

## **Winter Control and Spring Clean Up Update – May 2021**

Presented To:	Operations Committee
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### **Report Summary**

This report provides information regarding winter maintenance activities for the 2020/2021 season as well as spring clean-up activities up to and including May 31st, 2021.

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

This report refers to operational matters.

### **Financial Implications**

This report provides the estimated financial results for the period ending May 31st, 2021. The estimated result for the period ending May 31st, 2021 is a surplus of approximately \$3.4 million when compared to the 2021 year-to-date budget. The actual year-to-date results may differ, as certain estimates were necessary to account for outstanding invoices.

### **Background**

This report is intended to provide a summary of winter maintenance activities for the 2020/2021 winter season as well as spring clean-up activities up to and including the month of May 2021, 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 May Roads Maintenance staff focused on the spring clean-up program.

The total snow accumulation for the 2020/2021 winter season was significantly lower than the ten-year average (2011-2020) for the same period of time, resulting in less expense than budgeted for this period. The overall expenditures for the 2021 fiscal year are projecting an estimated surplus of approximately \$3.4 million when compared to the 2021 year-to-date budget.

## Weather Statistics

As shown on table 1, from October 2020 to the end of May 2021 there have been six major snow events and one freezing rain event that have required the deployment of all available City and Contractor snow plowing equipment. Furthermore, table 1 highlights the statistical information for the 2020/2021 winter season from Environment Canada including the 10-year average (2011-2020) for snowfall. The total snow accumulation for the 2020-2021 winter season, up to and including May 2021, is 1.7 meters or 5.6 feet compared to the 10-year average of 3.2 meters or 10.4 feet. This represents a 47% decrease.

**Table 1 – Weather Statistics (Winter 2020/2021)**

Month	Snow Accumulation (cm)	10 Year Average (cm) (2011-2020)	Percentage Increase/(Decrease) Compared to 10 Year Average (%)	Snow Events	Rain/Freezing Rain Event
Jun-Sep	-	-	0.0%	-	-
Oct	8.0	6.4	25.8%	0	0
Nov	15.6	39.0	-60.0%	0	0
Dec	57.2	63.8	-10.4%	4	1
Jan	21.6	79.9	-73.0%	0	0
Feb	48.7	61.3	-20.6%	2	0
Mar	16.6	39.1	-57.5%	0	0
Apr	3.2	27.3	-88.3%	0	0
May	0	2.8	-100.0%	0	0
Totals	170.9	319.6	-46.5%	6	1

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

During the 2020/2021 season there was minimal snow. This resulted in 25% less snow plowing/sanding/salting activities than the anticipated levels for the season.

### 2) Snow Removal

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

#### Status Update

Due to the lower than anticipated snowfall in the 2020/2021 winter season, there was 46% less activity in the snow removal category than the anticipated levels for the season.

### **3) Winter Sidewalk Maintenance**

Includes work activities such as sidewalk plowing and sanding.

#### Status Update

During the 2020/2021 winter season there was lower than anticipated snow. This resulted in 28% less activity in the winter sidewalk maintenance category than the anticipated levels for the 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

During the winter 2020/2021 period there was lower than anticipated snow accumulation. This resulted in 48% less snow plowing with graders/loaders/4x4s activities than the anticipated levels.

### **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

The lower than anticipated snow for the 2020/2021 season allowed for an earlier start to the spring clean-up program and accounted for less clean-up requirements than average. This resulted in 12% less spring clean-up expenditures than the anticipated levels.

### **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

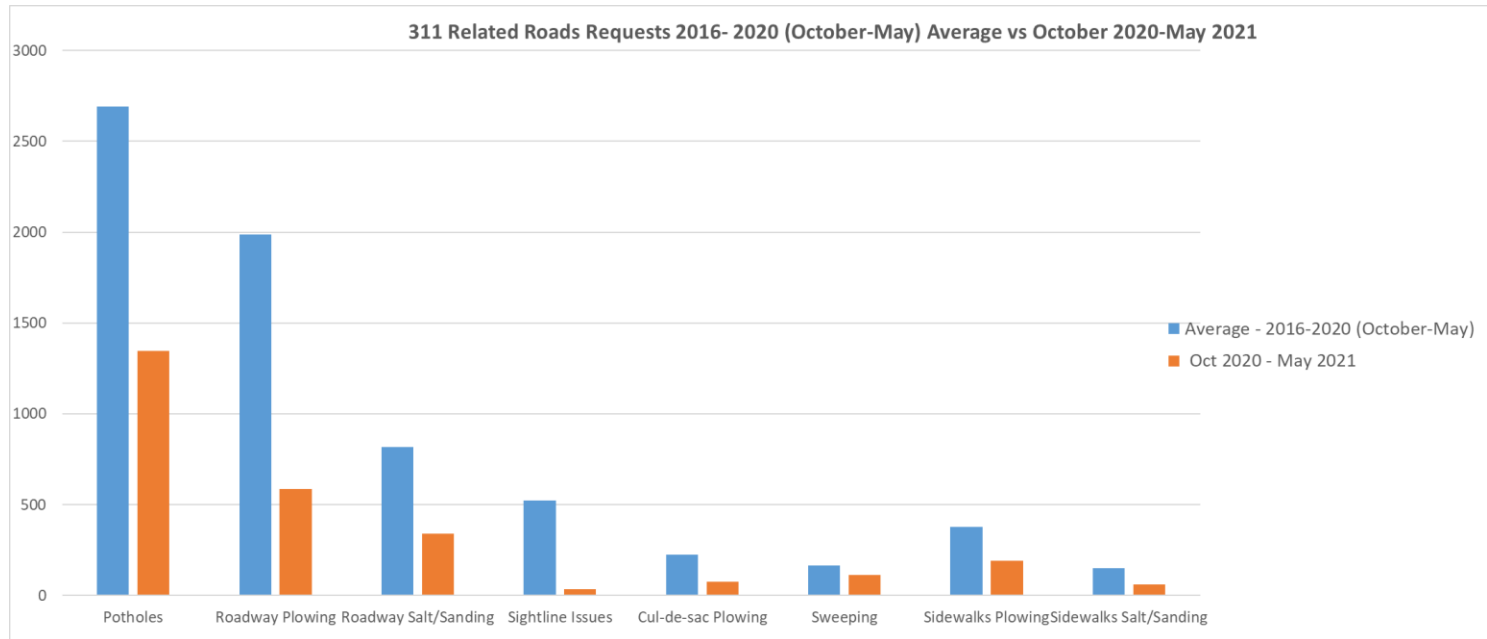
Pothole patching is the main activity that is utilized under this category.

