometres (lane km), which is a function of the length of the street or bike route multiplied by the number of lanes on that street or bike route.

While most roads are maintained by City crews, Priority 2 roads are maintained by contractors during declared snow events. Active Pathways are maintained by a combination of City crews and contractors.

Network Type	Number of Contractor Callouts (based on snow events)
Roadways	3
Active Pathways	2 - parking lots 13 - sidewalk plowing 39 - civic walks

Equipment

Equipment utilization rates are affected by several factors:

- Number of staff available to operate the equipment •
- Type of equipment and availability of optimal equipment required to complete the work
- Availability of well-maintained and properly functioning equipment
- Percentage of owned equipment (utilization rates do not include leased equipment) •
- Weather and road conditions •



The number of available equipment units have remained fairly constant for the past several years. Leased equipment utilization rates are not reflected in the tables below.

		ROADWAYS EQUIPMENT (OWNED UNITS)						
Roads equipment	Equipment Type	Max Total Available (in yard)		Max Units Used ¹ (daily)		% Max Utilization of Bookout Rate ²		
utilization increased due to an increase in		2021-22	2022-23	2021-22	2022-23	2021-22	2022-23	
the number of staff hired for the season.	Graders						47.37%	
		19	19	12	9	63.16%	47.37%	
Decrease in grader use was due to unseasonably warm temperatures.	Loaders	14	13	10	10	71.43%	16.92%	
Graders are used more often in cold, snowy conditions.	Tandem Sanders/Plows	119	114 ³	57	78	47.90%	68.42%	
	Total Units	152	146	79	97			

Decreased use of John Deere tractors and skid steers was a result of increased availability of leased sidewalk tractors, as the latter are the optimal tool for this type of work.



	ACTIVE PATHWAYS EQUIPMENT (OWNED UNITS)						
Equipment Type		Max Total Available (in yard)Max Units Used1% Max Utilization of Rate2					
	2021-22	2022-23	2021-22	2022-23	2021-22	2022-23	
John Deere	18	31	11	18	61.11%	I 58.06%	
Toolcat	20	21	17	18	85.00%	1 85.71%	
Bobcat/Skid Steer	5	6	3	3	60.00%	50.00%	
MV	5	4	4	4	80.00%	100.00%	
Tractor	2	2	2	2	100.00%	100.00%	
Total Units	50	64	37	45			

¹ Roads: Data for 2021-22 show the maximum utilization from January 2022.

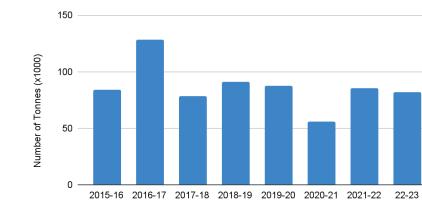
² Bookout rate: approx. 20% of equipment on reserve for equipment repairs and maintenance

³ Decrease in available units was due to units being retired without available replacement as a result of supply chain issues.

SNOW AND ICE CONTROL MATERIALS APPLICATION

Since 2015, sand application on winter roads has been minimized where possible to help reduce waste and contamination of waterways, reduce the likelihood of sand-related property damage and control spring sweeping costs. Weather, road and temperature conditions influence the amounts of sand and salt applied. For example, sand was in high demand during the 2021-22 season due to the amount of freezing rain.

Use of liquid calcium chloride as a commercially prepared solution continues to be restricted. The only authorized uses are its strict application as a pre-wetting agent on sand-salt mixtures to improve adhesion of materials to roadways under certain weather conditions, as well as its direct application as an anti-icing agent on Priority 1 bike lanes.



Solid Snow and Ice Materials Applied Per Season

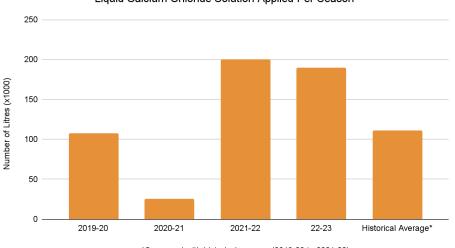
Includes sand, salt and rock chip

*Compared with historical average (2015-16 to 2021-22)

Historical Average*

Implemented process improvements to ensure continued access to sand and other traction materials in anticipation of increased freezing rain and freeze-thaw cycles.

Changed sand storage and delivery operations, resulting in placement of smaller, frequent sand delivery to yards based on usage, resulting in less mess, less waste and some cost savings.



