

The background of the cover is a collage of images related to snow and ice control. At the top, a large white snowplow with 'Edmonton' written on its side is clearing a snowy street. Below it, on the left, is a close-up of a snowplow's blade and engine. At the bottom, there's a close-up of a snowplow's tire tread. The entire collage is overlaid with a large, semi-transparent blue rectangle that serves as a background for the text.

PARKS AND ROAD SERVICES

Edmonton

SNOW AND ICE CONTROL ANNUAL REPORT

2023 – 2024 Winter Season

City of Edmonton

TABLE OF CONTENTS

SEASONAL HIGHLIGHTS FOR 2023/24 3

INTRODUCTION 4

WEATHER 4

SERVICE LEVEL DELIVERY 6

2023-24 WINTER SEASON PERFORMANCE RESULTS 8

WINTER SEASON CITY SERVICES DELIVERY - ROADWAYS 9

WINTER SEASON CITY SERVICES DELIVERY APR 11

INFRASTRUCTURE INVENTORY AND GROWTH 13

PERSONNEL AND EQUIPMENT 15

SNOW AND ICE CONTROL MATERIALS APPLICATION 18

ROADWAY MAJOR SNOW EVENTS – PARKING BANS 19

SIDEWALK ENFORCEMENT 21

SNOW STORAGE SITES 23

BUDGET AND EXPENDITURES 24

COMMUNICATIONS AND CUSTOMER SERVICE 25

OPERATIONAL REVIEWS, IMPROVEMENTS AND REPORTING 28

SEASONAL HIGHLIGHTS FOR 2023/24¹



Weather—This season was warmer compared to last one, had no freezing rain and a slow start to typical winter weather at the start of the season; the average mean temperature was 3 degrees higher than last season.



Operational Performance—Roadways and Active Pathways both saw notable increases in on-time percent completion of priority service levels compared with the previous season. The City kept the same ration during 2024.



Parking Bans—This is the second year of using the parking ban notification service at my.edmonton.ca and enhanced communications tactics to promote the service.



Communications—A communications survey has been conducted for 3 years (2022–2024) focused on defining residents needs and access to communication resources. The survey also assessed knowledge of the city services and their preferred source of communication.



Budget—Top-up funding from LRT reserve for APR Services 2023–2026. \$2M approved for 2024.



Upcoming—The Community Sandbox Program is being adjusted so more resources can be dedicated to improving Snow and Ice Control services levels for Active Pathways. The program is completing a two-year transition to focusing on more centralized locations that are evenly distributed across the City.

¹ Most of the 2023-24 data included in this report is from October 2023 - April 2024 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 maintains more than 12,000 linear km of roadways and 500 km of active pathways. The City prioritizes snow and ice clearing using a systematic approach that ensures major roadways are cleared first as they are most integral to the safe mobility of users across the city.

The City's Snow and Ice Control Policy and Administrative Procedure can be found at edmonton.ca/safetravels. 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 material application
- Equipment and materials usage
- When a parking ban may be needed

2023-24 Winter Season Temperature and Precipitation

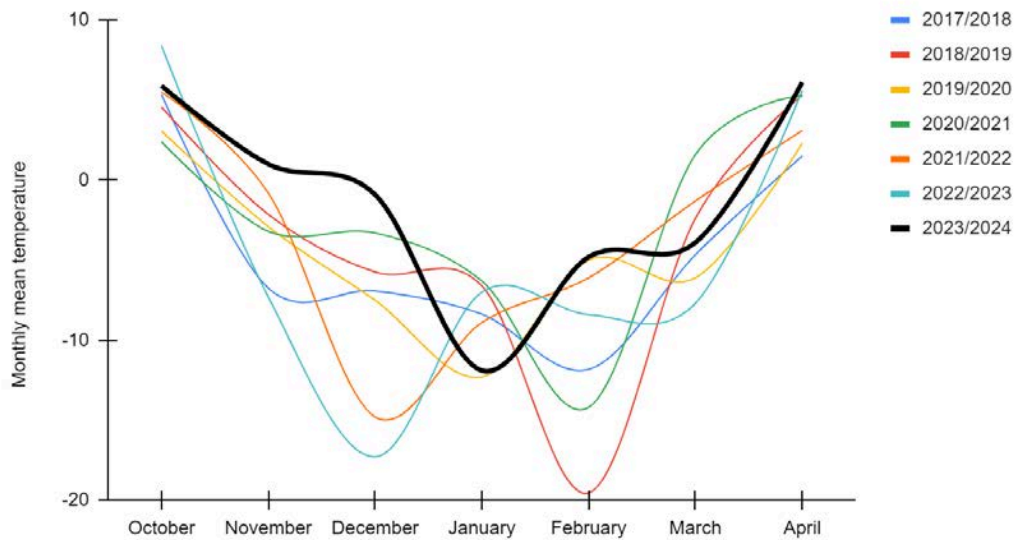
Winter of 2023/2024 was slightly warmer with an average mean temperature 3 degrees above the previous year (2022/2023)².

