

Winter Control Update – November and December 2023

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Report Summary

This presentation and report provides an overview of winter maintenance activities for the 2023/2024 winter control season up to and including the month of December 2023.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

This report refers to operational matters and has no direct connection to the Community Energy & Emissions Plan.

Financial Implications

This report provides the financial results of the 2023 winter roads operations for the City's fiscal year between January and December 2023. The result for 2023 is a deficit of approximately \$2,081,000. The deficit will be included as part of the 2023 Year End Variance Report that will be presented in Q2 of 2024. The winter control deficit will form part of the year-end position.

Background

This report is intended to provide a summary of winter maintenance activities for the month of December 2023, including financial variances. It is important to note that due to normal lags in receipt of costs related to these activities, final costs for this period may vary from the information reported at this time.

The City of Greater Sudbury's winter maintenance service levels are defined in Council approved winter control service policies as well as guidelines within the Minimum Maintenance Standards (MMS), O.Reg. 239-02.

During the month of December, there was one winter event that required the full deployment of City crews and subcontractors.

This report provides the estimated financial results for the period ending December 31, 2023. The estimated result for the period ending December 31, 2023 is a deficit of approximately \$2,081,000 when compared to

the 2023 year-to-date budget. The actual year-to-date results may differ, as certain estimates were necessary to account for outstanding invoices.

Weather Statistics

As shown in Table 1, from January to the end of December 2023, there were 10 major snow events and two freezing rain events which required the deployment of all available City and contractor snow plowing equipment in 2023. Table 1 also highlights the statistical information for the 2023 winter season from Environment Canada, including the 10-year average (2013-2022) for snowfall. The total snow accumulation for the 2023 calendar year was 3.18 meters or 10.4 feet compared to the 10-year average of 3.15 meters or 10.3 feet. This represents a 1% increase. As well, every month other than January saw days with temperatures above zero which contributed to a significant number of freeze-thaw cycles.

Table 1 – Weather Statistics (January through December 2023)

Month	Snow Accumulation (cm)	10 Year Average (cm) (2013-2022)	Percentage Increase/(Decrease) Compared to 10-Year Average	Snow Events	Rain/Freezing Rain Events
Jan	89.5	73.0	22.6%	2	0
Feb	75.7	67.9	11.4%	5	1
Mar	55.6	38.6	43.9%	1	0
Apr	46.2	27.7	66.8%	1	1
May	-	2.8	-100.0%	0	0
Jun-Sep	-	-	0.0%	0	0
Oct	8.8	6.6	32.9%	0	0
Nov	26.3	38.4	-31.5%	1	0
Dec	16.3	60.0	-72.8%	0	0
Totals	318.4	315.1	1.0%	10	2

Note: All weather data taken from Environment Canada website for weather station Sudbury A.

Winter Control Service Categories

1) Roadway Snow Plowing/Sanding/Salting

Includes work activities such as plowing, sanding, salting, anti-icing roads and winter stockpile management.

Status Update

For the November and December 2023 reporting period, there was one snow event that required the full deployment of City staff and contractors and minimal on-going precipitation. This resulted in 30% less snow plowing/sanding/salting activities than the anticipated levels for the season.

Challenges

There were no significant challenges with roadway snow plowing/sanding/salting during the reporting period.

2) Snow Removal

Includes work activities such as bus stop clearing, snow removal with loaders, snow dump operation and snowbank removal in the downtown centres.

Status Update

For the November and December 2023 reporting period, there was minimal snow removal completed.

Challenges

There were no significant challenges with snow removal during the reporting period.

3) Winter Sidewalk Maintenance

Includes work activities such as sidewalk plowing and sanding.

Status Update

As noted previously, for the November and December 2023 reporting period, there was one snow event that required the full deployment of City staff and contractors and minimal on-going precipitation. This has resulted in 27% less winter sidewalk maintenance activities than the anticipated levels for the season. The enhanced sidewalk maintenance pilot project was active during these months with spot sidewalk plowing and sanding completed as needed throughout the community.

Challenges

There were no significant challenges with winter sidewalk maintenance during the reporting period.