Liquid Calcium Chloride Solution Applied Per Season

*Compared with historical average (2019-20 to 2021-22)

PARKING BANS

Parking bans help ensure crews are able to clear snow from streets safely, effectively and quickly. Edmontonians play an important role by temporarily moving their parked vehicles from roads where plows are going to be working.

Enforcement teams provided support based on real-time routing and observed parking ban compliance for neighbourhoods scheduled to be cleared.

TWO-PHASE PARKING BAN

The City of Edmonton moved to a two-phase parking ban system in 2020-21.

- **PHASE 1**: Applies to Priority 1 (arterial) and Priority 2 (collector) roads. Can be called with a minimum 8 hours' notice.
 - Does not automatically mean a Phase 2 ban will be called.

PHASE 2: Applies to Priority 3 (industrial, rural) and Priority 4 (residential) roads. Efforts are made to communicate these as quickly as possible, with at least 24 hours' notice.

• These usually last approximately 72 hours per residential section or neighbourhood.

	Number of Parking Bans					
Туре	2021-22	2022-23				
Phase 1	Nov 16 - 20 Dec 14 - 20 Mar 4 - 7 Average Length: 4 days	Nov 8 - 14 Dec 19 - 24 Average Length: 5 days				
Phase 2	Nov 30 - Dec 8 Dec 20 - 27* Jan 10 - Feb 4 Average Length: 24 days	Jan 24 - Feb 8 Average Length: 15 days				
Total	5	3				

*Phase 2 parking ban was paused due to extreme cold weather and resumed January 10.

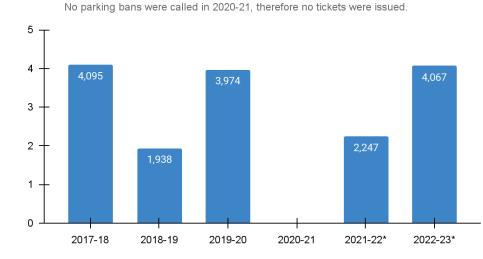
Fifteen seasonal Snow and Ice Officers (SIOs) were hired to provide dedicated parking ban enforcement.

Two Phase 1 parking bans were called in November and December 2022, due to snowfall.

One Phase 2 parking ban was called at the end of January 2023, due to melting conditions caused by unseasonably warm weather.



Fotal number of tickets (in thousands)



Number of Parking Ban Violation Tickets

During the Phase 2 ban, 2,875 tickets were issued.

*Includes both Phase 1 and Phase 2 parking bans.

The above graph reflects the number of tickets issued and does not take into account any further outcomes, such as cancellations and appeals.

SIDEWALK ENFORCEMENT

Maintaining sidewalks is a shared responsibility to ensure accessibility, safety and mobility for all pedestrians, service personnel and emergency service workers. Property owners are required to clear all snow and ice from sidewalks adjacent to properties they own or occupy (Community Standards Bylaw 14600).

Sidewalk investigations are handled by Municipal Enforcement Officers (MEOs), who typically focus on education over enforcement. Snow and Ice Officers (SIOs) provided support for proactive sidewalk investigations. If a violation of the bylaw is observed and sidewalks are found in an unsafe condition, the MEO has the option to send a written notice, leave a door hanger reminder or escalate enforcement leading to a fine. Failure to comply with the bylaw may result in a \$100 fine plus the cost of snow removal.

	2022-23 SIDEWALK ENFORCEMENT (through March 31, 2023)					
Number/Type	MEOs	SIOs				
Total Staff	23 Permanent	15 Seasonal				
Roles	 Conduct snow on walk enforcement (mostly resident-initiated complaints) Enforce other violations (eg, graffiti, nuisances, business licencing) 	 Support parking bans and vehicular enforcement When no ban in effect: Proactive snow/ice enforcement in high traffic and low compliance areas Support business license inspections (10K per year for Complaints and Investigations Section) 				
Investigations	12,994 (complaints* + proactive)	14,539 (proactive)				
Warnings 7,468						
Tickets/Work Orders for Snow Clearing	2,579	1,717				

SAND BOX



*In 2021-22, 92% of investigations were due to resident complaints. In previous years, the average was 75%.



SNOW STORAGE SITES

The City of Edmonton maintains five snow storage sites used for storing cleared snow. While the Kennedale site was not in operation during the 2022-23 season, the remaining sites were open and had capacity to meet City and public demand.

