



INFORMATION UPDATE

TO:	Chair and Members Public Works Committee
DATE:	February 12, 2019
SUBJECT:	Winter Sidewalk Maintenance (City Wide) (TOM1901)
WARD(S) AFFECTED:	City Wide
SUBMITTED BY:	Edward Soldo, P.Eng. Director, Transportation Operations & Maintenance Public Works Department
SIGNATURE:	

At the January 21st, 2019 General Issues Committee meeting, Transportation Operations & Maintenance staff were requested to provide a consolidated summary and financial update regarding previous reports related to winter sidewalk maintenance in the City. A listing of relevant past reports are identified in Appendix A.

Winter Control Program

The City maintains municipal roadways as per Ontario Regulation 239/02 - Minimum Maintenance Standards for Municipal Highways - made under the *Municipal Act, 2001* (MMS).

The City has a 24/7 winter response team equipped with; over 500 total pieces of winter equipment (in-house and contracted), which includes 161 road plow salt/sanders and 22 sidewalk plows. The response team maintains the City's 6,478 lane-kilometres of roadway; 2,445 km of sidewalk; approximately 1,100 cul-de-sacs; and over 2,300 bus stops.

In terms of snow clearing winter control for sidewalks, the program is comprised of maintaining 397 km of sidewalks on:

- Municipally-owned property;
- Along reverse frontage lots;
- Formerly Ward 12 in its entirety; and
- Sidewalks adjacent to school property, owned by either the Public or Separate School Board, in conjunction with By-law No. 03-296 on a charge-back basis

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: Winter Sidewalk Maintenance (City Wide) - Page 2 of 4

The program utilizes City staff in conjunction with contracted services to clear 397 km of the approximate 2,445 km of City sidewalks. The response standard for snow clearing is within 24 hours of the end of a winter event.

By-law No 03-296 requires that every occupant or owner shall, within 24 hours of the cessation of a winter storm event, or within 24 hours of the cessation of a series of consecutive winter storm events, remove and clear all snow and ice from sidewalks abutting the highways in front of, or alongside, or at the rear of any occupied or unoccupied lot or vacant lot.

Keeping the City roadway system safe also requires the cooperation of the public by not pushing snow back onto the roadway, helping clear sidewalks and removing obstructions.

It should be noted that under the Highway Traffic Act (Section 181), placing snow or ice on a roadway is prohibited. After a snowfall when the equipment has cleared the roadways, residents will have to clean out the end of their driveways.

Key reminders are:

- Do not park your car on the street overnight or while snow clearing operations are underway;
- Place your garbage and recycling containers a safe distance from the curb on collection days when the plow may be coming;
- Clear snow and ice from your sidewalk;
- Keep fire hydrants near your home or business clear of snow; and
- Clean catch basins.

The City does not offer individual snow removal services for seniors and individuals with disabilities. However, in 2005, the City approved the development of the Snow Angels Program, a partnership with Volunteer Hamilton that is coordinated through the Healthy & Safe Communities department. This program involves the recruitment of volunteers to clear snow on sidewalks, walkways and driveway entrances left by snow plows for eligible seniors and individuals with disabilities in the Hamilton area.

Sidewalk Winter Maintenance Service Level Change

Through Report PW14098, staff investigated the best practices of a number of outside municipalities and provided Council with options and alternatives for a City of Hamilton sidewalk snow clearing program.

The estimated sidewalk snow clearing costs identified in Report PW14098 have been updated utilizing the former Ancaster Ward 12 service delivery model. The average cost is based on the past five winter seasons utilizing standby contractual sidewalk plowing units, manpower costs and material costs.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: Winter Sidewalk Maintenance (City Wide) - Page 3 of 4

It is estimated that the cost to provide the service city-wide will cost approximately \$4.567M for a typical winter season plus projected standby costs of \$486K for a total of \$5.053M. The program service level provides for snow clearing activation at the minimum accumulation of 5 cm, based on average seasonal demands.

Council should be aware that bare pavement condition can only be achieved through the application of de-icing material. The addition of the application of de-icing material will increase the cost associated with equipment time and material costs which in-turn will increase the overall program costs.

The City of Hamilton has a Salt Management Plan which was approved in 2003. Under the Canadian Environmental Protection Act, 1999, the Government of Canada published a Code of Practice for the Environmental Management of Road Salts on April 3, 2004. The Code is designed to help municipalities and other road authorities better manage their use of road salts in a way that reduces their impacts on the environment while maintaining road safety. The use of road salt in sufficient concentrations pose a risk to plants, animals and the aquatic environment.

The use of road salt on sidewalks is not recommended from an environmental perspective, and may also damage the concrete sidewalks and contribute to the deterioration of other assets.

In order to provide the service and based on current in-house staffing levels, the City of Hamilton will be required to contract the service out to the private sector. Based upon the current inventory of City sidewalks and establishing an average sidewalk plow route at 25 km, the City will be required to secure at least 81 additional pieces of sidewalk snow clearing equipment.

Each unit of sidewalk snow clearing equipment presently contracted by the City of Hamilton, through a standby contract, receives \$6,000 in standby a winter season. Projecting those costs onto the estimated 81 additional pieces would create an additional \$486,000 a season in standby costs.

The private sector presently does not have enough trackless units available on the market to meet this demand. In order to implement the program, the contract would have to be released at least 1 year in advance in order for the successful vendor to secure the required equipment.

Not included in the above mentioned cost estimate is the restoration costs to damaged property as a result of the program. These include costs related to items within the road allowance such as parked cars, fences, posts, hedges, plantings, in-ground lawn sprinklers, driveway curbs or other obstructions within the right-of-way as a result of the plowing or blowing operations. Sod damage is a significant source of concerns in other municipalities and a budget for sod repair following the winter control season would be required.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

Municipal Service Comparison

Sidewalk plowing typically is triggered for most municipalities at the 5 cm threshold with target pavement conditions varying from bare pavement to the more typical snow packed condition (Appendix B).

Completion time for the sidewalk snow clearing program for most municipalities is 24 hours from the end of the event, to 72 hours after commencement of the sidewalk snow clearing operations (Toronto), to five working days from commencement of the residential sidewalk clearing operations (Winnipeg). In most cases, those municipalities that do service their entire sidewalk network do so only after the adjacent street or all of the roads within the City or Town have been maintained.

Next Steps

In the event that Council wishes to further consider the development of a potential city-wide municipal sidewalk maintenance program, staff recommend the engagement of consulting services to prepare a detailed program based on an assessment of the existing inventory, routing, staffing needs, with recommendations for program service levels and a program delivery model. The assessment could also take into account variations of the program such as sidewalk plowing along major arterials and reviewing access and connectivity to transit routes.

If you require further information, please contact Bob Paul, Manager of Roadway Maintenance at extension 7641.

APPENDICES AND SCHEDULES ATTACHED

Appendix A – Listing of Previous Reports

Appendix B – Municipal Service Level Comparison