



# **Snow and Ice Control Annual Report (2020/2021)**

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## Executive Summary

The City of Calgary is committed to the provision of a safe, customer focused, efficient and sustainable transportation system that supports mobility choices. The Roads Business Unit (Roads) partners with Calgary Parks, Calgary Transit, Fleet Services and Calgary Community Standards to deliver the winter operations services Calgarians receive and is committed to a well-maintained road, transit, sidewalk and pathway system in winter for all travel modes and is responsible for The City's Snow and Ice Control (SNIC) Program Plan.

Along with providing reasonable winter driving conditions for 16,257 lane kilometres of roadways, SNIC services were provided for 715 km of pathway (447 km within 24 hours), 958 km of sidewalk, 136 traffic calming curbs, 19 km of walkways and pedestrian bridges, 12 km of separated bike lanes, 2431 traffic islands and medians, 1200 bus stops and 500 wheelchair ramps within 24 hours.

## Spotlight on the 2020/2021 SNIC Program

### Below Average Snowfall

- The total amount of snowfall for the 2020/2021 SNIC season was 145 cm, slightly below the average accumulations for the prior 4 winter seasons (167 cm). There were 21 snow events compared to 39 in the previous winter season.
- Snow Event #1 of this winter season started: October 14, 2020 (5.5cm of snow).
- A major snow event occurred on Dec. 21, 2020 where some areas received 40cm of snowfall. A snowfall three days later resulted in accumulations of 7cm. Over 7,000 SNIC 311 service requests were received related to this event.

### Performance

- Performance targets were achieved by completing SNIC on Priority 1 routes within 24 hours and Priority 2 routes within 48 hours for every snow event except for one major event where residential clearing was advanced to respond sooner in residential areas.
- No snow route parking bans were activated during the 2020/21 SNIC season.
- From October 2020 to April 2021, Roads received 12,497 SNIC service requests (SRs).

### Budget

- The 2020/2021 SNIC expenditures for roadways and various mobility infrastructure totalled \$39.5 million. The budget was \$42.0 million (combined between Parks/Roads Business Units).
- The SNIC Reserve balance increased to \$10 million due to operational savings and a favourable winter season in 2020/2021.
- For the 2021 fiscal year, SNIC expenditures for the first half of the year were at projected levels. A total of \$24.5 million was spent with \$16 million remaining for SNIC operations for the remainder of 2021.
- On June 16, 2021, two reports (Snow and Ice Control to Improve Accessibility / Updates to Snow and Ice Control Policy to Respond to Significant Winter Storm Events) were presented to the Standing Policy Committee on Transportation & Transit. These reports were approved by Council on July 5, 2021.

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## Introduction

The annual SNIC Program Plan (Program Plan) provides detailed plans and strategies to meet the expectations set out in Council's SNIC Policy. The SNIC Policy and the Program Plan continue to respond to changing weather patterns, funding levels, innovation, best practices and lessons learned. The SNIC Policy and Program Plan are established to address normal winter weather conditions, with strategies to address "extreme winter conditions" and "snow emergencies". Trained personnel and the required resources are deployed to provide safe mobility on city infrastructure during the SNIC season.

## Background

The aim of the SNIC Policy is to provide reasonable winter driving conditions for vehicles/cycles that are properly equipped for winter driving and are operated in a manner consistent with good winter driving habits. Council and Administration remain committed to the delivery of SNIC services within a policy framework that is efficient, inclusive and fiscally responsible. Extreme winter conditions and snow emergencies are addressed in the plan as they are likely to occur. Council and Administration are aware that response to extreme winter weather conditions requires a systematic approach with stakeholder awareness and collective commitment to a safe and well-maintained road system for all travel modes.

Council previously authorized one-time funding of \$18.5 million to enhance Snow and Ice Control (SNIC) services for priority sidewalks, pathways, bus pads and wheelchair crossings from 2018 October through 2020 December.

