

GBA+ REPORTING

PROJECT/INITIATIVE NAME:

SNIC Options to Enhance Service Standards (CO 00778)

Branch Parks and Roads Services

Department City Operations

Completed by: Aurea Siemens

Date: Nov 22, 2021 (updated Mar 14, 2022)

1. DESCRIPTION OF PROJECT OR INITIATIVE

Please provide a high level overview of your project or initiative in two or three sentences.

The Council report being brought forward in response to the following Council motion from Aug 16, 2021:

That Administration provide options to increase the service standard in the Snow and Ice Control Procedure. This report is to include: any equipment, staffing and budget changes required to increase the standard with a greater emphasis on safety, efficiency and connectivity. This report should also include feedback from the Accessibility Advisory Committee, Edmonton Transit Service Advisory Board, the Edmonton Seniors Coordinating Council and the Women's Advocacy Voice of Edmonton Committee.

The work being conducted to support this report will include:

- A jurisdictional scan of comparable municipalities' snow and ice control programs
- A current state analysis of Edmonton's Snow and Ice Control (SNIC) program, including measures and current resource use and challenges
- Proposed options for enhanced service standards for Council to review and consider, including resource requirements that would be needed to implement the proposed options
- Stakeholder engagement on proposed options

2. OVERVIEW OF GBA+ IMPACT

The purpose of GBA+ is to mitigate or remove barriers to inclusion and to support equality of outcomes. In this section, please summarize what your GBA+ process identified in terms of barriers to equity, groups impacted and how recommendations will support equality of outcomes.

EXTERNAL FOCUS

The Council motion specifically identified groups that may be facing barriers to current SNIC program processes and is expecting that stakeholder engagement will include the following feedback from these committees:

- Accessibility Advisory Committee (persons with disabilities)

- Edmonton Seniors Coordinating Council (senior citizens)
- Edmonton Transit Service Advisory Board (transit users, could represent a diverse audience)
- Women's Advocacy Voice of Edmonton (women, parents with children that may face mobility issues such as walking with small children, use of strollers, etc)

From the discussion at Council and recent media/social media attention and news stories, there is an increasing level of attention and desire to improve SNIC service levels with an increasing focus on safety, accessibility, inclusion, and connectivity. In order to support equity and equality of outcomes, service level enhancements would need to take into account the perspectives of any person or groups that faces barriers with respect to:

- Mobility and accessibility challenges (seniors, persons with canes and wheelchairs, any medical or developmental condition that affects or restricts walking-type balance and movement, ability to shovel snow, etc.)
- Women and anyone who may be smaller in stature, have a smaller stride
- Parents and caregivers that may face challenges of moving around their community with small children (walking, use of strollers, wagons/sleds or bicycles)
- Persons that use multimodal transportation (walking, cycling, taking transit), regardless of whether they choose one or mode modes by choice or out of necessity for socioeconomic or other reasons

By including these groups in our stakeholder engagement process, we hope that our proposed service enhancements will result in safer, more accessible, more equitable and more connected travel experiences within their communities and around Edmonton, should these options be approved by Council.

INTERNAL FOCUS

Parks and Roads Services' Administration is reviewing its Snow and Ice Control operations, including current resources (equipment, staffing, materials, budget, contracts) as part of reviewing current service standards and developing proposed service enhancements to bring forward. Administration will be presenting resourcing requirements to support implementation of proposed service enhancements. As part of its program review, a GBA+ analysis could also be applied to the staffing components and resourcing requirements. Some work has been previously initiated to develop more inclusive recruitment processes and postings at the Branch, Department and corporate level in alignment with the [The Art of Inclusion: Our Diversity and Inclusion Framework](#) and the [City Operations Indigenous Framework Action Plan](#). Further planning and implementation may allow for exploration of new and additional opportunities for applying an equity and inclusion lens with Snow and Ice Control current and future employees.

GBA+ PROCESS

3. REFLECT

In this section, record:

- *The perspectives of those on the team/project (e.g personal or organizational identity)*
- *Whether a discussion of biases/stereotypes/norms was held (including actions to disrupt)*
- *Which perspectives are missing (especially those that may be most impacted by the project)*

Our team has relatively limited perspectives due to size, and nature of the COE work environment (similar economic situation, limited age range). The team does offer some balance in gender and family perspectives, but we are missing several perspectives from those with identity factors that may face barriers with snow and

ice (e.g. age, mobility/ability, multimodal transport users, business stakeholders, other factors that we may not be aware of).

