

IMPROVED ACCESSIBILITY - ACTIVE PATHWAY SNOW REMOVAL AND SIDEWALK REPAIR

Recommendation

That the August 11, 2025, City Operations report CO03079, be received for information.

Requested Action		Information only	
ConnectEdmonton’s Guiding Principle		ConnectEdmonton Strategic Goals	
CONNECTED This unifies our work to achieve our strategic goals.		Healthy City	
City Plan Values	ACCESS		
City Plan Big City Move(s)	Inclusive and compassionate	Relationship to Council’s Strategic Priorities	Mobility Network
Corporate Business Plan	Serving Edmontonians		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none">● Movement of Goods and People		
Related Council Discussions	<ul style="list-style-type: none">● November 19, 2019, City Operations report CR_6788, First/Last km Community Solutions● February 25, 2020, City Operations report CR_7812, Further Analysis of Alternative Transit Solutions● August 17, 2020, City Operations report CR_7694, Alternative Approaches to Snow and Ice Control● January 17, 2022, City Operations report CO00690, Sidewalk Repair and Accessibility Issues (A. Knack)● May 30, 2022, City Operations report CO01036, Sidewalk Maintenance Renewal Process● June 27, 2022, City Operations report CO01277, Snow and Ice Control - Programmed Approach for the 2022-2023 Winter Season● July 11, 2023, Community Services report CS01783, Assisted Snow Programs		

Previous Council/Committee Action

At the May 12, 2025, Community and Public Services Committee, the following motion was passed:

That Administration provide a report outlining options and the budget implications for amending its Snow and Ice Control procedures (as developed based on City Policy C490K) and Sidewalk Maintenance Program to:

- Prioritize City-maintained sidewalks for snow clearing at Priority 1 service level near areas of high importance to increase accessibility.
- Prioritize Priority 3 bus stops to increase service levels to Priority 2 service level in areas of high importance to increase accessibility.
- Increase snow and ice clearing enforcement for private frontage and flankage snow removal.
- Prioritize repairs for sidewalks near areas of high importance to increase accessibility.

Executive Summary

- Edmonton's sidewalks are crucial for transportation, accessibility, and community well-being, benefiting all commuters by facilitating efficient movement, improving air quality, reducing GHG emissions, fostering community connections, and increasing urban vibrancy.
- To optimize accessibility and service impact, a High Priority Sidewalk Index was developed in 2022, combining pedestrian volume, proximity to important pedestrian destinations (such as schools, senior centers, and high-frequency bus stops), and a Social Vulnerability Index (SVI) that considers 11 social need elements.
- The City manages approximately 5,776 km of public sidewalks with a \$5.9 million annual operating budget dedicated to responsive maintenance, while minor and major capital renewals are funded separately.
- Snow and Ice Control (SNIC) for active pathways, including 1,416 km of sidewalks and nearly 70 km of bike lanes, utilizes a four-level routed priority system to ensure timely clearing.
- Four options are proposed to enhance service levels. Option 1 focuses on internal reprioritization, whereas Options 2 to 4 require additional funding to enhance service levels in high-priority areas.

REPORT

Edmonton's sidewalks are vital for transportation, accessibility, and community well-being. They are essential for all commuters, regardless of travel mode, age, gender or socioeconomic status, offering benefits such as efficient movement, improved air quality, reduced GHG emissions, community connections and increased vibrancy. With growing awareness of the benefits, demand for active transportation infrastructure, including sidewalks, pathways, trails and bike lanes, has surged, highlighting the community's need for year-round active mobility options.

Definition of High Importance

Administration's goal is for service to be as impactful as possible and ensure high-priority sidewalks are repaired and cleared to optimize accessibility. In 2022, a High Priority Sidewalk Index was created for each sidewalk block in Edmonton, which combined three levels of analysis:

1. *Pedestrian Volume* - Administration obtained predictive pedestrian volume data for each city sidewalk block for 2019 and 2021. Pedestrian volumes changed due to the COVID-19 pandemic; there were higher volumes in downtown/retail corridors in 2019, while there were higher volumes in neighbourhoods in 2021. Administration averaged these two years to represent a hybrid model of both pre and post-pandemic pedestrian volumes, as it is predicted to be most representative of current and future state.
2. *Important Pedestrian Destinations* - Administration used four types of destinations to determine sidewalk demand priority through proximity to important pedestrian destinations: schools, senior centres, high frequency bus stops (top five percentile of ridership) and the nodes and corridors identified in The City Plan. Administration used a buffer zone of 120 metres to ensure sidewalks were not prioritized outside of the designated location of importance.
3. *Social Vulnerability Index (SVI)* - Administration developed a Social Vulnerability Index, which considers 11 elements of social need: senior population, child population, education, employment, government transfer payments, home ownership, immigration, income, language, lone parent and mobility. Administration conducted an internal and external survey to evaluate the importance of each of these elements. The final Social Vulnerability Index is based on the weighted average of these results.

