

Active Transportation Winter Maintenance Policy

Background:

The City of Greater Sudbury is committed to building and maintaining a pedestrian friendly community. The City recognizes the importance of clearing sidewalks and enabling residents to maintain healthy, active lifestyles and in providing safe access to Greater Sudbury Transit services and designations such as school, work and commercial areas.

Within the last term of Council, one previous report was presented to the Operations Committee and one report was presented to the Finance and Administration Committee, outlining various facets of how the City manages the winter maintenance of sidewalks. Presented below is a summary of these reports:

1) Sidewalk Winter Maintenance Report (September 20, 2016)

This report presented an overview of the sidewalk maintenance practices at the time the report was written and provided the Finance and Administration Committee with options, including budget impacts, for how winter maintenance could be performed:

- Option A) Maintaining what was the status quo at the time; or
- Option B) Maintaining all sidewalks on priority routes and arterial roads, in addition to Option A; or
- Option C) Maintaining one-side of all two-sided sidewalks in addition to both Option A and B; or
- Option D) Maintain all sidewalks

At the time, the Finance and Administration Committee referred the report to budget discussions for the 2017 budget. During budget discussions, Option C was selected as the preferred approach for the winter maintenance of sidewalks in Greater Sudbury.

This report may be read in its entirety at:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=974&itemid=12112&lang=en>(September 20, 2016);

2) Enhanced Sidewalk Winter Maintenance Plan (August 21, 2017)

This report presented an overview of the winter sidewalk maintenance quality standard at the time the report was written, as well as the highlights of potentially forthcoming changes to the O.Reg. 232/02 Minimum Maintenance Standards for Municipal Highways and the impacts these changes may have on the City's winter control practices. Further, the report outlined some community feedback received and further potential options for the enhancement of sidewalk winter maintenance practices.

This report may be read in its entirety at:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1145&itemid=13719&lang=en> (August 21, 2017).

Recent Amendments to O.Reg. 239/02 Minimum Maintenance Standards for Municipal Highways:

As of May 3, 2018, substantive changes to the Minimum Maintenance Standards for Municipal Highways, O. Reg. 239/02 came into force and effect. The most notable changes impacting the maintenance of active transportation facilities are:

1. The introduction of winter maintenance standards, including patrol obligations, for sidewalks;
2. The introduction of winter maintenance standards for bicycle lanes;
3. The ability for municipalities to declare a "significant weather event" with implications for winter maintenance on roadways, bicycle lanes and sidewalks during the duration of the event

Bicycle Lanes / Designated Cycling Facilities

The Minimum Maintenance Standards (MMS) now provide a definition for a 'bicycle lane' which includes a portion of the roadway with marked or buffered lanes, whether for the exclusive or preferential use of cyclists. Designated cycling facilities in Greater Sudbury, including Bicycle Lanes, are included in Schedule "T" of the Traffic and Parking By-law 2010-1.

The MMS now include specific sections outlining winter maintenance standards for snow accumulation in bicycle lanes. Table 1 compares the new snow accumulation depth standards for bicycle lanes as compared with the existing standards for roadways. Snow accumulation standards for bicycle lanes is lower than for the adjacent roadways in which they are contained, so where maintenance is performed on the roadway and bicycle lane concurrently, both standards should be satisfied. It should also be noted that the time period begins *after* snow accumulation has ended.

While there is no specific section dealing with ice formation on bicycle lanes, the section which sets out the standards for ice formation on roadways does note in section 5(5) that "this section applies in respect of ice formation on bicycle lanes on a roadway, but does not apply to other types of bicycle facilities". The current MMS defines 'bicycle facilities' as the on-road and in-boulevard cycling facilities listed in Book 18 of the Ontario Traffic Manual.

Table 1: Snow accumulation for Bicycle Lanes

Class of Highway or Adjacent Highway	Depth of Snow Accumulation	Time for Bicycle Lanes	Time for Roadways
1	2.5 cm	8 hours	4 hours
2	5 cm	12 hours	6 hours
3	8 cm	24 hours	12 hours
4	8 cm	24 hours	16 hours
5	10 cm	24 hours	24 hours

Sidewalks

The MMS now also includes specific sections dealing with sidewalk winter maintenance. Section 16.3 provides that snow accumulation on sidewalks shall be reduced to less than or equal to eight (8) centimetres within 48 hours of the end of a snow event. The section further provides a standard of a minimum maintained width of one metre. Notably, the section does not require clearing to bare pavement; rather simply reducing the depth to less than or equal to eight (8) centimetres.