4) Roadway Snow Plowing with Graders/Loaders/4x4s

Includes work activities such as snow plowing with graders, 4x4s and loaders, municipal parking lot maintenance and snow fence maintenance.

Status Update

For the November and December 2023 reporting period, there was one snow event that required the full deployment of City staff and contractors and minimal on-going precipitation. This resulted in snow plowing activities that were 78% less than the anticipated levels for the season.

Challenges

There were no significant challenges with this activity during this reporting period.

5) Winter Ditching/Spring Clean Up

Includes work activities such as winter ditch maintenance and spring clean-up with sweepers/flushers on roads and sidewalks.

Status Update

For the November and December 2023 reporting period, minimal work was done related to winter ditch maintenance and sweeping. The costs incurred during this reporting period are related to unallocated fleet and equipment costs from the 2023 spring clean-up.

Challenges

There were no significant challenges with this activity during this reporting period.

6) Miscellaneous Winter Maintenance

Includes work activities such as property restoration (plow damage), pothole patching, winter road patrol, employee standby, equipment standby, health and safety training (snow school), fringe benefits and tool repairs.

Status Update

Pothole patching and contractor standby are the main activities that have been utilized under this category during the November and December 2023 reporting period. There were below seasonal amounts of precipitation and few freeze thaw cycles during November and December which contributed to less pothole patching being required. This resulted in 28% less miscellaneous winter maintenance activities than the anticipated levels for the season.

Challenges

There were no significant challenges with this group of activities during this reporting period.

Financials

The estimated financial results for the period ending December 31, 2023 are summarized below. As shown in Table 2, 2023 is estimating a deficit of approximately \$2,081,000 when compared to the 2023 year-to-date budget. The actual year to date may differ as certain estimates were necessary to account for outstanding invoices. The winter control surplus/deficit will form part of the year-end position. Table 3 provides a breakdown of the budgeted expenses included within Miscellaneous Winter Maintenance.

Table 2 – Financial Results

2023 Winter Summary As at December 31, 2023					
	Annual Budget	2023 YTD			
		Budget	Actual	Variance	% Spent
Snow Plowing/Sanding/Salting	8,033,170	8,033,170	8,770,348	(737,178)	109%
Snow Removal	1,188,134	1,188,134	1,678,219	(490,085)	141%
Winter Sidewalk Maintenance	1,334,060	1,334,060	1,197,560	136,500	90%
Snow Plowing - Graders/Loaders/4x4s	1,482,340	1,482,340	1,090,357	391,983	74%
Winter Ditching/Spring Clean Up	3,113,406	3,113,406	3,820,711	(707,305)	123%
Miscellaneous Winter Maintenance	8,610,451	8,610,451	9,285,443	(674,992)	108%
Totals	23,761,561	23,761,561	25,842,637	(2,081,076)	109%

Table 3 – Miscellaneous Winter Maintenance Budget Breakdown

2023 Miscellaneous Winter Maintenance	
Expense Type	Annual Budget (millions)
Employee Benefits	1.83
Asphalt Patching	1.58
Internal Recoveries	0.96
Standby (Contractor Services)	0.87
Health & Safety	0.22
Other (Roads Patrol, Emergency Response, Tool Repair, Property Restoration, etc.)	0.52
Administration & Supervision	2.63
Total	\$ 8.61

Table 4 portrays a summary of winter maintenance activities for the 2023/2024 winter season which shows an estimated under expenditure of approximately \$2,280,000.

Table 4 – 2022/2023 Winter Season Financial Summary

2023/2024 Winter Season Summary as at Dec, 2023			
	Season Budget	Season Actual	Variance
Snow Plowing/Sanding/Salting	2,741,531	1,908,857	832,674
Snow Removal	262,627	125,404	137,223
Winter Sidewalk Maintenance	466,921	341,776	125,145
Snow Plowing - Graders/Loaders/4x4s	419,133	92,461	326,672
Winter Ditching/Spring Clean Up	44,942	82,240	(37,298)
Miscellaneous Winter Maintenance	3,226,307	2,314,578	911,729
Totals	7,161,461	4,865,316	2,296,145

In summary, weather conditions have caused costs attributable to winter maintenance for the 2023 fiscal year to track approximately 9% above budget allocations.