Specific improvements included:

- Increased the priority of sidewalk clearing for all City-owned properties to 24 hours
- Added 100 km of pathways to be cleared
- Removed snow build up (windrows) at 500 high-priority wheelchair ramp locations
- Communications campaign to increase public awareness of importance of clearing sidewalks, including helping neighbours (Snow Angels) and new fines

## Seven Day Plan

The SNIC response is delivered through a Seven Day Plan. This plan allows us to quickly address the impact of any snow event on the mobility of our citizens and communicate the level of service. The plan is a systematic response that addresses high volume and high-risk transportation assets first and then moves to lower volume and lower risk assets. If another snow event occurs prior to completing the plan, our response resets back to Day One. Figure 1 provides additional details on the Seven Day Plan. The response timeframe was updated to include the enhanced service approved by Council in July 2018.

SNIC RESPONSE TIME FRAMES – SNOW EVENT START TO END

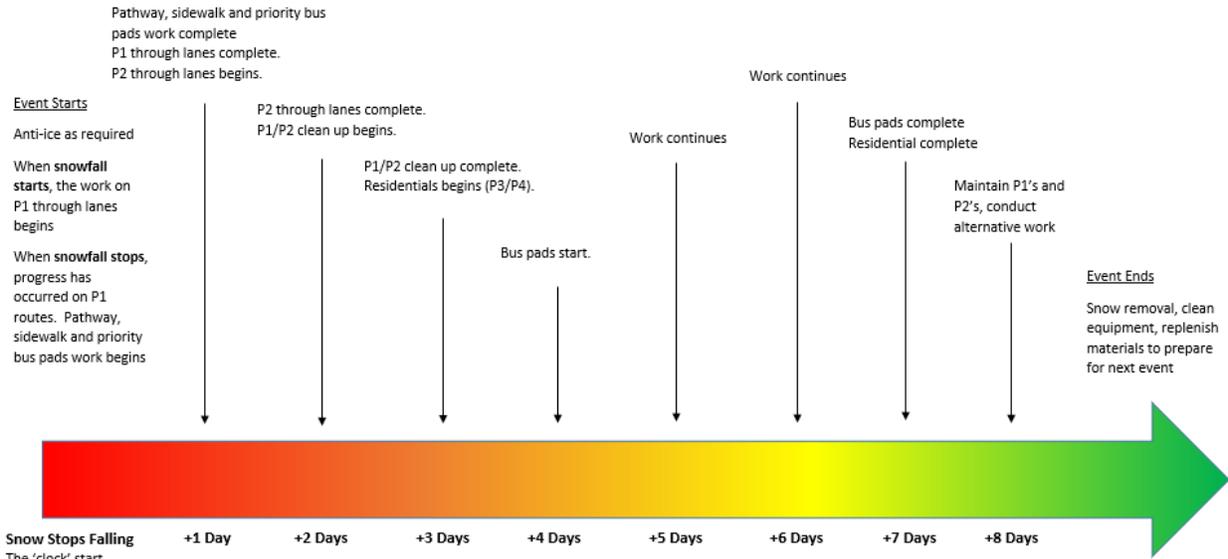


Figure 1: Seven Day Plan

Over the 2020/21 SNIC season, Calgary received 145 cm of snow. The Seven Day Plan was activated twenty-one times in 2020/21. Table 1 shows the snow fall comparison for the last five SNIC seasons.

SNIC Season Snowfall (cm)					
Month	2016/17	2017/18	2018/19	2019/20	2020/21
September	0	0	1.8	34.4	
October	13.0	1.4	48.4	15.8	27.9
November	2.9	27.4	27.9	43.4	18.2
December	26.1	32.2	14.9	20.5	39.6
January	14.5	11	10.2	3.9	7.7
February	35.8	43.3	33.8	21.5	33.8
March	16.7	41.9	8.2	28.8	9.9
April	16.6	24.6	16.9	22.4	7.8
May	0	0	7.7	0	0
<b>Totals</b>	<b>125.6</b>	<b>181.8</b>	<b>169.8</b>	<b>190.7</b>	<b>144.9</b>

Table 1: Season comparison 2016-2021

### 3-1-1 Service Requests

During the 2020/21 SNIC season, Roads Maintenance received 12,497 service requests (SR). Table 2 shows the historical data from the past five seasons.