While the High Priority Sidewalk Index was created with sidewalk maintenance in mind, other operational areas also use a combination of these three elements, along with their relevant service inventory, to identify high priority areas for their programs. A visual representation of the application of this priority applied to all city sidewalks can be seen in Map 1 within Attachment 1.

Current State

Sidewalk Maintenance

Sidewalk Inventory and Annual Operating Budget

There are approximately 5,776 kilometres of public sidewalks within Edmonton's city limits. The City's 2025 sidewalk maintenance operating budget is \$5.9 million and has remained relatively unchanged over the past 10 years, while sidewalk inventory has increased approximately eight per cent during that time.

Current Sidewalk Maintenance and Renewal Practices

The City of Edmonton currently manages its entire sidewalk inventory through three practices: responsive maintenance repairs, minor capital renewal and major capital renewal.

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- Responsive maintenance repairs are funded through the \$5.9 million annual operating budget. This includes addressing public inquiries through localized inspection and repairs to address safety and accessibility issues, such as trip hazards or water ponding. The repairs include grinding, patching, and localized panel replacement.
- Minor capital renewal, funded through capital budget, is used to rehabilitate or replace localized deficiencies that cannot be addressed with maintenance activities, and where major capital renewal is not planned in the near future.
- Major capital renewal, funded through capital budget, includes projects that are completed under the Arterial Renewal Program and the Neighbourhood Renewal Program, in which significant sections or entire neighbourhoods of mobility infrastructure, including sidewalks, are renewed or replaced.

Sidewalk Maintenance Service Levels and Prioritization

Administration is notified of sidewalk concerns mainly through 311 notifications or The Centre City Optimization Project, an initiative to quickly identify and respond to issues affecting the cleanliness, upkeep, safety and vibrancy of the city's downtown and adjacent areas. Each concern received is first assessed by district inspectors and categorized based on the type of defect and repair methodology required. Attachment 2 outlines the repair methods, construction durations, and seasonal/weather limitations that factor into the most common sidewalk repairs. After the repair strategy is identified, repairs are then prioritized based on importance of location, size, severity, and risk to the public. Safety concerns impacting accessibility or near areas of high importance are given higher consideration and expedited repair.

Administration also sets targets related to the time to inspect (TTI) and the time to repair (TTR) sidewalk deficiencies. The target timeline for Administration to inspect a sidewalk 311 notification (i.e., TTI) is five calendar days. The target TTR for a sidewalk ranges from 80 to 120 days.

The TTR timeline is influenced by the type of deficiency, necessary repair, resource availability, and weather conditions, but is primarily affected by the time of year. The majority of sidewalk repairs can only be scheduled and completed within five months of the year (i.e. between June and October) when weather conditions are favourable.

Snow and Ice Control

Active Pathway Inventory and Operating Budget

The Active Pathways team is responsible for 1,416 linear kilometres of public pedestrian sidewalks and nearly 70 linear kilometers of bike lanes, in addition to maintaining over 5,000 bus stops. SNIC is only completed on public property, adjacent sidewalks, multi-use trails, City facilities, staircases and other assets not considered to be a roadway. Other existing sidewalks are the responsibility of private property owners. The total budget for SNIC is \$67 million/year, and while costs are not tracked by inventory type and share common elements such as materials, there is a rough split of 45 per cent, or approximately \$30.15 million, on Active Pathways and 55 per cent, or \$36.85 million, on roadways.

Active Pathway SNIC Service Level

The SNIC program uses a routed priority system to determine snow clearing service levels, which are developed with consideration for user accessibility to important locations within the program's serviced inventory. Other factors influencing service priority include geographic location, pedestrian access and connection, and crew safety outlines in Attachment 3.