As a result, we understand the importance of and need to engage with a variety of internal and external stakeholder and citizen groups that represent diverse perspectives to help inform and refine the proposed options that will be presented to Council. Due to the timelines to bring this report forward, we prioritized our engagement process with representative stakeholder groups and committees, since a comprehensive public engagement process could not be conducted within this timeframe. We are opting for quality over quantity of feedback, although we recognize the possible limitations of this approach (eg, feedback from stakeholder groups may not reflect all possible perspectives of individuals with similar common identity factors). This has been identified as a risk within our stakeholder engagement plan and will be taken into consideration when using feedback to refine the proposed options.

We also understand the need to engage with and seek perspectives from Snow and Ice Control employees, both frontline staff as well as team leads, supervisors, and management about their needs and priorities from both a staffing and an operational perspective.

4. RESEARCH

In this section, record:

- *The kind(s) of research undertaken (e.g. qualitative, quantitative, academic, industry, jurisdictional, etc.)*
- *Which kinds of data used (disaggregated if available)*
- *Identification of best practice (based on research or subject matter expertise)*

The proposed options have been developed in part through jurisdictional scanning of comparable cities with snow and ice control procedures and how accessibility is prioritized, as well as based on some initial stakeholder engagement feedback. Very few cities have developed their snow and ice operations to align with accessibility and inclusion policies, or with gender equity in mind. Most cities prioritize some pedestrian or active transportation pathways, high-traffic pathways, access to seniors centres, hospitals and schools. Cities that have some focus on equity and inclusion:

- Winnipeg provides enhanced private sidewalk clearing for residents who are physically incapable and have no means otherwise of shoveling snow (must sign declaration annually)
- St. Albert prioritizes neighbourhoods with highest mobility issues, as well as areas with geographical challenges (eg, hills/high inclines)
- Toronto clears sidewalks for seniors who have no means to do so themselves (this is a program)
- Ottawa also provides different levels of assistance with snow clearing programs (Snow Angels, Snow-Go, etc.)
- Sweden [clears sidewalks first, then roads](#)

There is minimal scientific research or academic papers on equity and snow clearing, some research has indicated that there is evidence of gender inequality with snow clearing policies and procedures, [originating in Sweden](#). Many snow clearing practices benefit more men (higher percentage of drivers/commuters) than women (higher percentage of pedestrians, cyclists, pushing children in strollers), and higher percentages of winter injuries involved pedestrians (79%, of which 69% were women). By changing to clearing snow from sidewalks first, they reduced accidents by half and saved money. This approach has been considered by [Canadian governments with respect to snow-clearing budgets](#) and snow clearing in other cities such as [Moncton](#). Residents and social justice advocates in [Hamilton](#) have also raised inclusion concerns with the city.

Of the academic papers that could be found, findings focused on:

- [Gender dynamics with slips on ice and snow](#), with the greatest percentages of injuries being in elderly women (50+ years, mostly fractures) and young men (20-29 yrs), highlighting a need for more effective snow clearing, sand and salt application.
- [Gender dynamics and pedestrians involved in injuries during icy conditions](#), with elderly women (50+ yrs) having the highest number of injuries, particularly fractures (67% of injuries); the article highlights a need for better communication when icy conditions exist, more extensive snow clearing, spreading of sand/salt, and focusing efforts on foot and bike paths.
- [Cross-sectional analysis of hospital admissions due to slips and falls](#), with highest admissions among elderly men, especially men (80+ yrs); includes discussion of cities that encourage shared responsibility for keeping walkways clear.
- [Reviewing challenges with use of a mobility device](#) (eg, cane, walker, wheelchair, scooter) during the winter, especially navigating ramps, sidewalks and roads due to icy and snowy conditions, which also limits community participation. It was also determined in this review that there is a need for improved snow and ice removal policy and procedures because “minimal investigation has been conducted in this area.”
 - [Understanding experiences of stakeholder groups regarding sidewalk accessibility](#)
 - [Barriers to wheelchair access in winter](#)
 - [Case study of wheelchair users and community participation](#)
 - [Experiences of youths with disabilities participating in winter](#) (abstract)
 - [Winter community participation among wheelchair users](#)
 - [Seasonal patterns of community participation and mobility of wheelchair users](#)

Online searches for research papers suggest that there has been little research to date on equity and accessibility for transit users specifically in winter. While this has been identified as a concern by some municipalities in their transportation planning, it is unclear whether there is a body of research to uncover barriers that address the intersectionality of this group.