Section 16.5 also sets out standards with respect to ice formation on sidewalks. It requires that municipalities monitor weather in accordance with section 3.1, and to "treat the sidewalk if practicable to prevent ice formation or improve traction within 48 hours if the municipality determines that there is a substantial probability of ice forming on a sidewalk, starting from the time that the municipality determines the appropriate time to deploy resources for that purpose". This standard still leaves the municipality with discretion in terms of the deployment of resources during such events.

Section 16.7 for the first time introduces standards for winter sidewalk patrols, which are to be conducted by the municipality where "the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on sidewalks in excess of eight (8) cm, ice formation on sidewalks or icy sidewalks." The patrols are to be conducted on sidewalks that the municipality selects "as representative of its sidewalks at intervals deemed necessary by the municipality." There is no expectation that *all* sidewalks are to be patrolled; rather, this section appears to promote the reasonable practice of inspecting "representative" sidewalks for winter maintenance conditions.

Off-road / Recreational Trails

The MMS do not apply to off-road trails or facilities that exist outside of the municipal right-of-way.

Risk Mitigation for Winter Maintenance

According to Section 44(1) of the Municipal Act, 2001, municipalities are obligated to maintain highways and bridges within their jurisdiction in a reasonable state of repair. While sidewalks are not defined specifically in the Municipal Act, the case law indicates that the sidewalk is a portion of the highway which a municipality must keep in a reasonable state of repair.

The defence outlined in Section 44(3) states that a municipality is not liable for failing to keep a highway or bridge in a reasonable state of repair if: a) it did not know and could not reasonable have been expected to have known about the state of repair of the highway or bridge; b) it took reasonable steps to prevent the default from arising; or c) at the time the cause of action arose, minimum standards established under subsection (4) applied to the highway or bridge and to the alleged default and those standards have been met.

Further, with respect to sidewalks, Section 44(9) indicates that except in the case of gross negligence, a municipality is not liable for a personal injury caused by snow or ice on a sidewalk.

The City of Greater Sudbury does not currently maintain all 440+ km of sidewalks, bicycle lanes and other designated cycling facilities throughout the winter months. To minimize liability and to ensure that the City takes reasonable steps to prevent incidents from arising, it is recommended that the sidewalks and cycling facilities which are not maintained should be closed by municipal by-law each year and advertised to the public, similarly to the current municipal practice of prohibiting Overnight Parking during the winter months from December 1 to March 31.

Proposed Approach to Active Transportation Winter Maintenance:

This report represents the first comprehensive review of the City's winter maintenance practices for active transportation infrastructure from a mobility perspective. To align with the changes to the MMS and ensure that the City's winter maintenance practices designated cycling facilities, sidewalks and off-road/recreational trails are meeting the needs of residents, staff are proposing the following approach for the Committee's consideration.

Bicycle Lanes / Designated Cycling Facilities

The City of Greater Sudbury currently has approximately 21 km of designated cycling facilities and this number is growing each year with the completion of additional capital projects. Cycling facilities in Greater Sudbury are currently not well-connected, which would pose challenges for planning for cost-effective winter maintenance.

Until such time as the City reaches a point where there is a critical mass of residents who are interested in riding all year long, warranting the investment in maintenance of cycling facilities for all seasons, it is recommended that all designated cycling facilities (including Bicycle Lanes), as identified in Schedule “T” of the Traffic and Parking By-law 2010-1 be closed by by-law for a specified period of time, annually (i.e. December 1 to March 31).

Closing cycling lanes by by-law on an annual basis would be consistent with the current operating practice, would result in a process that is consistent with the provincial standards, and would have no financial implications.

Sidewalks

The City’s current sidewalk winter maintenance practices have evolved over a number of years, resulting in the current service levels and routes. To modernize the delivery of this essential service and to ensure ongoing financial prudence, a documented policy approach and criteria for determining which sidewalks should be maintained throughout the winter, on a go forward basis, are being presented here for the Committee’s consideration. Where appropriate, the criteria presented here aim to be in line with those used in the City’s Sidewalk Priority Index, which is an objective tool used by staff to prioritize where new sidewalks should be constructed to fill gaps in the City’s existing pedestrian infrastructure network.

In addition, reviewing current sidewalk maintenance practices annually will allow our operations to align services with items such as the forthcoming route restructuring of the Transit Action Plan. Furthermore, the policy is designed to be flexible and allow for minor changes brought forward by the public and supported by either staff or Council as long as the changes can be implemented within existing budgets.