January was the coldest month of the season with an average temperature of -11.9°C and the coldest day reaching -41°C. April was the warmest month of the season with an average temperature of 6.1°C and the highest temperature of 19.5°C.³

For this season, a cold snap occurred from January 11-15, 2024, when temperatures remained below -30. The extreme cold temperatures caused complications with equipment and snow clearing operations.

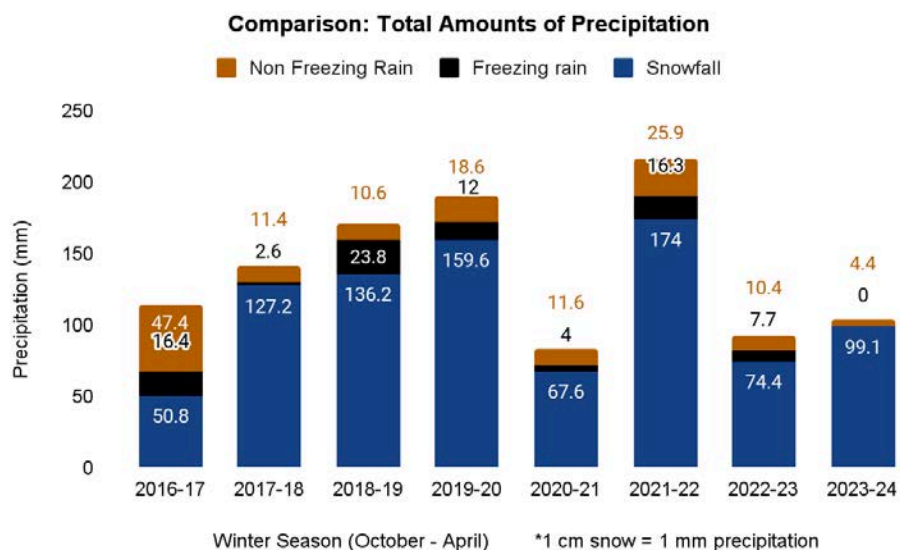
² <https://climate.weather.gc.ca/>

³ Historical and current data from Government of Canada <https://climate.weather.gc.ca/>



Following an early season snowfall in October, the remainder of 2023 saw little precipitation and no snow events until December 19, 2023. During this time of unseasonably warm and dry weather, crews were reassigned to respond to other priority tasks within the Parks and Roads Services (PARS) branch. These tasks included sidewalk repairs, graffiti removal, litter and illegal dumping cleanup, pothole repairs and other necessary work. As a direct result of these reassignments, between October 21 and December 31, a record-breaking 109,465 potholes were filled, including a large portion of potholes in residential areas and alleys that typically are not addressed until spring.

The 2023/2024 winter season had slightly higher precipitation than the previous season. The majority of precipitation occurred in January and February, primarily falling as snow. Snow precipitation of 38.4 mm occurred in February. In April, 2 mm of rain occurred in the City.



SERVICE LEVEL DELIVERY

When it snows, crews are out 24/7 maintaining Roadways and Active Pathways. The Snow and Ice Control program uses a priority system to identify snow clearing service levels. Priority levels are based on the Snow and Ice Control Policy. These service levels are used to manage and measure performance.

Along with their own dedicated staff and equipment, Roadways and Active Pathways have their own priority hierarchy. That way, their service levels do not compete with each other. Service levels begin once a weather event ends and each type of inventory is completed independently.

The road priorities are outlined in the Snow and Ice Control policy and are:

1. Freeways, arterial roads and business districts
2. Collector roads and bus routes
3. Local industrial roadways
4. Residential streets and alleys

The Active Pathway priorities are outlined in the Snow and Ice Control policy and are:

1. City facilities, LRT stations, paved trails, priority bike routes (Winter Priority Loop)
2. City sidewalks, wheelchair ramps, bridges, stairs, parking lots, bike lanes
3. Manually cleared areas (bus stops, paths, public amenities), community sandboxes

This winter season, the City published an updated [Active Pathways Snow Clearing Map](#). The map displays all sidewalk and multi-use pathways cleared by the City and the service levels. New for the 2023/24 season, a **Winter Priority Loop** was created forming a network of Priority 1 active pathways connecting downtown, Old Strathcona and the University of Alberta. This new feature was in response to suggestions from the community.

For Roadways, a new [Roadways Snow Clearing Map](#) was launched to display the current location of all active plows. During snow events, this map proved to be popular with both media and social media spotlights on the online map. During a snow event on February 26, over 30 million page requests were made for the map indicating residents were using it to follow the plows as they were active across the City. During this time, the average viewing time was around nine minutes!

In addition to showing residents where plows are active, the map can be updated to show the clearing status of all roadways during an active parking ban. This was done twice this season following snow events when phase one parking bans were activated on January 23, 2024, and February 26, 2024.

2023-24 SERVICE LEVELS AND PRIORITY PLAN				
Network Type	Priority 1	Priority 2	Priority 3	Priority 4
Roadways	Freeways, arterials, business districts: Bare pavement within 5 days . Alleys in business districts: 5 cm snowpack within 5 days .	Collector roads, Transit Park and Ride access roads: Bare pavement within 5 days <i>Service fully provided by contractors.</i>	Industrial roads: Bare pavement within 5 days . Rural roads: Level snowpack within 5 days .	Residential roads and alleys: 5 cm snowpack within 10 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 3 days .	Manually cleared active pathways and public amenities: Safe and passable surface within 14 days . Community sandboxes: Refill within 14 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 bus stops that fall on the same area as adjacent sidewalks next to private property (Community Standards Bylaw 14600).