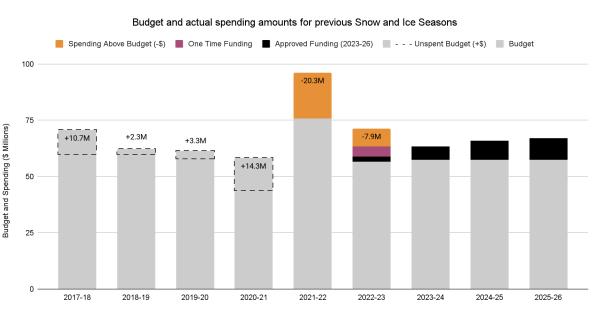
City Council approved 2023-26 budget funding for a long-term snow storage site upgrade project, which is expected to take approximately 8-10 years. Upgrades will include the addition of hard surfacing, settling pond repairs, better lighting and site user access, and installation of telecoms infrastructure that will enable site usage monitoring and future implementation of tipping fees. Upgrades will improve operational and environmental performance, and better align with site design best practices.

The Kennedale site will receive upgrades first. Construction work will begin in 2024 and the site is expected to reopen for the 2024-25 season. The Poundmaker site is anticipated to be closed for the 2024-25 season, in preparation for construction.

BUDGET AND EXPENDITURES

In 2022, \$4.7 million in one-time funding was allocated from the Financial Stabilization Reserve (FSR) by City Council to hire additional staff for the 2022-23 winter season as part of the shift towards increased service levels and service enhancements by 2026.

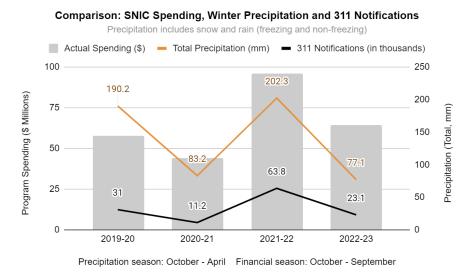
In December 2022, as part of the 2023-26 budget process, City Council approved 20 per cent of the funding needed for full implementation of proposed service level increases. The approved budget increase is shown by the red segments for the next four calendar years.



Snow and Ice Control Season (Oct - Sept) | 2021-22 Season includes variance for the residential blading pilot

Following budget deliberations, elevated staffing levels were maintained for the remainder of the 2022-23 season in order to ensure consistency of service levels and meet public expectations. This resulted in an unfavourable variance through March 2023. **Increased costs of** hired equipment and changes to materials storage processes also contributed to increased spending in 2022-23.

Weather and precipitation play a factor in actual spending and costs incurred each year. Spending tends to increase with higher precipitation as it costs more to maintain Roadways and Active Pathways inventory with increased snow and freezing rain. Notifications to 311 are also influenced by precipitation.



CUSTOMER SERVICE AND COMMUNICATIONS

Communications

2022-23 COMMUNICATIONS PLAN

OBJECTIVES:

- Increase public confidence around weather event response
- Increase understanding of service expectations and improved experience
- Improve positive sentiment and normalize winter through activities designed to help shift perceptions

TACTICS: Media, advertising digital tools, social media and community activities, including City Hall School presentations.



Image

2022-23 Snow and Ice Control information postcard mailed to 450,000 households in the fall of 2022.

	4	Media Events	450K	Direct Mail Postcards
Communications Key Themes:	4	News Releases and PSAs	112	Social Media Posts (Facebook, Twitter and Instagram)
Safety is our priority Improved service	15	Operational Updates to Council	26M	Facebook Post Impressions
for Edmontonians — we are out there working	1	Online Survey	2.1K	Name a Plow Submissions
Shared	31K	Subscribers to Email and SMS alerts	3	Parking Bans
responsibility — we're in this together and we need your help	5	City Hall School Virtual Classroom Presentations	137K+	Web Page Views edmonton.ca/safetravels
Edmonton is a winter city	121	City Hall School Attendees		

2022-23 Results By the Numbers (as of March 28, 2023)



The end of season Edmonton Insight communications survey results, completed by 5,373 respondents, indicated Snow and Ice Control communications were successful in terms of reach and engagement:

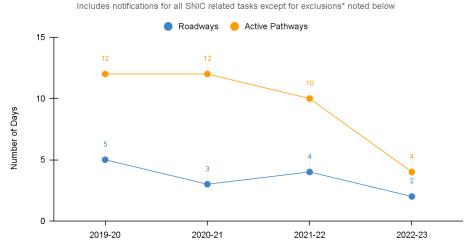
- Understanding improved among respondents regarding snow and ice clearing communication, compared with the 2021-22 season.
- Most respondents understood the different service levels for roads and pathways, parking ban phases, sand availability and information sources.
- Street and digital signage, as well as news media (radio, television, newspapers) continue to be the dominant sources of Snow and Ice Control information for residents.