Historical 3-1-1 Data					
	2016/17	2017/18	2018/19	2019/20	2020/21
<b>Total SNIC SRs</b>	14,308	27,710	8,787	6,840	12,497

**Table 2: SRs from 2016-2021**

Roads was able to adhere to our 3-1-1 service level completion agreement 99.43 per cent of the time. This is derived from ONTIME data (SR on time/SR count).

The Average Cycle Time (Days)/Response Time was 4.50 days. Escalated SRs totalled 82 (0.7%) and Overdue SRs were 75 (0.6%).

### Snow and Ice Control Materials

Our team uses four main SNIC materials in its operations: road salt (sodium chloride), sanding chips, calcium chloride brine and sodium chloride brine. Sanding chips are six-millimetre rock particles which contains with up to three per cent salt. The liquid brines help the material stick to the road surface and are also used as an anti-icing agent applied directly to the road surface. As an anti-icing agent, sodium chloride brine and calcium chloride brine perform over different temperature ranges. The sodium chloride brine is used during warmer winter temperatures whereas calcium chloride brine is used during colder winter temperatures.

A five-season comparison of SNIC material consumption is shown in Table 3. Road salt usage during the 2020/21 SNIC season was 48,637 tonnes, which is approximately 25 per cent lower when compared over the past five seasons averages. Sanding chip consumption during the 2020/21 SNIC season was 26,528 tonnes, approximately 40 per cent lower compared to the past five season average.

Studies have shown that without pre-wetting, only 46 per cent of the material applied to a roadway will stay in the middle third of the roadway. However, if the material is pre-wet, 78 per cent will stay in the middle third of the roadway. This practice increases the efficiency of the sanders, reduces costs and helps minimize our impact on the environment.

SNIC Material Consumption					
SNIC Season	Road Salt/NaCl (tonnes)	Sanding Chips (tonnes)	Calcium/Sodium Chloride Brine (litres)	Snow Days	Snowfall (cm)
2016/17	43,215	59,550	647,520	66	126
2017/18	84,286	67,322	1,033,869	62	182
2018/19	70,177	46,477	1,144,593	62	169
2019/20	79,857	21,585	345,942	69	191
2020/21	48,637	26,528	28,308	55	145
<b>Average</b>	<b>65,234</b>	<b>44,292</b>	<b>640,047</b>	<b>63</b>	<b>162</b>

**Table 3: Five-year comparison of SNIC materials consumption, snow days and total snow fall**

Roads conducted a trial using Beet 55 as an anti-icing and de-icing agent on pedestrian cycling infrastructure, Priority 1 / 2 routes. Beet 55 is a trademarked liquid organic accelerator alternative to other anti-icing and de-icing products. When this is blended with salt brine at 65% salt brine and 35% Beet 55, the freezing point will be lower than by using pure salt brine but higher than by using calcium chloride at 30% concentration. Roads may broaden the scope of the trial.

## Snow Storage Sites

The City has three snow storage sites to manage snow removed from roadways. These sites are found in Table 4 below:

Site	Address	Capacity (cubic metres)
Highfield	1320-50 Ave. S.E.	~600,000
Spring Gardens	1025-32 Ave. N.E.	494,100
Pumphouse	2140 Pumphouse Ave. S.W.	55,805

**Table 4: Snow Storage sites**

During the 2020/21 winter season, snow removal activities were conducted where required on Priority 1 and Priority 2 routes along with some residential roadways. \$1.8 million was spent on snow removal during the SNIC season. This is significantly lower than in previous years: \$4 million in 2018/2019 and \$5.9 million in 2017/2018 SNIC seasons.

As an alternative to removing and storing snow, Roads Maintenance reviewed the effectiveness of Mechanical Snow Melter equipment. However, it was determined that the resulting water from the melting process would not meet environmental guidelines for discharging into the storm water system.

## Budget Review 2020/2021

The graph in Figure 2 shows our SNIC budget and actual expenditures compared to snow fall and snow days for the past 5 seasons.

During the 2020/21 SNIC season, 145cm of snow was reported to have fallen in Calgary over 55 snow days.

Budget expenditures for the 2020/2021 winter season totalled \$39 million. Expenditures by category were as follows: Equipment (36%), Labour (47%) and Materials (17%). Equipment and labour costs are the main costs and are proportional to snow fall. When crews are not working on SNIC, they'll work on environmental control, winter sweeping, depot maintenance and pothole repairs.