2023-24 WINTER SEASON PERFORMANCE RESULTS

A total of six snow events (two major) were declared for Roadways and 19 snow events for Active Pathways.⁴ Overall, service completion rates in 2023-24 improved over the previous year. Contributing factors included:

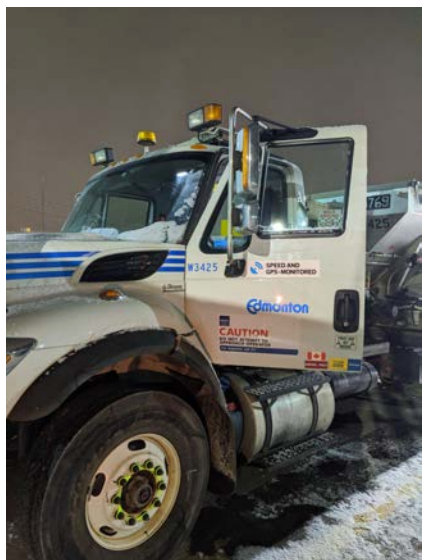
- Better service level alignment with staffing and equipment availability.
- Top-up funding was approved by City Council on October 24, 2023 for high input Active Pathways manual tasks
- Adjustment of service levels for 2022-23 were based on the number of available resources
- Fewer snow days, precipitation and a lack of freezing rain

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

Overall, this season was a success as clearing was 99 percent for Priority 1-3 roadways and 87 percent for all active pathways. Crews were able to complete a higher percentage of inventory within service level timelines when compared to the previous season.

⁴ 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.

WINTER SEASON CITY SERVICES DELIVERY - ROADWAYS

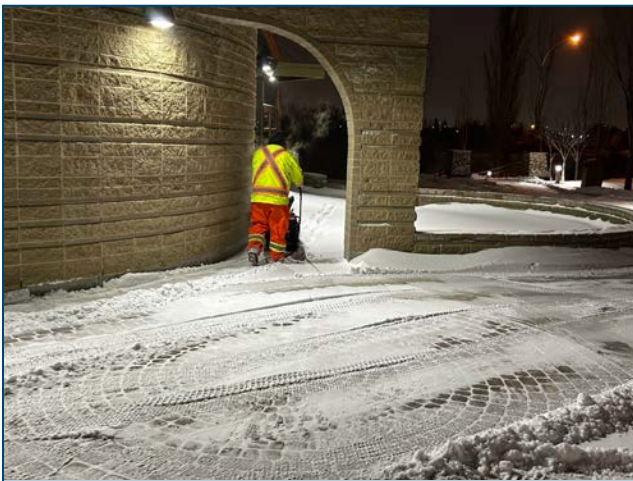
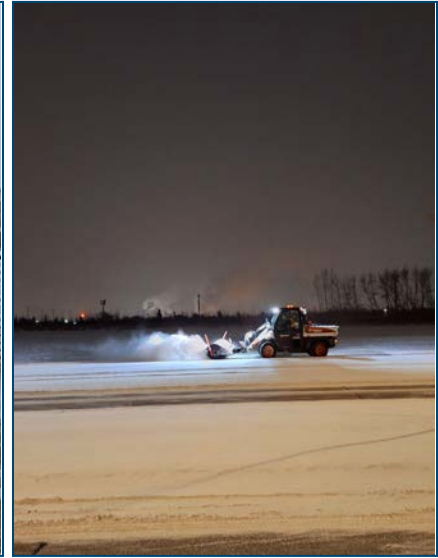


ROADWAYS SCORECARD				
Priority Level	2022-23 Winter Season		2023-24 Winter Season	
	Service level (not aligned to budget)	On-time % Completion	Service level (aligned to budget)	On-time % Completion
P1 – Arterial, Business Improvement Areas	4 days	98%	5 days	99%
P2 – Collector, bus routes	5 days	90%	5 days	99%
P3 – Industrial rural	5 days	97%	5 days	100%
P4 – Residential	8 days	80%	10 days	N/A
P4 – School zones	8 days	Not measured	10 days	N/A

Blue shaded cells indicate on-time completion rate of 95% or higher (target) for 2024 season.

- This season had decreased grader use due to unseasonably warm temperatures. Graders are used more often in cold, snowy conditions.

WINTER SEASON CITY SERVICES DELIVERY APR



ACTIVE PATHWAYS SCORECARD				
Priority Level	2022-23 Winter Season		2023-24 Winter Season	
	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	96%	1 day	98%
P1 – LRT Stations	1 day	99%	1 day	96%
P1 – Hard surface trails (river valley)	1 day	85%	1 day	96%
P2 – Parking lots	4 days	85%	3 days	87%
P2 – Non-prioritized, separated bike lanes	4 days	95%	3 days	97%
P2 – Pedestrian bridges	4 days	95%	3 days	99%
P2 – All-season stairs (separate from City facility areas)	4 days	88%	3 days	94%
P2 – City maintained sidewalks, wheelchair ramps, shared paths	4 days	80%	3 days	94%
P3 – Manually cleared areas (bus stops, paths, etc)	13 days	96%	14 days	91%
P3 – Bus stops	13 days	82%	14 days	94%
P3 – Community sandboxes	13 days	92%	14 days	87%

Blue shaded cells indicate on-time completion rate of 80% or higher (target).