As of the end of May, the City placed over 1,614 tonnes of asphalt in 2021 which would equate to 40,350 potholes filled assuming 40 kilograms of asphalt was placed into each hole. In the same period in 2020, the City placed over 1,770 tonnes of asphalt, equating to 44,250 potholes filled based on a 40 kilogram pothole size. Traditionally, the City fills approximately 55,000 potholes annually.

## **ACR Statistics**

As noted in chart 1, the number of resident related issues recorded in the system during the winter 2020/2021 season was significantly lower in all categories. Overall, there was a 60% reduction in the number of calls associated with winter control services when comparing winter 2020/2021 values to the average values (2016/2017-2019/2020). The main factor in this reduction in call volume was the favorable weather.

**Chart 1 – 311 Winter Control Statistics**



As seen in table 2, the number of resident related concerns in the system regarding street sweeping during the 2021 spring clean-up was 64% less when compared to the 2018-2020 average.

**Table 2 – 311 Street Sweeping Statistics**

Average Call Volume (2018 - 2020)	2021 Call Volume	Comparison to Average
486	173	-64%

## Financials

The estimated financial results for the period ending May 31th, 2021 are summarized below. As depicted in table 3, May 2021 is estimating a surplus of approximately \$3.4 million when compared to the 2021 year-to-date budget. The actual year-to-date results may differ, as certain estimates were necessary to account for outstanding invoices.

**Table 3 – Financial Results**

2021 Winter Summary As at May 31, 2021					
	Annual Budget	2021 YTD			
		Budget	Actual	Variance	% Spent YTD
Snow Plowing/Sanding/Salting	7,601,958	5,001,573	3,511,762	1,489,811	70%
Snow Removal	1,081,503	846,532	501,660	344,872	59%
Winter Sidewalk Maintenance	1,219,250	792,513	540,750	251,763	68%
Snow Plowing - Graders/Loaders/4x4s	1,294,384	929,321	365,448	563,873	39%
Winter Ditching/Spring Clean Up	2,816,050	2,773,874	2,373,640	400,234	86%
Miscellaneous Winter Maintenance	7,731,915	4,838,395	4,493,932	344,462	93%
<b>Totals</b>	<b>21,745,060</b>	<b>15,182,208</b>	<b>11,787,193</b>	<b>3,395,015</b>	<b>78%</b>

## Inventory Adjustments

Due to the nature of inventory tracking for sand and salt, it is necessary to reconcile inventory use with the remaining inventory at the end of each winter control season. Inventory adjustments are typically completed at fiscal year-end. In 2021, a decision was made to complete these adjustments for the May Winter Control/Spring-Clean-up Report going forward in an effort to better report on the corresponding winter season. The methodology for tracking winter sand and salt purchases and usage was audited and improvements were identified in recording these inventory entries. As such, the inventory counts which were completed in May, 2021 resulted in an adjustment in the amount of \$486,000. This inventory adjustment affected the Snow Plowing/Sanding/Salting category.

Table 4 portrays a summary of winter maintenance activities for the 2020/2021 winter season which shows an estimated under expenditure of approximately \$4.3 million.

**Table 4 – 2020/2021 Winter Season Financial Summary**

<b>2020/2021 Winter Season Summary</b>			
<b>May, 2021</b>			
	<b>Season Budget</b>	<b>Season Actual</b>	<b>Variance</b>
<b>Snow Plowing/Sanding/Salting</b>	7,667,039	5,742,766	<b>1,924,273</b>
<b>Snow Removal</b>	1,026,257	555,407	<b>470,850</b>
<b>Winter Sidewalk Maintenance</b>	1,186,061	858,633	<b>327,428</b>
<b>Snow Plowing - Graders/Loaders/4x4s</b>	1,191,447	616,675	<b>574,772</b>
<b>Winter Ditching/Spring Clean Up</b>	2,807,884	2,466,791	<b>341,093</b>
<b>Miscellaneous Winter Maintenance</b>	7,071,881	6,422,036	<b>649,845</b>
<b>Totals</b>	20,950,569	16,662,308	<b>4,288,261</b>

In summary, favorable weather conditions in the 2020/2021 winter season would suggest that costs attributable to winter maintenance and spring clean-up for the 2021 fiscal year are tracking well below budget allocations.