The current balance in the SNIC Reserve is estimated to be \$10 million and subject to change due to evolving operational needs.

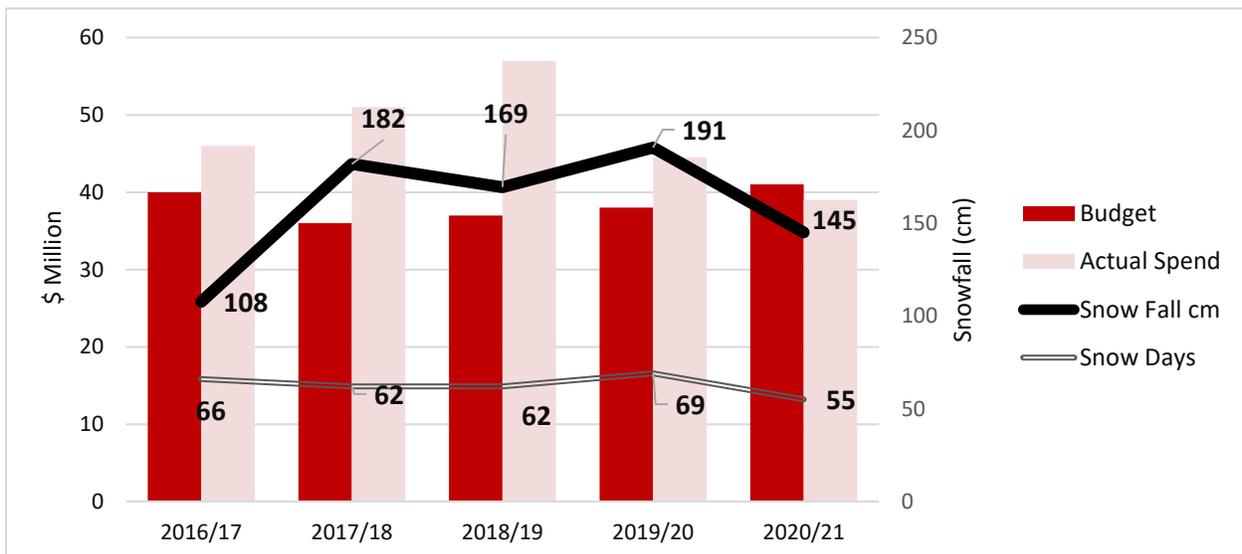


Figure 2: Expenditures and snow days 2016-2021

## SNIC Budget Details

The tables below show the annual SNIC budget and actual cost for the winter season of 2020/2021 for Roads.

Activity	For the period of October 2020 to December 31 2020	
	Budget	Actual
Snow Removal P1 and P2	209,893	237,617
Snow Removal Residential	535,891	13,444
Ploughing P1 and P2	1,047,116	487,013
Sanding and Salting P1 and P2	8,132,407	12,610,152
Residential Sanding and Ploughing	943,688	1,757,485
Transit SNIC LRT Stations*	-	-
Transit SNIC Bus Zones*	-	-
Snow Dump Site Maintenance	31,392	1,784
Separate Bikeways	187,617	49,520
Snow Fencing	131,749	34,953
Anti Icing	268,297	205,111
Material Handling and Storage	352,863	176,107
Sidewalk SNIC Clearing	8,207,904	969,837
Winter Supplementary Work**	2,321,639	2,881,059
Winter Operation	22,370,456	19,424,082
SNIC Reserve ***		2,125,580
<b>2020 TOTAL</b>		<b>21,549,662</b>

**Table 5: 2020 SNIC expenditures and budget**

Activity	For the period of October 2020 to December 31 2020	
	Actual	Recovery
Transit SNIC LRT Stations	275,176	275,176
Transit SNIC Bus Zones	553,650	515,421

