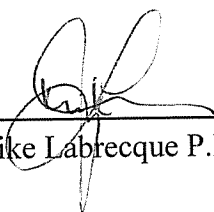




PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

**Halifax Regional Council**  
**November 21, 2006**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**   
Mike Labrecque P.Eng., Director Transportation & Public Works

**DATE:** November 7, 2006

**SUBJECT:** Snow and Ice Control Service Standards

**INFORMATION REPORT**

**ORIGIN**

Transportation and Public Works Snow and Ice Control Program.

**BACKGROUND**

Transportation and Public Works Services (TPWS) is responsible for all aspects of the Snow and Ice Control Program. Under the auspices of Municipal Operations, supported by its Renewal Plan, TPWS relies upon Council approved servicing standards for the management of HRM's Snow and Ice Control Program. These standards were originally approved in 1998, with minor modifications in 2004 (reflecting operational procedures to open Priority 2 traffic corridors during significant accumulation snowfall events) and revised sidewalk snow plowing standards adopted February 21, 2006.

The goal for TPWS is to reach an attainable servicing standard which is aligned with the financial parameters of the Snow and Ice Control budget.

## **DISCUSSION**

The key objectives of the Snow & Ice Service Standards are to:

1. reduce the hazards of ice and snow conditions to motorists and pedestrians;
2. minimize economic loss to the community and industry;
3. facilitate the handling of emergencies by Fire, hospitals and Police;
4. provide a means to convey service delivery expectations to the public;
5. provide a means to measure service delivery performance on an event basis; and
6. align operational resourcing with the financial resource allocation of the Snow & Ice Control budget.

In order to set effective priorities for snow and ice activities within the region, roads and sidewalks must be classified as to their impact on the overall transportation system. Appendix A outlines these classifications aligned to street snow plowing standards and sidewalk snow & ice control standards and the snow removal guidelines.

The snow removal standards reflect an area of service enhancement which resulted from the successful restructuring of the shift arrangements for winter works during the last CUPE Local 108 Collective Agreement bargaining.

In early December, TPWS will begin an awareness campaign of the Snow and Ice Control Service Standards. This will be undertaken utilizing print media, radio and the HRM website.

Program service delivery resource levels will be based upon servicing the standards as outlined, with monitoring and reporting by category per region, per storm event, with resource reallocation to address performance reporting imbalances.

## **BUDGET IMPLICATIONS**

Costs for snow and ice control are covered under Account R760 in the 2006-2007 Operating Budget.

## **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

**ALTERNATIVES**

There are no recommended alternatives

**ATTACHMENT**

Appendix A - Snow and Ice Control Service Standards

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by : Denis Huck, Manager Municipal Operations 490-4673

**SNOW AND ICE CONTROL SERVICE STANDARDS**

<b>Road Priority Classification - Snow Removal Guidelines</b>				
<b>Road / Area Priority Classification</b>	<b>Typical</b>	<b>Cumulative Snow Before Start of Removal *</b>	<b>Type of Operation</b>	<b>Time To Completion from End of Snowfall</b>
Downtown Core, Business Districts	Hollis Street, Spring Garden Road, Portland Street	40 centimetres	Full Operation with Overtime	3 days from end of last snowfall
Transit Routes and Collector Roads with loss of driving lanes	Parkland, Caledonia Road, Metropolitan Avenue	60 centimetres	Full Operation with Overtime	5 days from end of last snowfall
Intersection visibility on Main Arterials or Collectors		60 centimetres	Regular hours	2 weeks
Intersection visibility on residential streets		80 centimetres	Regular hours	3 weeks
Cul-de-sac snow storage		80 centimetres	Regular hours	4 weeks

\* Indicates snowfall accumulation over successive events.

**Snow and Ice Control Service Standards (continued)**

<b>Road Priority Classification - Plowing Standards</b>				
<b>Road Priority Classification</b>	<b>Typical</b>	<b>Service Level After Operations</b>	<b>Start Times and Frequency</b>	<b>Time to Completion from End of Snowfall</b>
Main Arterials Priority 1	Robie Street, Sackville Drive, Portland Street	Bare pavement driving lanes	After 2 centimetres of snow, 3 hour turnaround	12 hours to full driving lanes
Transit Routes, Collector Roads Priority 1	Parkland, Caledonia Road, Metropolitian Avenue	3m centerline bare	After 2 centimetres of snow, 3 hour turnaround	12 hours
Residential Streets with greater than 10% slope that serve as snow routes Priority 1	Vestry Street, Joffre Street, Lindsay Hill	Centerline bare	After 4 centimetres of snow, 3 hour turnaround	12 hours to 2 lane widths
Residential Streets Priority 2	Cork Street, Anderson Street, Chandler Drive	Snow covered, passable	After 10 centimetres of snow *	24 hours to 2 lane widths
Gravel Roads Priority 2	Confederation Drive, Flandrum Hills	Snow covered, passable	After 10 centimetres of snow	24 hours
Private Lanes Priority 2	Myers Lane	Snow covered, passable	After 10 centimetres of snow	24 hours

- ▶ In snowfalls greater than 30 centimetres, or in blizzard conditions, service levels may not be achieved.
- ▶ In multiple snowfalls where all roads have not been fully cleared, priority will be given to the first two Priority Classifications
- ▶ During significant snow events “cut throughs” will commence after 10 centimetres on residential streets to allow single lane access. \*

**Snow and Ice Control Service Standards (continued)**

<b>Sidewalk Priority Classification - Snow &amp; Ice Control Standards</b>			
<b>Sidewalk Priority Classification</b>	<b>Materials Used</b>	<b>Start Time</b>	<b>Duration Until Cleared</b>
Priority 1 Main Arterials Capital District	Salt or Salt /Sand mixture	After 5 centimetres of snowfall	12 hours from end of snowfall
School Routes	Salt or Salt /Sand mixture	After 10 centimetres of snowfall	18 hours from end of snowfall
Residential Streets/Walkways	Salt or Salt /Sand mixture	After completion of first 2 priorities	36 hours from end of snowfall
Intersections (Peninsula Halifax)	Salt or Salt /Sand mixture	After sidewalks are complete	72 hours from end of snowfall

- ▶ While the objective is to maintain sidewalks to bare conditions, many factors are key to achieving success. Wet snow packed to ice, freezing rain, and sudden freezes after rain can produce a heavy ice build-up on sidewalks. Sand will be applied to provide a degree of traction.
- ▶ Standards apply only to sidewalks that are area rated and maintained by the HRM. In other areas, sidewalks are the responsibility of the abutting property owner, and subject to regulations set out in By-Law S-300.
- ▶ In the case of multiple snowfalls, where there has been insufficient time to complete all sidewalks, operations will return to the highest priorities and start over.
- ▶ During late winter/early spring, sidewalks are subject to runoffs from melting snow during the day and re-freezing overnight. Spot sanding may take place during regular, non-overtime hours only.