Criteria identified in table 2 will be applied in sequential order and staff will use professional judgment to make decisions where more than one criterion may apply to a road segment. Ultimately, sidewalk winter maintenance routes will be planned to ensure they are connected and provide for the most efficient and cost-effective route. The impact for the 2019/20 winter season will be consistent with existing efforts. Any change that would impact service levels/budgets will be brought to Council’s attention during the budget process.

Table 2: Criteria for planning Sidewalk Winter Maintenance Routes

Criteria:		Maintenance Approach:	
1	Road Classification	Primary/Secondary Arterial	<ul style="list-style-type: none"> All connected sidewalks will be maintained.
		Collector/Tertiary Arterial	<ul style="list-style-type: none"> All connected sidewalks will be maintained.
		Local	<ul style="list-style-type: none"> Where a local road has sidewalks on both

Criteria:		Maintenance Approach:
		sides, a minimum of one side of the road will be maintained.
2	Pedestrian Connections to Greater Sudbury Transit Stops	<ul style="list-style-type: none"> All sidewalks will be maintained.
3	Pedestrian Path / Cut-through	<ul style="list-style-type: none"> Pedestrian paths/cut-throughs will be maintained where they provide connections between destinations* or form part of a connected maintenance route.
4	Crescents	<ul style="list-style-type: none"> Sidewalks will not be maintained unless it will form part of an efficient connected maintenance route or there is access to a pedestrian path/cut-through which would connect to a destination*.
5	Dead-end roads / Cul-de-sacs	<ul style="list-style-type: none"> Sidewalks will not be maintained unless there is a pedestrian path/cut-through at the dead-end/cul-de-sac which would connect to a destination* or form part of a connected maintenance route.
6	Roadway Geometry (i.e. width, curves, hills, etc)	<ul style="list-style-type: none"> Where deemed necessary for safety purposes related to roadway geometry, regardless of whether the sidewalk is located on a dead-end road/cul-de-sac, it will be maintained.
7	Connected Routes	<ul style="list-style-type: none"> Where deemed necessary for the purpose of creating an efficient, connected maintenance route, regardless of whether the sidewalk is located on a dead-end road/cul-de-sac or crescent, it will be maintained.

*Destinations may include hospitals, schools, etc.

As noted previously, sidewalk routes should be re-evaluated annually to ensure new segments of sidewalk added through either the roads capital program or development processes are incorporated into the existing sidewalk winter maintenance routes in accordance with the criteria and approach presented in Table 2.

This proposed policy and approach will ensure that the right sidewalks are being maintained to enable residents to access destinations and continuous travel paths.

Off-road / Recreational Trails

To be considered for winter maintenance, off-road trails must be constructed to a standard which is able to accommodate municipal tractors and other winter maintenance equipment without causing degradation to the trail. The surface of

the trail should be asphalt or similar hard surface and must be of sufficient width to accommodate the appropriate equipment.

It is not recommended that trails that are a soft surface (i.e. natural or granular material) be maintained in the winter months, as there are a number of challenges with maintaining these trails. For example, the majority of the off-road/recreational trails in Greater Sudbury have not been constructed to a standard (i.e. width) that could accommodate a municipal tractor or other maintenance equipment, which would likely result in damage to the trails resulting in increased maintenance costs in the summer months.

Currently, only the Jim Gordon Boardwalk and the Ramsey Lake Road Path, which are both hard-surfaced and appropriate widths, are maintained during the winter months.

Summary of Policy Recommendations:

- 1) It is recommended that designated cycling facilities be closed by by-law, seasonally during the winter months;
- 2) It is recommended that any changes to existing sidewalk winter maintenance routes be consistent with the criteria established in Table 2;
- 3) It is recommended that the winter sidewalk maintenance routes and off-road recreational trail routes be approved annually, through Operations Committee, subject to the Annual Budget Process if any changes result in a service level change and/or changes in budget.

Next Steps:

If approved, this policy will be applied for the forthcoming 2019/2020 winter control season and specific details (i.e. sidewalk plow routes) will be presented to the Operations Committee in October of this year (and prior to budget deliberations each subsequent year), for the Committee's consideration and discussion prior to the winter control season commencing. Any proposed service level/budget changes, resulting from the application of this policy, will be brought to Council's attention during budget deliberations.

To ensure the public is made aware of any approved changes to the winter maintenance of active transportation facilities, staff will work with Communications and Community Engagement staff to ensure all relevant information, including lists of closed sidewalks and cycling facilities, will be posted to the City's website and will be communicated by Public Service Announcement each year.