The SNIC team works within Council Policy C409K - Snow and Ice Control Policy to provide clear and accessible transportation networks for the City of Edmonton throughout the winter months (Attachment 3). The following are the current Active Pathways service levels:

- **Priority 1 includes** active pathways inventory adjacent to City facilities, and includes City Hall, recreation centres, seniors centres, transit centres and LRT stations. This inventory includes City maintained sidewalks, wheelchair ramps, shared pathways, all season staircases and bus stops outside these facilities - the standard is **bare surfacing within one day following the end of snowfall**. Priority 1 also includes the prioritized winter bike loop and designated shared pathways. Cleared within 24 hours from the end of the snowfall.
- **Priority 2 includes** all active pathways inventory except those listed in priority 1. This means all **other** City maintained sidewalks, wheelchair ramps, shared pathways, parking lots, etc. These are maintained to a safe and passable surface within three days following the end of snowfall. This also includes all-season staircases, access to bus stops adjacent to City property, and pedestrian bridges. These are maintained to a safe and passable surface and completed within 72 hours from the end of the snowfall.
- **Priority 3 includes** other manually cleared active pathways and public amenities such as breezeways, benches, fire hydrants, bus stop manual clearing and manual shared use pathways. Cleared within 14 days from the end of a snowfall.
- **Priority 4 includes** Community sandboxes and safe mobility devices. These are maintained and completed when resources allow.

Bylaw Enforcement

Bylaw Enforcement Resourcing and Operating Budget

Bylaw 14600 - Community Standards Bylaw ensures public safety through the regulation of public sidewalk conditions during the winter season. Section 7 of the bylaw states: "A person shall maintain any sidewalk adjacent to land they own or occupy clear of all snow and ice." Municipal Enforcement Officers (MEOs), including Problem Property Initiative Officers (PPI) and Snow and Ice Officers (SIOs), are responsible for the education and enforcement of this bylaw. Each enforcement team provides varying levels of support and resources to snow on sidewalk enforcement. The annual budget for all Municipal Enforcement Services, including but not limited to snow related enforcement, is \$7.2 million.

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Bylaw Enforcement Service Delivery

Municipal Enforcement Officers (MEOs) and seasonal Snow and Ice Officers (SIOs) are deployed city-wide, working with residents in neighbourhoods and business communities to ensure that Edmonton's basic community standards are maintained to a reasonable level. In the winter, MEOs primarily focus on investigating resident initiated snow on sidewalk complaints; however, they are also responsible for a variety of property standards investigations, including nuisance on land, graffiti, business licensing and zoning infractions year round. SIOs are primarily responsible for parking ban enforcement and when no parking ban is in effect, they conduct proactive snow on sidewalk investigations.

The volume of snow on walk investigations fluctuates annually, depending on the amount of snowfall the City receives. MEOs, including the Problem Property Officers, primarily conduct reactive enforcement: approximately 90 per cent of all snow on walk files investigated are initiated through residents reporting through 311. All calls are investigated within four business days with the exception of slip and fall complaints or public safety risks, where the MEO aims to investigate within 24 hours. In comparison, SIOs primarily conduct proactive enforcement with a focus on areas where accessibility is impacted, such as schools, hospitals, and seniors residences; in addition to supporting parking enforcement when a parking ban is declared. Attachment 4 provides additional details on service delivery.

Bylaw Enforcement Approach

Where property conditions do not meet acceptable municipal standards set by the Community Standards bylaw, officers will follow the 4E model of escalation (engage, educate, encourage and enforce) during the course of an investigation. MEOs and SIOs use a variety of enforcement methods, such as education through door hangers and warning letters, to gain voluntary compliance, ensuring that Edmonton's sidewalks are kept safe and clean for all users. When voluntary compliance is not achieved, officers coordinate sidewalk snow removal cleanups to ensure public safety and may issue a bylaw fine of \$100 in addition to the cost of snow removal.

Options to Increase Service Level on Areas of High Importance

To enhance year-round accessibility for sidewalks and active pathways by leveraging a High Priority Sidewalk Index and Social Vulnerability Index (SVI), four distinct service options have been outlined in Attachment 5, each with varying impacts and associated costs where applicable. Funding for these scenarios does not exist within the current budget. These options address improvements across the SNIC Program, the Sidewalk Maintenance Program and the Bylaw Enforcement Program. The options range from maintaining current practices to a significant increase in service levels.

Option 1: No Change to Budget/Maintain Current Practices, focuses on internal reprioritization within the existing SNIC budget to target high social vulnerability areas earlier, without increasing costs. Sidewalk Maintenance continues with responsive repairs using its current \$5.9 million operating budget, and Enforcement Services maintains its existing model.

