Options for Additional SNIC Investment for Pedestrian Spaces

In the feedback provided on the SNIC service enhancements, the Advisory Committee on Accessibility provided several recommendations for Council to consider (Attachment 2). Administration has provided the following cost estimates of those recommendations for information (Table 1), should Council wish to explore any additional SNIC service levels to improve the safety and accessibility of winter travel for pedestrians in the future.

SNIC Investment Options for Pedestrian Spaces	Cost Range
Complete all Bus Zones within 24 hours	$4.5-6.5 million (operating) $5-7 million (capital)
City provide SNIC service for high priority engineered walkways within 24 hours	$3-4 million (operating) $3 million (capital)
City provide SNIC service for all engineered walkways within 24 hours	$6-8 million (operating) $4.5 million (capital)
City to clear laneway apron crossings within seven days based on a priority system	$12-15 million (operating)
Plow windrows away from all wheelchair ramps	$13-16 million (operating)

Table 1: SNIC Investment Options for Pedestrian Spaces

The following descriptions of Engineered Walkways and Laneway Aprons are from the 2018 Council report TT2018-0467 Improving Accessibility and Reducing Injuries through Snow and Ice Control:

Engineered walkways

Engineered walkways are thoroughfares that run between private properties to connect streets, pathways, lanes, and parks to each other. Typically, these thoroughfares have an asphalt surface and have a barrier placed at the ends (bollard or bedstead) to prevent traffic from accessing them. There are 2,200 public engineered walkways within the city with a total length of 98.7 km. Almost all engineered walkways are paved with asphalt (93.7 per cent).

These walkways are used to provide pedestrian mobility through neighbourhoods and to provide convenient year-round connectivity to transit, schools, recreation and shopping centres. However, during the winter season, most of these walkways remain un-shovelled, which makes them difficult to travel through. While the walkway performs the same function as a sidewalk, the adjacent property owners are not required to keep this space clear of snow and ice. Section 67 of the Street Bylaw only requires the removal of snow and ice from public sidewalks or pathways that run parallel to and directly adjacent to a street.

Engineered walkways are not currently part of The City's SNIC inventory list. Currently, the Roads business unit addresses snow and ice concerns on the walkways on a request basis only. Snow and ice are not removed. Instead, sand and salt are applied to provide traction and a hard-packed snow condition is maintained.

The issue of maintaining and clearing engineered walkways is one of the actions recommended within the 2016 Pedestrian Strategy that was approved by Council. Action 31 from the strategy states:

" Undertake an assessment of engineered walkways, develop a management plan, amend the bylaw to address public concerns, and identify funding requirements to upgrade and maintain the walkways city wide."

Options to Consider

Since the status quo does not advance the goals set in the Pedestrian Strategy, three other options were considered for snow and ice control on engineered walkways:

Adjacent property owner responsibility

Through a bylaw amendment, make adjacent property owners/occupants responsible for snow and ice clearing on these walkways. The same timeframes and standards for sidewalks would apply.

There are practical challenges to this approach that would need to be addressed. The language of the bylaw would have to explicitly determine how the space is to be cleared by each property owner – divide pathway in half lengthwise, or at a midpoint, or by alternating years (owner on north or east side responsible on odd-numbered years, and the other owner for even-numbered years). This piece is critical and would need to be clearly communicated with all parties, as non-compliance would be met with corrective action costs, and possibly fines.

The space itself is usually fenced or hedged in with little space to store snow on either side of the walkway. This means the snow would have to be removed out of the walkway, through the existing barriers, to the street. There are also locations where the private properties that border the

engineered walkways have no practical access to them (no side gates or lanes) and would have to be identified as an exception.

High-priority approach

The locations of engineered walkways were compared to the High Priority Network of sidewalks and pathways that was developed for this report. Proximity to school sites was chosen as the primary area to focus on, to help promote walking to school during the winter. Using the 200 m buffer zone around the schools, approximately 50 per cent of the total inventory of engineered walkways were captured (49.7 km).

The option would be for The City to provide SNIC service for these priority walkways, within 24 hours after the snow stops falling. This would require an initial investment of $3 million to upgrade all end treatments to removable bollards for machines to access the walkways, and an annual increase in operating budget of $3 million to $4 million. It is assumed that this work will be performed by contractor.

The remaining 50 per cent of walkways would either be relegated to the status quo, where no SNIC service would be legally required, or make the adjacent property owners responsible for SNIC through a bylaw amendment.

Full Service

The final option would be for The City to provide snow and ice control for all engineered walkways based on a priority system and completed within seven days after snow stops. This would require an initial investment of approximately $4.5 million to upgrade all end treatments to removable bollards for machines to access walkways, and an annual increase in operating budget of $6 million to $8 million. It is assumed that this work will be performed by contractor.

Sidewalk Crossings of Laneways (Aprons)

The Street Bylaw delegates responsibility to remove snow and ice from sidewalks and pathways that are at the front of or along the side to the adjacent property owner/occupant. Sidewalk crossings of laneways, also known as Laneway Aprons, are sloped concrete sections that provide vehicular entry into lanes and alleys. These crossings are not in front of or along the side to the adjacent property owner. Therefore, the snow and ice control responsibility of these crossings reside with The City. Currently, The City does not provide SNIC services to these vehicle crossings. There are an estimated 13,000 laneway aprons in Calgary.

As the status quo is understood, and does not advance the goals set in the Pedestrian Strategy, two other options were considered for snow and ice control on sidewalk crossings of laneways:

1. Bylaw amendment: Provide additional clarification to make adjacent property owners/occupants responsible for clearing these sidewalk spaces within 24 hours.

2. City service: The City to provide snow and ice control on sidewalk crossings of laneways within 7-days of snow deposit. Estimated annual costs would be $12 million to $15 million.