- The Winter Priority Loop created an interconnected and reliable network, not patchwork segments.

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 2023-24 winter season, crews:

- Completed additional bike lane windrow pick-ups
- 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
- Provided transparent tracking to the public for snow removal progress
- Cleared and monitored safe mobility sites (new for 2023/2024)
- Added additional signage for snow pick-up areas
- Added signage indicating the Winter Priority Loop and unserviced staircases
- Detailed service level signage for River Valley Trail systems

At the start of the season, new signage was installed on staircases that do not receive winter maintenance. These signs serve to better help users plan their routes and know what to expect when traveling active pathways in the winter season.

Following the driest November on record, the mild weather from the El Niño weather pattern also led to unseasonably high temperatures and lower than average snowfall. Crews were temporarily reassigned to other high-priority work in November and December. These reassignments offered flexibility so that the staff can quickly return back to SNIC duties on short notice. Crews repaired 128,546 potholes between October 21 and March 31, 2024; added mulch to 20,000 m² of shrub beds and picked up over 3,000 bags of garbage. Reassignment duties included:

- Asphalt Road Maintenance
- Sidewalk Trip Hazard Repairs
- Paving Stone Replacement
- Parking Lot and Shared Use Path Repairs
- Oil & Gravel Road and Gravel Alley Repairs
- Playspace Maintenance: Minor Service Repairs
- Auxiliary Maintenance – Minor Fence Repairs & Graffiti Removal, Tree Grate Maintenance
- Bridges Maintenance – Open Space Bridge Maintenance
- Slab Levelling Remediation – Black Dirt & Seed
- Litter & Illegal Dumping Clean-up
- Horticulture
- Vacant Encampment Clean-up





INFRASTRUCTURE INVENTORY AND GROWTH





Edmonton is a growing city. The City maintains more than 12,000 km of roadway and 500 km of active pathways, and 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 increases 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
- City-wide changes with services and roadway classification
- Winter priority bike loop – redesigned Priority 1 Bike Lanes to provide a continuous loop around the City allowing users to have a connected network that is reliably cleared within 24 hours of the end of a snowfall resources below available

Roadways	% Change in Inventory (2020-21 to 2023-24)	
P1		-4.5% (arterials)
P2		1.6% (collector routes)
P3		-28.0% (industrial, rural) ¹
P4		15.2% (residential)

Active Pathways	% Change in Inventory (2020-21 to 2023-24)	
P1		133.3% (machine cleared paths) 3.5% (civic walkways)
		-17.7% (Bike lane)
P2		194.0% (natural areas) 3.0% (bridges) 135.7% (bike lanes)
		-21.4% (parking lots)

P3		231.1% (manually cleared areas) 8.9% (community sandboxes) 3.9% (parking lots)
		- 22.8% (bus stops beside city property)

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)

Resources and helpful Maps


- Map: [Winter Bike Lane Clearing Changes \(PDF\)](#)
- Winter Cycling [Video](#)

Adaptable 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. They include road narrowing curb extensions, speed humps and speed tables This work aligns with the [Safe Mobility Strategy](#) 2021-2025. More information about these features can be found [here](#).



Due to the unique nature of these adaptable measures, Snow and Ice crews must clear and maintain these areas by hand, rather than using sidewalk machines or road plows.This is a resource and time intensive process. 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 for Priority 3 Active Pathways.

Traffic Calming Measures ¹	2022-2023	2023-2024	Average Change in Number (across all types)
Total Number	181	347	 92%

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

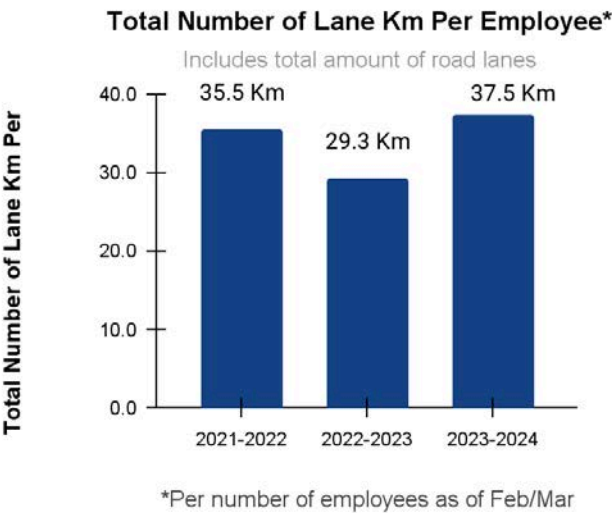
PERSONNEL AND EQUIPMENT

Dedicated, trained staff and access to necessary equipment are critical to the success of the Snow and Ice Control program. The City has approximately 600 people working on the Roads and Active Pathways crews. Roadways and Active Pathways have their own teams and

specialized equipment to complete clearing. That way, the service they deliver does not compete with each other.