Option 2: Minimal Changes. A one time capital expenditure of \$0.74 million for SNIC equipment and an annual ongoing operating increase of \$1.14 million would elevate 385 bus stops and 113

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km of pedestrian walks to Priority 1 or 2, benefiting bus users in social vulnerability zones. Sidewalk Maintenance would see an annual ongoing operating increase of \$1.78 million for proactive repairs on 6.48 km (0.6 per cent) of sidewalks with a High Priority Sidewalk Index (HPSI) score of 10-12. Parks and Roads Services would add 1 FTE and 31.4 Seasonal Staff. Enforcement Services adds 15 temporary, seasonal officers and two supporting FTEs for additional proactive snow on walk investigations with a \$0.66 million annual ongoing operating increase.

Option 3: Moderate Changes, this option balances improved accessibility with the costs of the enhanced service. This involves a \$1.43 million one-time capital investment and an annual ongoing operating increase of \$1.94 million to prioritize SNIC efforts in socially vulnerable areas, school zones, and increase service levels for 385 bus stops. Sidewalk Maintenance would receive an annual increase of \$4.53 million for proactive repairs on 16.06 km (1.6 per cent) of sidewalks with an HPSI score of 9-12. Parks and Roads Services would add 2 FTEs and 63.2 seasonal staff. For Enforcement Services, an annual increase of \$1.6 million would fund 15 permanent Municipal Enforcement Officers and two supporting FTEs, increasing year-round community standards enforcement, including additional dedicated services for snow on walk investigations.

Option 4: Highest Impact, represents the most comprehensive service level and greatest change, both financially and in accessibility. It includes a one-time capital expenditure of \$5.31 million and an annual operating increase of \$6.42 million for SNIC, prioritizing 806 km of sidewalks, including all transit corridors, city-wide school zones, and socially vulnerable areas at Priority 1, with adjacent bus stops at Priority 2. Sidewalk Maintenance sees the largest annual increase of \$10.99 million to proactively repair 45.51 km (4.5 per cent) of sidewalks with an HPSI score of 8-12, identified as having the greatest impact on accessibility in high-priority corridors. Parks and Roads Services would add three FTEs and 155.9 Seasonal FTEs and this option includes enforcement services. Options 3 and 4 both include a \$1.6 million annual increase for 15 permanent Municipal Enforcement Officers to provide year-round enforcement and two supporting FTEs.

The table below summarizes four distinct service options to Increase Service Level on Areas of High Importance, each with varying impacts and associated costs, where applicable.

Option	Description	One-time (\$)	On-going (\$)	Tax Increase Equivalent
All Programs	Sidewalk Maintenance Program and Bylaw Enforcement Program to maintain current practices. SNIC to focus on internal reprioritization within the existing SNIC budget to target high social vulnerability areas earlier	\$0.00	\$0.00	0
Total Option 1		\$0.00	\$0.00	0
Snow and Ice Control Program	Add 385 bus stops to priority 2 and increase current P2 pedestrian walk inventory to P1 priority Add 10.4 front line, seasonal staff		\$1.14	0.05%
Snow and Ice Control Program Equipment	Add 5 Bobcat toolcats to complete new inventory	\$0.74		
Sidewalk Maintenance Program	Perform proactive repairs on 6.48 kms of sidewalks with an HPSI score of 10 - 12 Add 21 front line, seasonal staff and 1 permanent CSU FTE to support program administration.		\$1.78	0.08%

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Bylaw Enforcement Program	Add 15 temporary, seasonal municipal enforcement officers and two supporting FTEs for additional proactive snow on walk investigations		\$0.66	0.03%
Total Option 2		\$0.74	\$3.58	0.16%
Snow and Ice Control Program	Prioritize socially vulnerable areas, school zones, and increase service levels for 385 bus stops Add 15.2 front line, seasonal staff		\$1.94	0.09%
Snow and Ice Control Program Equipment	Add 10 Bobcat toolcats to complete inventory	\$1.43		
Sidewalk Maintenance Program	Perform proactive repairs on 16.06 kms of sidewalks with an HPSI score of 9 - 12 Add 48 front line, seasonal staff and 2 permanent FTE to support program administration.		\$4.53	0.21%
Bylaw Enforcement Program	Add 15 permanent Municipal Enforcement Officers and two supporting FTEs		\$1.60	0.07%
Total Option 3		\$1.43	\$8.07	0.37%
Snow and Ice Control Program	Prioritize 806 Kms of sidewalks including transit corridors, city-wide school zones and socially vulnerable areas at priority 1 with adjacent bus stops at Priority 2. Add 41.9 front line, seasonal staff		\$6.42	0.30%
Snow and Ice Control Program Equipment	Add 36 Bobcat toolcats to complete additional work	\$5.31		
Sidewalk Maintenance Program	Perform proactive repairs on 45.51kms of sidewalk with a HPSI score of 8-12 Add 114 front line, seasonal staff and 3 permanent FTE to support program administration.		\$10.99	0.51%
Bylaw Enforcement Program	Add 15 permanent Municipal Enforcement Officers and two supporting FTEs		\$1.60	0.07%
Total Option 4		\$5.31	\$19.01	0.88%