**Table 6: Calgary Transit-2019 SNIC activity expenditures versus recovery**

Activity	For the period of January 2021 to April 30 2021		Fiscal Year 2021
	Budget	Actual	Budget
Snow Removal P1 and P2	1,789,757	2,101,880	2,370,958
Snow Removal Residential	488,564	517,738	533,594
Ploughing P1 and P2	1,055,717	580,176	1,569,044
Sanding and Salting P1 and P2	13,189,485	6,566,852	24,284,534
Residential Sanding and Ploughing	2,401,942	2,004,395	3,780,028
Transit SNIC LRT Stations*	0	0	0
Transit SNIC Bus Zones*	0	0	0
Snow Dump Site Maintenance	81,783	20,827	121,800
Separate Bikeways	234,668	77,096	344,036
Snow Fencing	126,232	27,441	174,320
Anti-Icing	212,067	5,519	402,468
Material Handling and Storage	158,898	180,327	478,099
Sidewalk SNIC Clearing	908,269	2,184,951	2,784,314
Winter Supplementary Work**	1,951,049	3,339,845	4,095,588
Winter Operation	22,598,431	17,607,047	40,938,782
SNIC Reserve Transfer		4,000,000	
2021 Total (Jan-April)		21,607,047	

**Table 7: 2021 SNIC expenditures and budget**

Activity	Year to Date – For the period of January 2021 to April 30 2021	
	Actual	Recoveries
Transit SNIC LRT Stations	280,312	53,524
Transit SNIC Bus Zones	1,321,835	1,274,564

**Table 8: Calgary Transit 2021 YTD expenditures and recoveries**

## Enhanced SNIC Services

Council directed Administration to enhance the SNIC services through a one-time \$9 million budget commitment from the Fiscal Stability Reserve for 2019 and 2020. The funds were added into the SNIC Reserve. The enhanced services are as follows:

- Provide SNIC services to additional 100 km of pathway
- Clear all sidewalks adjacent to City property within 24 hours

- Plow windrows away from high priority wheelchair ramp locations
- Communications campaign to advise residents of new fines and new responsibilities for 2018/19 winter season (TV, Web, Radio, Print)

With the enhanced SNIC services, the pathways and sidewalks snow clearing must be completed 24 hours after snow stops. The City provide services to 447 km of pathway, 958 km of sidewalk, 136 traffic calming curbs, 2,431 traffic islands and medians, 19 km of walkways and pedestrian bridges, and 165 miscellaneous locations (including stairs).

500 wheelchair ramp locations were selected for enhanced windrow clearing. During the clearing of traffic islands and medians, the windrows in front of crosswalks are cleared. In addition, the windrows will be cleared if any pathway and sidewalk snow clearing route goes through a wheelchair ramp. With the knowledge gained delivering enhanced SNIC Services, Roads will continue to work with stakeholders to improve the experience for pedestrians during the winter seasons.

Roads will continue to identify efficiencies for Enhanced SNIC Services to reduce the cost of providing this service. Table 9 below shows the SNIC expenditures on pathways and sidewalks during the 2020/21 winter season.

For the period of October 2020 to December 31 2020				
Sidewalk SNIC Clearing	Department	Budget	Expenditures	Recovery from Enhanced Budget
	Roads	1,000,772	969,837	
	Parks	550,000	1,799,836	
	<b>2020 Total</b>	<b>1,550,772</b>	<b>2,799,673</b>	
For the period of January 2021 to May 31 2021				
Sidewalk SNIC Clearing	Department	Budget	Expenditures	Recovery from Enhanced Budget
	Roads	908,269	916,005	
	Parks	570,000	1,838,946	
	<b>2021 Total</b>	<b>1,478,269</b>	<b>2,754,951</b>	
<b>2020/21 Season Total</b>		<b>3,029,041</b>	<b>5,554,624</b>	<b>2,525,583</b>

Table 9: SNIC expenditures on pathways and sidewalks during the 2019/2020 SNIC season

## SNIC to Improve Access for those with Mobility-Challenges

Through the One Calgary 2019-2022 Budget, \$2 million was allocated to improve accessibility for citizens with mobility challenges during the SNIC season. This funding was initially allocated in the 2015 to 2018 Action Plan. During the spring of 2015, the mobility-friendly program focused on bus pads and bare pavement bus stops with large windrow accumulation. These locations included bus stops with high numbers of transit ramp deployments (to assist citizens with mobility challenges), including hospitals, senior homes, and locations where mobility-challenged individuals frequently visit. Calgary Transit and CN worked together to provide a list of priority

locations. Calgary Transit identified prioritized locations to use the funding for this program. Roads have a contract in place that would allow this work to be completed as on-demand SNIC work. During the 2020/21 SNIC season, Roads' contractor provided service to over 1200 bus stop locations and 5.15 km of sidewalk.