Personnel

	2021-22	2022-23	2023-24
Number of Employees	507	649	580



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	2
Active Pathways	5 – parking lots 8 – sidewalk plowing 30 – civic walks




Equipment

Equipment utilization rates are affected by several factors:



- Number of staff and contractors 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.

Note: 2023-2024 season Total Grader and loaders decreased in the yards

ROADWAY EQUIPMENT (OWNED UNITS)						
Equipment Type	Max Total Available (in yard)		Max Units Used ¹ (daily)		% Max Utilization of Bookout Rate ²	
	2022-23	2023-24	2022-23	2023-24	2022-23	2023-24
Graders	19	18	9	16	47.37%	 88.89%
Loaders	13	12	10	10	76.92%	 83.33%
Tandem Sanders / Plows	114 ³	125 ³	78	92	68.42%	 73.60%
Total Units	146	155	97	118	-	-

ACTIVE PATHWAYS EQUIPMENT (OWNED UNITS)						
Equipment Type**	Max Total Available (in yard)		Max Units Used ¹ (daily)		% Max Utilization of Bookout Rate ²	
	2022-23	2023-24	2022-23	2023-24	2022-23	2023-24
John Deere	31	29	18	21	58.06%	 72.41%
Toolcat	21	28	18	23	85.71%	 82.14%
Bobcat/Skid Steer	6	6	3	3	50.00%	50.00%

MV*	4	3	3	2	100.00%	 66.67%
Tractor***	2	6	2	4	100.00%	 66.67%
Total Units	64	72	45	36	-	-

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

* MVs are being phased out of the City of Edmonton's fleet, projected to be at 0 units by fall of 2024

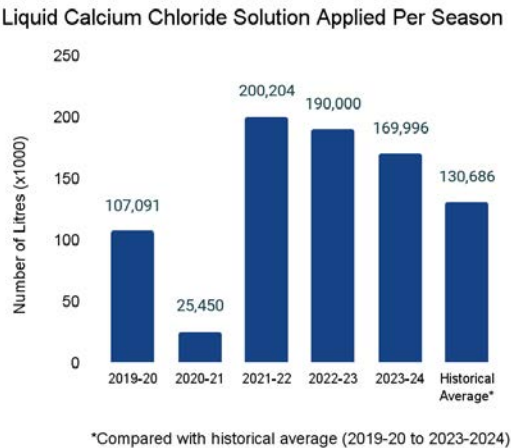
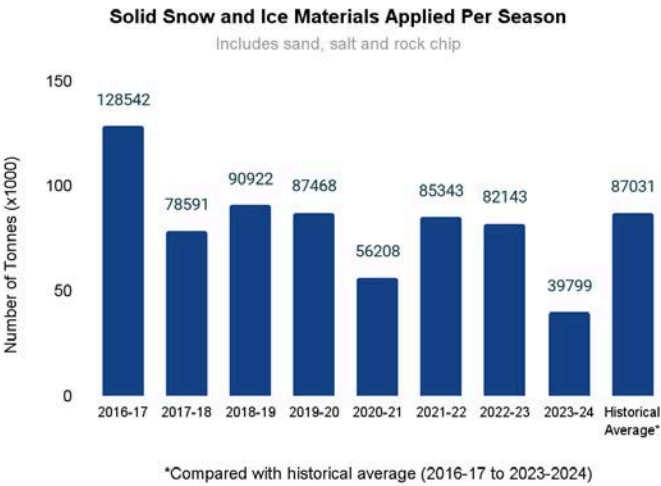
** Leased MT bookout rates are unavailable for this season, with implementation of GPS this data will become available for the 24/25 season (leased MTs are the primary vehicle currently used for Snow and Ice clearing)

*** Tractors are used for very specific purposes usually having to do with moving large amounts of snow, with the reduced snowfall less tractors were utilized during the season

SNOW AND ICE CONTROL MATERIALS APPLICATION

Since 2015, sand application on winter roads has been minimized where possible to help reduce waste and impacts to 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, safety for users is still the top priority for crews. For example, due to the unseasonably warm temperatures throughout the 2023/2024 winter season the need for repeated material application was lower than in previous seasons.

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 and effectiveness of materials to roadways under certain weather conditions, as well as its direct application as an anti-icing agent on Priority 1 bike lanes.



ROADWAY MAJOR SNOW EVENTS – PARKING BANS

To achieve safe travel conditions as quickly as possible, we must work together. Parking bans are instituted during roadway snow clearing to ensure City crews can clear the roads as efficiently and effectively as possible. Edmontonians play a key role in supporting City staff and contractors by moving their vehicles when a parking ban is in effect.

Parking bans are announced through a variety of communication channels, including neighbourhood signage, email alerts, news media, social media, web information and banners, digital signs and destination signs on buses. Residents were encouraged to sign up for text message [notifications](#) and follow the City's [social media channels](#) to learn when a parking ban was in effect.

