

## **ANNUAL UPDATE ON SNOW AND ICE CONTROL ACTIVITIES 2016**

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### **EXECUTIVE SUMMARY**

This report provides Council with an annual update on the Snow and Ice Control (SNIC) program for the winter season of 2015/2016.

- The 2015/2016 SNIC expenditures for 16,242 lane-km of roadway totalled \$30.8 million (\$13.1 million + \$17.7 million). This is less than the \$36.75 million spent during the 2014/2015 SNIC season,
- 2016 SNIC operations is presently under budget due to reduced snowfall in February, March and April of 2016, the funds are held in budget for the October to December 2016 SNIC activities,
- From October 2015 to April 2016 Roads received 5,514 SNIC 311 Service Requests (SR). During the same period in the 2014/ 2015 SNIC Season, Roads received 6,832 SNIC 311 Service Requests,
- Roads met their target to plough and sand the Priority 1 & 2 routes within 24/48 hours during the 2015/2016 season 94% of the time,
- The total snow fall for the 2015/2016 SNIC season was 58.2 cm and for the 2014/2105 SNIC season was 140 cm. The average snow fall from 2011-2016 is 120 cm,
- The current balance in the SNIC Reserve is \$8.89 Million. Transportation added \$3.89 Million and the Fiscal Sustainability Reserve added \$5.0 Million.

### **ADMINISTRATION RECOMMENDATIONS**

That the SPC on Transit and Transportation recommends that Council:

1. Receive this report for information; and
2. Direct Administration to provide future annual reports on SNIC activities to council and the public via Calgary.ca.

### **RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2016 JULY 20:**

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That the Administration Recommendations contained in Report TT2016-0498 be approved.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

No new direction since the previous update.

### **BACKGROUND**

The Roads Maintenance Division is responsible for The City's SNIC Program. We are committed to helping make Calgary safer for pedestrian, cyclist and vehicle passage along the developed right-of-ways according to the Council approved policy and priority system. An effective and efficient snow and ice control program is essential to allow the municipality to function under normal winter weather conditions. The SNIC Program helps reduce public hazards related to snow and ice and to provide reasonable and reliable winter mobility on City infrastructure including roadways, public transit, sidewalks and pathways.

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New funding was approved as part of Action Plan 2015-2018 for snow clearing of important pedestrian and transit customer links. The funding is intended to assist Calgarians, particularly those with mobility challenges, to more easily reach their destinations.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

The 2015/2016 SNIC season experienced a below average amount of snowfall and snow days compared to previous years (Attachment). The City received a total of 58.2 cm of snow over 25 snow days in the past winter season, which is less than the recorded snowfall of the previous four SNIC seasons.

Budget expenditures for the 2015/2016 winter season totalled \$30.8 million. The breakdown of expenditures by category is: Equipment (35.5 per cent), Labour (48 per cent) and Materials (16.5 per cent).

Roads Maintenance used a total of 207 vehicles units during SNIC operations. These vehicles range from tandem axel dump trucks, loaders and snow blowers to 1-ton trucks, trailers and small broom equipment. The main pieces of SNIC equipment are our 92 dump trucks, outfitted with sanders and snow ploughs, representing 44 per cent of the SNIC fleet. This past season, Roads life-cycled 22 units and replaced them with rebuilt/repurposed Fleet services manufactured units that perform much the same as the high-efficiency commercial units. SNIC operations also applied 16 per cent less salt and chlorides in 2015/2016 than in the previous season.

To operate the SNIC equipment and deliver service levels as per the Council approved SNIC Policy, a total of 430 staff were employed by Roads Maintenance to maintain 24/7 stand-by coverage over four shifts.

Roads received a total of 5,514 SNIC 311SRs from October 2015 to April 2016. During the same period in the 2014/2015 SNIC season, Roads Maintenance received 6,832 SNIC 311 SRs.

The joint project between Roads, Transit and Community & Neighbourhood Services (CNS) to improve safety and access to the public transportation network for those citizens with mobility challenges was successfully applied to 350 high priority transit locations and 5.15 km of sidewalks. Numerous compliments were received by The City from the public as a result of this increased level of service.

### **Stakeholder Engagement, Research and Communication**

The SNIC Program Citizen's Satisfaction Survey is completed every second year. In June 2015, the survey was given to 803 randomly selected Calgarians via land and cellular phones for the services performed during 2014/2015 SNIC season. 84 per cent of respondents stated satisfaction with travel conditions due to snow and ice control services when driving or being in a vehicle on Calgary roads. This is an improvement compared to 2013/2014 survey results which indicated 81 per cent of citizens were either "very satisfied" or satisfied with travel conditions due to snow and ice control services.

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### **Strategic Alignment**

The 2015/2016 SNIC operations were carried out in alignment with the SNIC Policy. The objective of the SNIC program is to maintain Calgary's mobility throughout the winter season.

### **Social, Environmental, Economic (External)**

SNIC operations maintain reasonable conditions on roadways and sidewalks throughout the winter to minimize delay in the movement of people and commercial goods. The reduction in travel time will result in cost savings for the movement of goods and services. It also ensures safe access for emergency vehicles, and maintain the availability of all mobility options to the public.

SNIC operations may result in less greenhouse gas emissions from motor vehicles due to reduced traffic congestion. However, release chlorides and sediment will be released into the environment. Use of improved equipment will apply chlorides and sanding chip materials efficiently. The capital cost to upgrade the facilities to meet the environmental requirements is \$26 million and is unfunded at this time.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

The 2016 SNIC operating budget is \$36.99 million. 2016 SNIC operations is presently running a positive variance due to reduced snowfall in February, March and April of 2016. The current balance in the SNIC Reserve is \$8.89 million.

#### **Current and Future Capital Budget:**

Future capital costs associated with this report include \$26 million identified for upgrades to SNIC Material Storage facilities, and a \$52 million infrastructure upgrade to Snow Storage sites. Both capital projects are currently unfunded.

### **Risk Assessment**

There are no risks associated with this report.

#### **REASONS FOR RECOMMENDATIONS:**

1. The annual update on Snow and Ice Control activities are provided for informational purposes.
2. The report should be made public via Calgary.ca to keep citizens and council members informed of any changes or upgrades.

### **ATTACHMENT:**

Snow and Ice Control Annual Report (2015-2016 season)