From the Safe Mobility collision data that has been shared with us regarding collisions, the lower priority roads (local and service roads and alleys, those that receive less clearing down to bare pavement or that take longer to clear) have a higher number of collisions than arterial and collector roads, although injuries tend to be less severe. There is no collision/injury data for active pathways and there are challenges with obtaining such data due to privacy and other concerns.

Understanding the experiences of those who may be more vulnerable to injury and those with mobility challenges is key to framing our final proposed options. Our stakeholder engagement process has helped us gather interests, concerns, and feedback from these groups. Proposed options being presented in the final version of the Council report have been adjusted based on feedback from stakeholder engagement.

5. ENGAGE

In this section, record:

- *Who and how you engaged or consulted, or if not, why not?*
- *If you did not engage with groups impacted, provide the reason/rationale.*

An engagement plan was developed and implemented to involve key, representative stakeholders in an inclusive process. Given the time constraints for this report, the project was unable to conduct a comprehensive public engagement process and primarily focused on gathering feedback from committees

and boards that advocate for the needs and interests of persons with disabilities, seniors, women, community members, transit users, business areas, emergency medical services, and those who rely on walkability in their communities. A separate public survey was also developed and launched through the Edmonton Insight platform, to provide residents a chance to give feedback on the proposed options. We received over 19,000 survey responses.

We engaged with the following **external** groups:

- Accessibility Advisory Committee (persons with disabilities)
- Business Improvement Areas (represent communities of businesses, customers, and visitors, with an interest in maintaining safe, welcoming and accessible environments)
- City Councillors (discussing priorities regarding the report)
- Edmonton Federation of Community Leagues, Planning and Development Committee (represent a variety of interests and needs of community members)
- Edmonton Seniors Coordinating Council (senior citizens)
- Edmonton Transit Service Advisory Board (transit users, could represent a diverse audience)
- Emergency Medical Services (EMS) (represent medical professionals that respond to a variety of incidents where medical attention is required and have a unique perspective on road and pathway safety)
- EPCOR (represent drainage services)
- Paths for People (represent diverse interests with respect to walkable and connected pathways for all)
- University of Alberta (represent researchers involved in Snow and Ice monitoring projects)
- Women's Advocacy Voice of Edmonton (women, parents with children that may face mobility issues such as walking with small children, use of strollers, etc)

We engaged with the following **internal** groups:

- 311
- City Facilities (eg, Recreation and Seniors Centres)
- Civic Events
- Communications
- Community Standards (Bylaw and Parking Enforcement)
- Fleet and Facility Services
- Fire Rescue Services
- Safe Mobility
- Snow and Ice Control Working Group (through meetings), Operations Staff (through survey)
- Snow and Ice Dispatch
- Traffic Operations
- Winter City

Due to gathering restrictions with COVID-19, all engagement sessions took place virtually, planned with specific stakeholders in mind and implemented in ways that were most convenient for them to minimize barriers to participation. The following tools were used:

- Presentation followed by discussion and feedback gathering session, held virtually through Google Meet or Zoom, depending on the group's preferences.
 - Information packages distributed to participants in advance, with a post-session form circulated to capture additional feedback and for session evaluation.
 - Sessions occurred during a regularly scheduled committee meeting or scheduled as a separate workshop.
- Online survey for EMS hosted through the City of Edmonton's online engagement platform, SPARQ.

- Information packages distributed to participants in advance, along with the survey link.

It is understood and captured in the identified risks that some groups may have been underrepresented, since feedback stakeholder groups may not represent all perspectives and needs of Edmontonians with overlapping identity factors. Over- or underrepresentation will be noted in the What We Heard report.

Future engagement

Depending on direction received from Council regarding the proposed options, there may be future opportunities for stakeholder and public engagement to provide further input on snow and ice services.

Although the current stakeholder engagement process did not specifically involve engagement with Indigenous or Newcomer groups (such as Bent Arrow Healing Society, Multicultural Health Brokers or the Mennonite Centre for Newcomers), there may be opportunities to engage with them as well to gather input on snow and ice service levels from residents that may be further disproportionately affected arising from intersectionality.