For the 2023-2024 season, the City did not tow vehicles failing to comply with the parking ban. The budget was reduced for 2023-2026 with no resources allocated to tow services. Bylaw enforcement teams did conduct ticketing, a minimum fine of \$250.00, for failure to comply

with the parking ban. Officers provided enforcement support based on real-time routing of crews.

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.

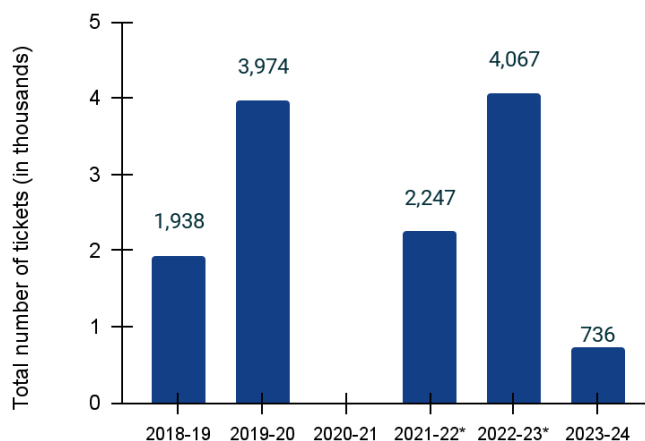
PHASE 2: Applies to Priority 3 (industrial, rural) and Priority 4 (residential) roads. Efforts are made to communicate these as quickly as possible, with at least 24 hours' notice.

- These usually last approximately 72 hours per residential section or neighborhood.

NUMBER OF PARKING BANS		
Type	2022-23	2023-24
Phase 1	Nov 8 - 14 Dec 19 - 24 Average Length: 5 days	Jan 23 - Jan 26 Feb 26 - Mar 2 Average Length: 4 days
Phase 2	Jan 24 - Feb 8 Average Length: 15 days	n/a
Total	3	2

Number of Parking Ban Violation Tickets

No parking bans were called in 2020-21, therefore no tickets were



*Includes both Phase 1 and Phase 2 parking bans.

The reduction in number of tickets issued in 2023-2024 is attributed to two factors:

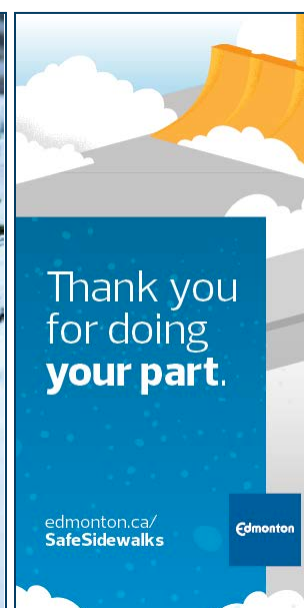
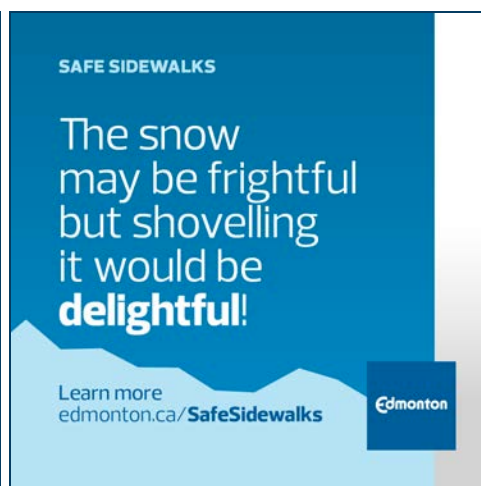
- The budget for dedicated Snow and Ice Officers (SIOs) was reduced from 15 seasonal staff for the 2022/23 season to five for the 2023/24 season
- There was no Phase 2 parking ban in the 2023/24 season, which generally results in a greater number of tickets.

SIDEWALK ENFORCEMENT

Sidewalks play a crucial role in our city, from basic mobility and accessibility to community cohesiveness and livability. Edmonton is a winter city - snow-covered and icy sidewalks have a significant mobility and safety impact on our neighbors and fellow citizens. 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 both regular, full time Municipal Enforcement Officers (MEOs) as well as temporary, seasonally hired Snow and Ice Officers (SIOs). When possible, enforcement takes an education first approach to encourage property owners to comply with the Community Standards bylaw. If a violation of the bylaw is observed and sidewalks are found in an unsafe condition, officers exercise discretion to send a written notice, leave a door hanger reminder or escalate enforcement for non-compliance, leading to a fine. Failure to comply with the bylaw may result in a \$100 ticket plus the cost of snow removal.

2023-24 SIDEWALK ENFORCEMENT		
Number/Type	MEOs	SIOs
Total Staff	23 Permanent	5 Seasonal
Roles	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Proactive snow/ice enforcement in high traffic and low compliance areas Support business license inspections (10K per year for Complaints and Investigations Section)
Investigations <i>complaints + proactive</i>	4,965	1,684
Total warnings issued <i>letters, notices and door hangers</i>	3823	1735
Compliance Rate <i>snow and ice cleared by owner prior to ticket issued</i>	81.44%	84.20%
Total Tickets Issued* <i>Not including subsequent cancellations or appeals</i>	596	215
Total Work Orders <i>Property cleaned by City contractor at owners' expense</i>	941	271



SNOW STORAGE SITES

The City of Edmonton maintains four public snow storage sites used for storing cleared snow. These four public sites were open and had capacity to meet City and public demand. A fifth site (Kennedale) is not for public use and was not in operation during the 2023/24 season.