311 Notifications

Notifications to 311 in 2022-23 decreased significantly from 2021-22. The number of notifications in 2021-22 was partly due to the residential blading pilot, which resulted in large windrows on streets and boulevards adjacent to sidewalks in several residential areas. Notifications about windrows declined in 2022-23, with the return to maintaining a 5 cm snowpack in residential areas.

Processing time for Snow and Ice Control 311 notifications has improved over the past three seasons. Staff have been successful at streamlining processes for addressing and closing notifications.

Average Processing Time for Snow and Ice Notifications





*excludes callbacks, quality of work completed, policy inquiries and general comments

Service Satisfaction Survey

The City of Edmonton's annual Service Satisfaction Survey was conducted from June 30 - July 17, 2022 and from June 12 - July 6, 2023. The purpose of this survey is:

- To gather Edmontonians' perceptions of overall service quality, satisfaction and importance of highly visible City of Edmonton public services
- To provide insight into Edmontonians' priorities and complement other insights to inform decision-making

Respondents were asked to rate their satisfaction with the importance of, and their preferred level of financial investment for each of 21 visible services. Key findings from the survey include:

- More than 90 per cent of respondents saw winter road maintenance (snow and ice removal) as important in 2022. This is a nominal increase from the previous year.
- Satisfaction with winter road maintenance also saw a nominal increase of four per cent from 2022 to 2023.
- Nearly three-quarters of respondents thought winter road maintenance should receive either "more" or "much more" financial investment in 2022. This is a decrease of six per cent in 2023, yet the service was the highest rated in this category for both years.



Survey Results: Sum of Percentages (4/5 or 5/5 ratings)									
Service	Importance*		Satisfaction*		Level of Financial Investment**				
	2022	2023	2022	2023	2022	2023			
Winter Road Maintenance	92%	93%	36%	40%	72%	66%			
Winter Sidewalks ^A (2022)	77%		42%		51%				
Pathway Maintenance [₿] (2023)		84%		52%		41%			

* 4/5 = somewhat, 5/5 = very

**4/5 = more, 5/5 = much more

^ASurvey definition: "Winter Sidewalks - bicycle paths, and shared-use paths" ^BSurvey definition: "Pathway maintenance (all season repairs and maintenance for sidewalks, shared-use paths, and trails)"

Edmontonians see winter road maintenance services as one of the City's primary opportunities.

They see this service as being important but are generally less satisfied with the service. *Top 2 box score for satisfaction is very satisfied/somewhat satisfied. Top 2 box score for importance is very important/somewhat important.

Q: [1] Based on your personal experience and anything you may have heard, please let me how satisfied you are with the City's job in providing each program or service, on a scale of 1 to 5, where 1 is 'very dissatisfied' and 5 is 'very satisfied'. [2] Next, please tell me how important each program or service is, on a scale of 1 to 5, where 1 is 'not at all important' and 5 is 'very important'. [3] What level of financial investment do you think the City should make for the following program or service? (n=800)

Data Source: 2022 Council Report FCS01414, Attachment 1: Services Overview. Complete 2023 survey results will be published by the end of 2023.

OPERATIONAL REVIEWS, IMPROVEMENTS AND REPORTING

Environmental Monitoring & Reporting

Road salts are used operationally to ensure road and path conditions are safe for Edmontonians, but must be managed to minimize environmental impacts. Road salts can enter the environment through discharge of meltwater at snow disposal sites, runoff at salt storage sites, runoff from roadways following application and from unintended spills and releases.

In addition to the planned snow storage site upgrades over the next 8-10 years, the program continues to focus on soil and watershed protection through operation and monitoring activities that include:

- Following Environment Canada's Code of Practice for the Environmental Management of Road Salts and provincial Snow Disposal Guidelines.
 - This includes annual reporting of salt usage, use of a Salt Management Plan and registration of the five snow storage sites as a designated activity under the provincial Environmental Protection and Enhancement Act (EPEA).
- Storing sand and salt mixtures in the lowest volumes required to serve operational needs and meet service levels for road safety. Funding has been approved to provide future covered on-site storage.
- Following operational procedures for snow storage pond and site maintenance, such as soil, groundwater and surface water monitoring, clean up of spills related to equipment and regulatory reporting as required, and audited routinely under the ISO 14001 environmental management system.



Concentrated salt piles are stored in covered salt domes to reduce chloride contamination from

run-off during rain

events.

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Visit **edmonton.ca/SafeTravels** for more information on winter operations, Snow and Ice Control clearing updates and parking bans.