Budget/Financial Implications

If this report is received for information, Administration will continue with Option 1 and maintain the status quo.

Attachment 5 provides details on the operating and capital budget requirements for Options 2-4 to improve accessibility for residents by considering sidewalk maintenance, active pathway snow removal, and bylaw enforcement costs. There is no funding in the 2025 and 2026 budgets for enhancements to the program; any future enhancements will be considered as part of the 2027-2030 budget development.

Community Insight

To develop the High Priority Sidewalk Index and Social Vulnerability Index, Administration consulted various community groups like Paths for People, Business Improvement Areas, and the Senior's Association of Greater Edmonton in 2022. Their input led to the inclusion of new data sources and the integration of City Plan nodes and corridors. A survey sent to 145 individuals helped identify key social demographic metrics, resulting in the addition of pedestrian volume

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data and the new Social Vulnerability Index to the model. Five follow-up sessions with the previously consulted groups shared details on the revised methodology.

Administration also gathered feedback on SNIC service levels and proposed enhancements from City staff, external companies, snow and ice contractors, business associations and residents. Key findings aligned with previous SNIC analyses. Concerns raised included:

- Accessibility and pedestrian safety (residential sidewalks, transit, City facilities, seniors' centers).
- Windrows obstructing accessibility, emergency services, and parking; stakeholders suggested their avoidance or prompt clearing.
- Limited resources and equipment contributing to longer response times for SNIC clearing and 311 requests.
- Non-compliance with residential sidewalk clearing and parking bans, causing safety issues and inconsistent service, enhanced enforcement was desired.

Survey respondents from the Edmonton Insight Community and an open link were divided on a tax increase for SNIC service enhancements (45 per cent in favour, 40 per cent against).

GBA+

The City of Edmonton considers equity and incorporates a GBA+ lens when delivering services to the public. The High Priority Sidewalk Index uses qualitative and quantitative data, including the Social Vulnerability Index, to identify and address inequalities in current sidewalk repair and snow removal practices. The approach ensures that areas with higher social vulnerability, where requests for sidewalk repairs and snow clearing are disproportionately lower, are not overlooked in the prioritization of work. The index also supports the equitable safety commitments laid out in the Safe Mobility Strategy 2021-2025, which is designed to achieve Vision Zero through safe and livable streets by 2032. By considering diverse inputs, including data such as pedestrian volumes, City policies and Edmontonians' lived experience, sidewalk maintenance and snow clearing can play a critical role in contributing to Vision Zero by protecting vulnerable sidewalk users and addressing unintentional systemic service delivery inequity.

Environment and Climate Review

The changing climate continues to pose risks to public infrastructure and human and environmental health and safety. Edmonton is expected to see continued shifts in extreme temperatures, worsening air quality, shifting precipitation patterns and more frequent extreme weather (wet and dry) events, as a result of climate change.¹ As such, there will be environmental and climate implications to the resource allocation and prioritization for SNIC removal, together with sidewalk maintenance and repair, as the City of Edmonton continues to advance the City Plan's climate resilience goals. Administration has already acknowledged the impact of climate change in its sidewalk maintenance and renewal practices; however, additional thoughtful considerations for SNIC operations and the sidewalk maintenance program could be further

¹ City of Edmonton. (2025). Understanding Edmonton's Changing Climate 2025: Observed Climate Trends. City of Edmonton.

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considered in climate adaptation and infrastructure cost, active transportation and greenhouse gas emissions and snow and ice operations in a changing climate. Attachment 6 elaborates on each of the three areas, incorporating a climate lens and environmental considerations as appropriate.

Attachments

1. Application of High Priority Sidewalk Index: Active Pathway Routes and Sidewalk Maintenance
2. Maintenance Tasks Performed by Deficiency Type
3. Snow and Ice Control (SNIC) Service Levels
4. Bylaw Deployment Model
5. Options and Costs to Increase Service Levels
6. Environment and Climate Review