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 upgrades started in 2023 and the site is expected to reopen for City-only use in the 2024-25 season. The Poundmaker site closed in April 2024 and will remain closed for the 2024-25 season, in preparation for construction. A project webpage and email

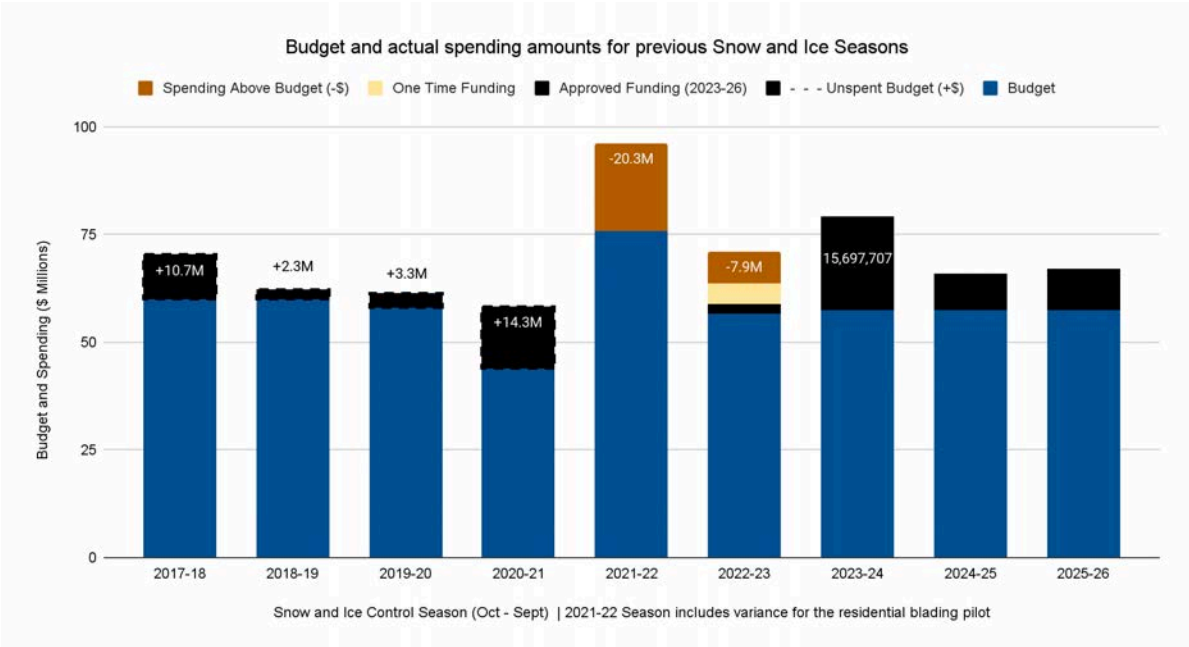
subscription service were established to help communicate the closures to the commercial companies which use the public sites.

BUDGET AND EXPENDITURES

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

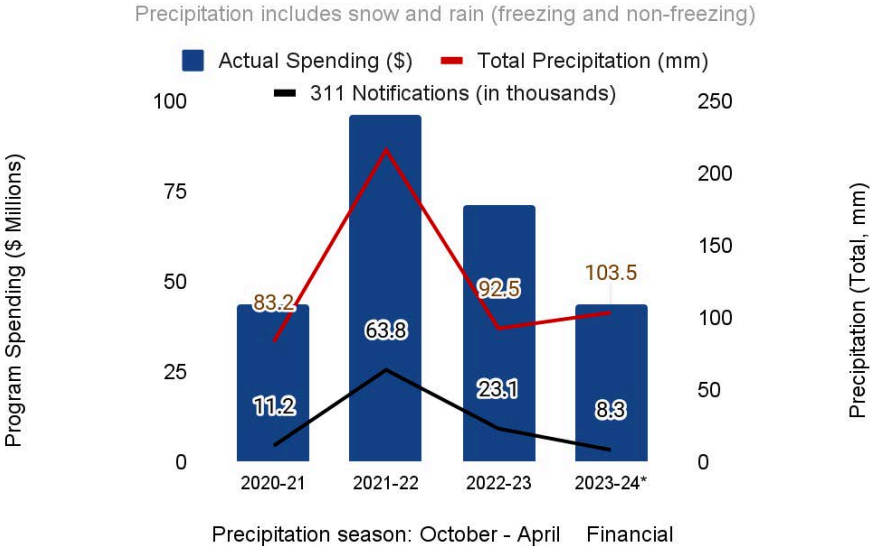
In 2023, \$4.1 million in approved on-going tax-levy funding by City Council to hire additional staff and equipment for the 2023-24 winter season as part of the shift towards increased service levels and service enhancements by 2026.

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



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.