6. FINDINGS AND RECOMMENDATIONS

In this section, record:

- *What you learned from your research and engagement about differential impacts or barriers to equity-seeking or marginalized groups*
- *What equity measures you identified as a result and recommend for implementation*
- *Which equity measures are not recommended for implementation and why*

<p>6a) Finding statement(s):</p> <ul style="list-style-type: none"> - Persons with mobility and accessibility challenges (including seniors, persons with disabilities, parents with strollers and active transportation users), as well as those who use multiple modes of transportation have greater difficulties in being able to move around in snowy and icy winter conditions, which results in safety hazards (eg, increased slips and falls) and day-to-day barriers to participation and mobility around Edmonton. - Persons with mobility issues are disproportionately affected by snow and ice control measures and face the risk of increased injuries with icy conditions along any part of their route. - Persons who use active pathways and public transportation are differently affected by snow and ice, compared with those who use roads and vehicles, and face increased barriers and risk of injury with snow and ice 	<p>6b) Equity Measure Recommendation(s):</p> <p>Our research and engagement results indicate that the following proposed service standard enhancements will reduce or remove barriers from the demographic groups identified in our finding statement.</p> <ul style="list-style-type: none"> - Take into account areas and control measures that will allow for greater connectivity when walking or using a mobility aid or wheeled device (eg, stroller, wheelchair, bike) throughout the mobility network, such as crossing streets/intersections, being able to successfully navigate alley crossings and curb cuts as a result of increased snow removal. - Take into account different response plans for snow, freezing rain and significant thaw in order to better address and manage the risks and challenges to residents presented by each type of weather event. - Include a wider range of pathways that will
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<p>accumulation along any part of their route.</p> <ul style="list-style-type: none"> - Persons with mobility and accessibility challenges may face additional barriers to clearing snow and ice from shared walkways adjacent to their property, which results in safety hazards (eg, increased slips and falls) for themselves and others in the community. 	<p>receive clearing (such as internal park paths), enhanced clearing down to bare pavement, removal of windrows, faster clearing times following snow/ice events, expanded use of grit and anti-icing materials on active pathways</p> <ul style="list-style-type: none"> - Include shortened timelines for plowing/sanding of parking lots, including accessible parking stalls - Include a greater focus on maintaining Active Pathways, access to transit (bike paths, sidewalks adjacent to bus routes), and the resourcing requirements needed to meet current and proposed service standards. - Include a greater focus on residential compliance with clearing snow/ice on sidewalks and removing vehicles to facilitate better street clearing during parking bans. - Include suggestions and recommendations for future development of one or more assisted shoveling programs or supports available to residents with mobility concerns. <p>Selection and implementation of the proposed options are subject to the required resources needed for implementation and approval by Council. Options may need to be prioritized based on availability of required resources and with stakeholder feedback.</p>
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7. IMPLEMENTATION

In this section, record:

- *How you will implement/have implemented the equity measures, including timing (e.g. some may be implemented immediately, some noted for the future)*
- *If possible, identify any resources (eg. staffing, materials, etc) that will be allocated to implement equity measures*

Safety, mobility, inclusion and connectivity are foundational components of the current service levels, as well as the proposed service enhancement options. The selection, prioritization, and timing of implementation will be influenced by the availability of resources and decisions made by Council.

Resource Requirement Considerations

Resources that would be needed for implementation vary by option, but the broad categories include:

- Equipment (type and quantity)

- Staffing
- Materials for application
- Contracts (services, management)
- Infrastructure
- Budget
- Bylaw enforcement
- Other operational considerations (eg, snow dump site operations)
- Staff training resources (trainers and equipment)

Future Work and Considerations - Internal Focus

The PARS Branch is currently involved as a stakeholder in the Seasonal Workforce Program project that is taking place through 2022. Additional work and processes to develop more inclusive hiring practices and partnerships may arise through this project, building on previous work that has been undertaken or ongoing at the Branch and Department levels.

8. EVALUATION

In this section, record:

- *Your plans to evaluate the effectiveness of the project/initiative, including the effectiveness of equity measures implemented.*

Evaluating our success will be determined by measures such as:

- Operations' ability to successfully meet current and future Service Level Agreement (SLA) measures
- Resident satisfaction (eg, reduced number of 311 notifications and POSSE inquiries)
- Feedback through future engagement sessions and/or satisfaction surveys with residents and stakeholder groups
- Snow and Ice Control KPIs and targets
- Feedback from Operations staff
- Future collision data, safety data, and bylaw enforcement data
- Snow and Ice monitoring data and studies

Measurements will help us understand if, when and how the selected options and implementation are successful in meeting our goals of ensuring public safety, accessibility, inclusion and connectivity.

9. GENERAL COMMENTS (optional)

Please record any comment, if any, regarding the use of GBA+, your experience completing this template, the support provided, outstanding questions, suggestions, etc.

ADMINISTRATIVE USE ONLY:

The following actions are for the GBA+ Centres of Excellence. (TBD)

Reviewed by: Lindsay Skillings

Date: January 6, 2022