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## **2010 BUDGET BRIEFING NOTE**

### **The Health of the Winter Maintenance Reserve**

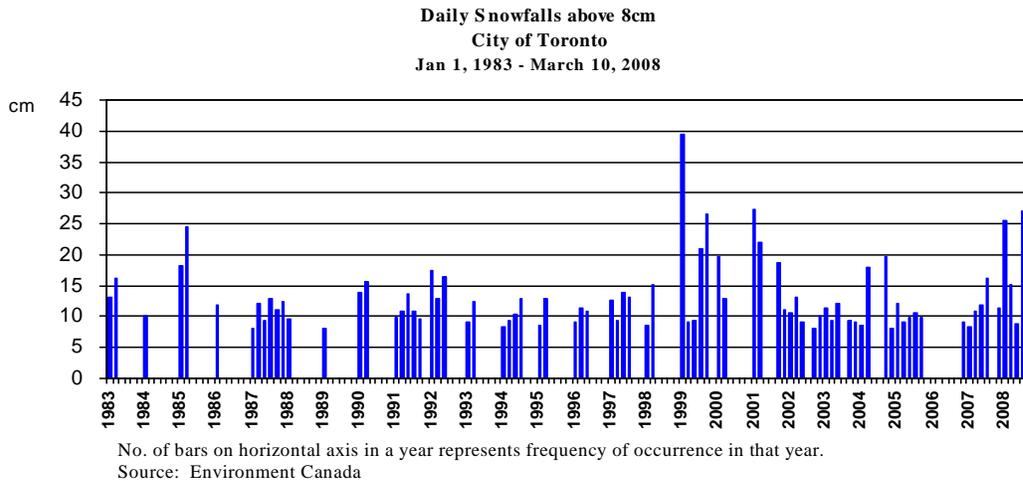
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#### **Issue/Background:**

This briefing note addresses the motion made at Budget Committee's meeting of March 4, 2010 requesting that staff provide a Briefing Note to the wrap-up meeting on March 12, 2010 on the health of the winter maintenance reserve, now called the Transportations Services Extreme Weather Reserve.

#### **Key Points:**

- Transportation Services is responsible for approximately 5,600 kilometers of roads and 8,000 kilometers of sidewalks, 600 km of bridges and over 100 km of bike lanes. The winter maintenance service includes snow clearing, removal/disposal and salt de-icing. The 2010 Recommended Operating Budget includes \$86.500 million for winter maintenance costs and assumes regular winter conditions. An overview of the winter maintenance budget and actual spending in correlation with the snowfall data for the last seven years (2003-2009) is presented in Appendix A.
- In order to mitigate financial impacts arising from extreme weather conditions on the operating and capital budgets of the City's programs and services, Council established the Extreme Weather Reserve group. Within that group, a separate Extreme Weather Reserve account was created for Transportation Services with the intent of providing funding to offset any annual potential budget deficits resulting from unbudgeted and uninsured weather related costs incurred during extreme weather conditions. The disposition of any surplus from the winter budget maintenance that goes into the Reserve is subject to the approval of the Chief Financial Officer under the Surplus Management Policy. The current balance (as of March 10, 2010) in the reserve account is \$19.142 million.
- It is not uncommon to see snow accumulations up to 5 cm on Toronto's roads and streets — about 30 to 40 times a year. Environment Canada data shows that on average in Toronto a snowstorm of 20 cm occurs once in four years, while a snowstorm of 30 cm occurs once in 20 years. The figure below shows the occurrences of daily snowfalls in excess of 8 cm for the winter months in Toronto during the period from 1983 to March 10, 2008.