## SNIC for Bike Lanes

The City's cycle track (walking and wheeling lanes), bike lanes, multi-use pathways, neighbourhood greenways (bicycle boulevards), shared lanes, and signed bicycle routes all contribute to mobility choices. The City has approximately 12 km of cycle track that is cleared within 24 hours after snow stops falling. All 57 km of marked, on-street bike lanes are cleared within 48 hours after snow stops falling.

- Cycle Track **12 km** (SNIC clearing priority the same as all downtown roadways, within 24hrs)
- Bicycle Lane: **57 km** (SNIC Clearing within 48hrs)
- Shared Lane: **20 km** (SNIC Clearing same as the Priority as the road it is on)
- Neighbourhood Greenway: **20 km** (SNIC Clearing same as the Priority as the road it is on)
- Signed On-Street Bikeway: **384 km** (SNIC Clearing same as the Priority as the road it is on)

## P1 Route Collision Data

One of the primary goals of SNIC is to provide for safe travel. Comparison of collisions during the last five calendar years of complete collision data (Figure 3) shows that Priority 1 SNIC routes generally have 5 per cent fewer collisions (comparison of blue and red lines in Figure 3) attributed to 'Slush/Snow/Ice' road surface conditions than other routes, resulting in approximately 820 prevented collisions per year. In 2020, the number of 'Slush/Snow/Ice' related collisions decreased compared to 2019 for all metrics, including Priority 1 routes, all roads, and for population rate on Priority 1 routes (green line in Figure 3). It should be noted that the total number of collisions reduced due to less vehicle travel during the COVID19 pandemic.

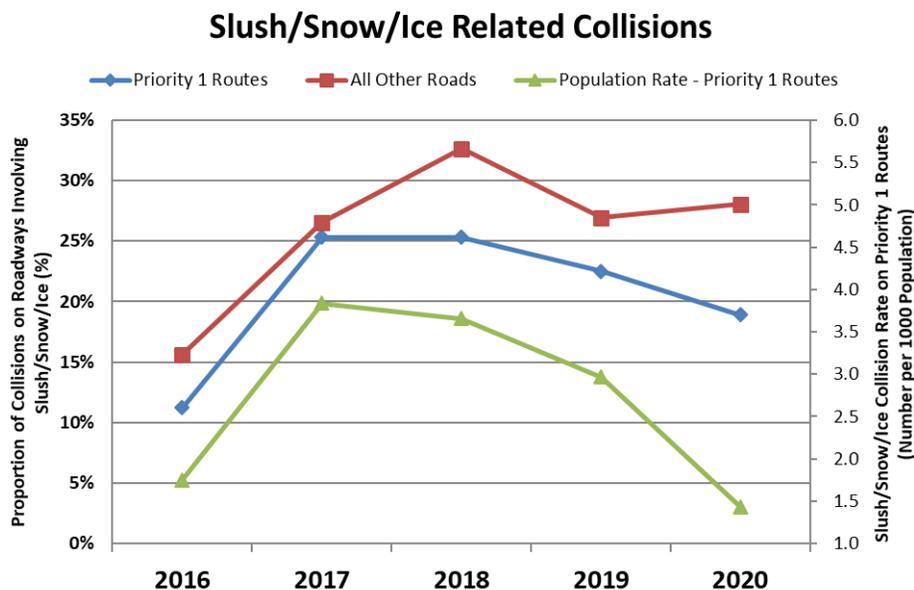


Figure 3: Snow Related Collisions

## SNIC Policy Metrics

The SNIC program service levels are based on the Council-approved SNIC Policy. The purpose of the policy is to:

- Maintain reasonable conditions on roadways and sidewalks to minimize hazards and economic loss to the community
- Ensure safe access for emergency vehicles providing Fire, Police and Emergency Medical Services
- Provide guidelines for management and operating personnel to handle winter maintenance operations
- Outline citizens' responsibilities regarding sidewalk snow and ice control on private property

To align with the approved SNIC service levels outlined in the SNIC Policy, three Key Performance Indicators (KPIs) were identified (See Figure 4: Roads Maintenance KPIs and Performance Achieved).