Comparison: SNIC Spending, Winter Precipitation and 311 Notifications



COMMUNICATIONS AND CUSTOMER SERVICE

Communications

2022-23 COMMUNICATIONS SUPPORT

OBJECTIVES ACHIEVED:

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

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

2023-24 RESULTS BY THE NUMBERS – 1 Online survey been conducted			
3	Media Events	50	City Hall School Attendees

3	News Releases & PSAs	89	Social Media Posts (<i>Facebook, Twitter / X and Instagram</i>)
22	Operational Updates to Council	0.99M	Facebook Post Impressions
31.5K	Subscribers to Email and SMS alerts	2	Parking Bans
1	City Hall School Virtual Classroom Presentations	141K +	Web Page Views <i>edmonton.ca/SafeTravels</i>

The SNIC program was in the news throughout the season starting with the 2023/2024 season kickoff media event in October. The new Roadways Snow Clearing Map, Winter Priority Loop, service levels and service notifications tool were the focus. Following the initial snow event in October, communications shifted to focus on the reassignment of crews due to the warm, dry conditions. Media attention focused on the reassignments before shifting to cover each of the parking bans during the weather events. Analysis of the tone and sentiment of the coverage indicated overall neutral-positive presentation of the program, with quotes and images from the City appearing prominently.

Throughout the season, communications regularly shared information on service levels, the Roadways Snow Clearing Map, Winter Priority Loop and service notifications tool. In addition to media coverage, communications relied on the City's social media channels, including X (formerly Twitter), Facebook, Instagram and LinkedIn, to keep residents informed. Several social posts generated significant engagement and increased awareness for parking ban notifications. More Instagram reels were used this season to revitalize engagement and make more Edmontonians aware of SNIC services. Using a viral trend at the end of February helped showcase crews who were clearing the way for Edmontonians following a dry stretch. The post generated more than 140,000 views on Instagram while promoting the Roadways Snow Clearing Map.

Throughout the season, Edmontonians were encouraged to sign up for parking ban notifications to be aware of when they needed to move their vehicles for crews to clear their road. The City's service notification tool sends advanced text and email notifications to subscribers prior to a ban in their area. By the end of the season, there were 33,127 subscribers to the notification tool.

Since 2022, the City of Edmonton has conducted an annual survey to understand residents' perceptions about communications of the Snow and Ice Control program. The end of season survey results, completed by 13,164 respondents through 2022-2024, indicate communications were successful in terms of reach and engagement:

- Respondents showed a continued increase in awareness of knowing where to find SNIC information
- Respondents understood the different service levels for roads and pathways, parking ban phases, sand availability and information sources
- A majority of respondents indicated awareness of the parking bans

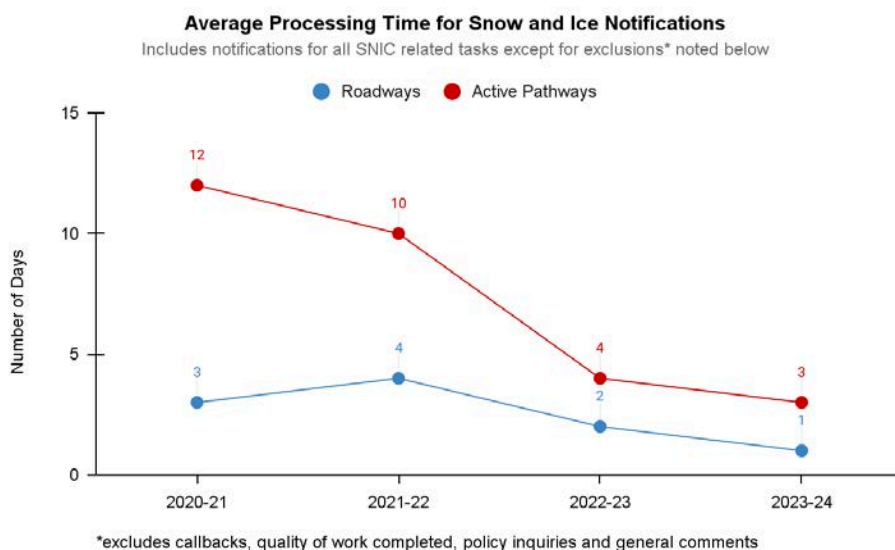
Communication Survey results:

- 88 per cent understood there are different service levels
- 77 per cent understood how a Phase 1 Parking Ban works
- 69 per cent knew where to find snow and ice clearing information
- 93 per cent found the Roadways Snow Clearing Map useful

311 Notifications

Notifications to 311 in 2023-24 decreased from 2022-23. A total of 5,780 notifications were received through 311 from Nov 1, 2023 to April 30, 2024. Of these notifications, 4,419 were for roadways and 1,361 were for active pathways.

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



Service Satisfaction Survey

The City of Edmonton's annual Service Satisfaction Survey will be conducted for four weeks starting on June 3, 2024. 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 will be asked to rate their satisfaction with the importance of, and their preferred level of financial investment for, each of 21 visible services. After last year's survey, many actions have been taken to improve our services. Results for the 2024 survey will be published later this year on the city website. Results from last year can be accessed through [this link](#).

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.
- 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 registered environmental management system.