- It appears that heavy snowfalls have occurred more frequently over the past decade (1999-2009). For example, the total snowfall of 118 cm that fell in the month of January 1999 was about 90% of that in a normal year (133 cm), causing a \$37.9 million shortfall in Transportation Services' 1999 winter maintenance budget. The winter of 2007/2008 was a near record year with respect to snowfall, with a total of 207 cm of snow in Toronto (almost equal to the historical high of 207.4 cm recorded in 1938/39) resulting in \$10.3 million in overspending in the Transportation Services' winter maintenance budget. In 2008, a large accumulation of snow from January to April and in December 2008 (total snow fall of 205 cm) resulted in over expenditures in the amount of \$45.6 million.

### Questions & Answers:

- **Is the winter maintenance budget keeping pace with winter maintenance costs?**

The cumulative increase in the Consumer Price Index (CPI) over the period under consideration (2003-2009) was 12.5%. During that same period Transportation Services' winter maintenance budget increased by 16.5%. The majority of that increase occurred in 2009, since the cost to deliver winter maintenance services on Toronto's streets and sidewalks increased significantly and could not be accommodated within the existing winter maintenance budget, which by 2008 fell below the 2003 budget levels. Historically, available winter maintenance budgets were marginally sufficient to keep pace with inflationary increases as the Program also assumed responsibility for more than 400 km of new roads and bike lines (adding about 7% to its inventory of roads) during the same period.

- **Was the winter maintenance budget sufficient to address winter expenditures?**

During the last seven year period there were several winters with a snow fall less than the average (calendar years 2003, 2004, 2006, 2007 and 2009). The only significant budget surplus was recorded in 2006 (\$12.619 million). Even in 2009, with mild winter conditions and snow fall amounting to only 52% of the average, cost savings (\$1.8 million) were not as high as expected. In addition, three of the relatively mild winters (2003, 2004 and 2007) actually resulted in the winter maintenance budget being overspent (\$7.585 million, \$7.617

million and \$10.075 million respectively), instead of resulting in savings. In part, this is because 70% of the winter maintenance budget consists of fixed costs such as salaries, vehicle replacement and maintenance costs, stand-by contracts and materials (excluding salt). More importantly, over the past seven years Transportation Services relied mostly on non-winter maintenance savings to offset deficits in winter maintenance budgets even in years characterized by moderate winter weather conditions.

- **What happened in years with extreme snow falls?**

The last two large snow fall events (corresponding to calendar years 2005 and 2008), resulted in winter maintenance budget overspending of \$10.3 million and \$45.6 million respectively, representing 17% and 73% of the winter maintenance budgets in respective years. In today's terms, the \$37.9 million over expenditure in 1999 is equivalent to \$47.7 million or 55% of the winter maintenance budget recommended for 2010.

At that time of the 1999 winter storm, approximately \$16.5 million was withdrawn from the Winter Control Stabilization Reserve Fund, which almost depleted the entire account. In subsequent years, apart from 2008, when \$2.4 million was withdrawn from the Transportation Services Extreme Weather Reserve, winter maintenance budget shortfalls were largely offset by the City's operating budget surplus, and to a smaller extent by the Program's non-winter maintenance and other cost savings. For example, in that same year (2008) Transportation Services' under-spending of \$14.5 million in various non-winter maintenance programs, together with other City's operating surplus of \$ 29.1 million was used to offset the winter budget maintenance over-spending of \$45.6 million.

Although the current Transportation Services' Extreme Weather Reserve has a relatively large balance of \$19.1 million, available funding will not be sufficient to accommodate a winter snow fall event similar to the 2008 experience.

- **What is the 2010 year outlook?**

The winter maintenance budget of \$86.3 million recommended for 2010 anticipates only labour and non-labour inflationary increases. Although weather conditions so far have been relatively mild, according to Environment Canada, approximately 30% of the snow in Toronto falls in the months of November (8.1 cm) and December (32.2 cm). Therefore, continuation of the mild weather patterns cannot be predicted with any degree of certainty. In addition, historical evidence suggests that favourable weather patterns leading to any significant surplus in the Program's winter maintenance budget are becoming less common, which diminishes its ability to offset any future over expenditure resulting from extreme weather events. Over the past seven years, only one contribution (\$9.6 million) was made to the Transportation Services Extreme Weather Reserve which was the one time reallocation from the City's 2007 operating budget surplus.

- **What is appropriate level of funding for the Transportation Services Extreme Weather Reserve?**

The information currently available does not substantiate that unpredictable and extreme weather patterns will change. Based on historical evidence, funding available in the Transportation Services Extreme Weather Reserve may not be sufficient to offset potential future severe weather events. In addition, given the future Program's financial constraints and budget reduction requirements it may not be possible to rely on the non-winter

maintenance budget savings to the extent it was done in the past. Accordingly, further analysis and detailed adequacy study would be required to assess any direct correlation between climate changes and adequate levels and mechanisms of funding this reserve.

**Attachment:**

Appendix A – Transportation Services Winter Maintenance Expenditures

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**Appendix A: Transportation Services Winter Maintenance Expenditures**

	2003			2004			2005		
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
<b><u>Un-Adjusted Costs</u></b>									
<b>Fixed Costs</b> (Salaries, Material-excluding Salt, Contract Standby, Vehicle Replacement & Maintenance, etc)	46,639	44,508	(2,131)	41,623	41,986	363	42,430	42,913	483
<b>Variable Costs</b> (Contracts-excluding Standby, Salt, Overtime)	24,864	19,410	(5,454)	26,796	18,816	(7,980)	30,408	19,206	(11,203)
<b>Total Costs</b>	<b>71,503</b>	<b>63,918</b>	<b>(7,585)</b>	<b>68,419</b>	<b>60,802</b>	<b>(7,617)</b>	<b>72,839</b>	<b>62,119</b>	<b>(10,719)</b>
	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>
<b>Snowfall (cm)</b>	<b>130</b>	<b>133</b>	<b>(4)</b>	<b>117</b>	<b>133</b>	<b>(16)</b>	<b>144</b>	<b>133</b>	<b>11</b>

	2006			2007			2008		
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
<b><u>Un-Adjusted Costs</u></b>									
<b>Fixed Costs</b> (Salaries, Material-excluding Salt, Contract Standby, Vehicle Replacement & Maintenance, etc)	39,521	43,513	3,992	45,227	46,118	891	49,750	43,544	(6,205)
<b>Variable Costs</b> (Contracts-excluding Standby, Salt, Overtime)	11,009	19,636	8,627	31,093	20,128	(10,965)	58,620	19,261	(39,359)
<b>Total Costs</b>	<b>50,530</b>	<b>63,149</b>	<b>12,619</b>	<b>76,320</b>	<b>66,245</b>	<b>(10,075)</b>	<b>108,370</b>	<b>62,805</b>	<b>(45,564)</b>
	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>
<b>Snowfall (cm)</b>	<b>24</b>	<b>133</b>	<b>(109)</b>	<b>108</b>	<b>133</b>	<b>(25)</b>	<b>205</b>	<b>133</b>	<b>72</b>

	2009			7 Year Average		
	Actual	Budget	Variance	Actual	Budget	Variance
<b><u>Un-Adjusted Costs</u></b>						
<b>Fixed Costs</b> (Salaries, Material-excluding Salt, Contract Standby, Vehicle Replacement & Maintenance, etc)	50,978	57,088	6,109	45,167	45,667	584
<b>Variable Costs</b> (Contracts-excluding Standby, Salt, Overtime)	30,542	26,227	(4,316)	30,476	20,383	(11,775)
<b>Total Costs</b>	<b>81,521</b>	<b>83,314</b>	<b>1,794</b>	<b>75,643</b>	<b>66,050</b>	<b>(11,191)</b>
	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>	<b>Actual</b>	<b>Normal</b>	<b>Difference</b>
<b>Snowfall (cm)</b>	<b>69</b>	<b>133</b>	<b>(64)</b>	<b>121</b>	<b>133</b>	<b>(12)</b>