Designation	Response Time
Priority 1 Routes	Through lane ploughed and sanded completed within 24 hours of the end of snowfall (100% sanded/salted and 90% ploughed)
Priority 2 Routes	Through lane ploughed and sanded; completed within 48 hours of the end of snowfall (100% sanded/salted and 90% ploughed)
Priority 3 Routes	Within 4 days after Priority 2 routes complete (sanded and ploughed when temperature conditions allow)
Priority 4 Routes	Within 4 days after Priority 2 routes complete (sanded and ploughed when temperature conditions allow)

Figure 4: SNIC service levels

## 2020/2021 Snow Route Parking Bans

A Snow Route parking ban may be considered when a snow accumulation of five centimetres or greater is forecast. Snow routes include major roadways and most bus routes. A major advisory is issued when a snow event is expected in the forecast. This advisory is meant to serve as a warning that parking bans may soon be in effect on snow routes. Vehicles should be moved as quickly as possible following the notice. Vehicles that remain parked on these roads during the ban are subject to enforcement, up to and including a parking tag and tow. Business Improvement Areas (BIAs) and the downtown core have overnight bans (9 pm. to 6 am.).

However, during the 2020/21 winter season, no snow route parking bans were activated.

## **Personnel, Equipment and Infrastructure**

The Roads Business Unit commits personnel, material, equipment, infrastructure, capital and operational funds to SNIC operations as follows:

- 421 personnel working rotating shifts, available 24/7 throughout the season
- Material, including equipment consumables (i.e. plough blades) and snow remediation substances (salt, de-icing liquids and abrasives).

The various machinery and equipment include:

- 78 City owned tandem trucks and 16 leased trucks equipped to plough and apply materials
- 27 graders
- 9 snow blowers
- 11 smaller single axle trucks equipped to plough and apply materials in residential areas such as cul-de-sacs where tandems are unable to work
- 9 front-end loaders
- 8 Leased Articulating Tractors (Holder C70)

## **SNIC Contractors and Hired Equipment**

The City retains the service from contractors to augment City personnel and equipment for SNIC operations. Our Maintenance Division and Parks, in conjunction with the Supply Management Division, has contracts to provide the following SNIC services:

- Transit Trouble Spots: 219 lane-km
- District Trouble Spots: 504 lane-km
- 1247 Priority bus pads
- 958 km of sidewalks
- 2431 traffic islands and medians
- 19 km of walkways and pedestrian bridges
- 165 miscellaneous locations, including stairs
- 136 traffic calming curb locations

The Roads Maintenance Division also works closely with the Fleet Services business unit to maintain and coordinate equipment used for SNIC. Fleet Services maintains a rental equipment tender and hired truck contract that is reviewed every two and six years respectively.

Infrastructure required for the delivery of SNIC services in Calgary includes nine district depots and three snow storage sites, as well as the right-of-way infrastructure. The 2020/21 SNIC season budget provided the maintenance operations support for the right-of-way infrastructure shown below:

Infrastructure Right-of-Way				
Description	Lane-km	Linear-km	SNIC Service	Quantity
Expressways	1,632	553	Yes	-
Arterial Roadways	2,348	818	Yes	-
Collector Roadways	4,237	1,514	Yes	-
Residential Streets	9,729	3,631	Yes	-
Gravel Roadways	293	136	Yes	-
Back Lanes Paved	1,158	540	As required - WRS*	-
Back Lanes Gravel	2,175	1,259	As required - WRS*	-
Cycle Track/ Walking/wheeling lane		12	Yes	-
Bicycle Lane		57	Yes	-
Shared Lane		20	Yes – same priority as adjacent roadway	-
Neighbourhood Greenway		20		-
Signed On-Street Bikeway		384		-
Sidewalks (Roads)	-	5,749	Yes – 958	-
Engineered Walkways	-	-	No	2209
Vehicle Bridges	-	-	Yes	187
Pedestrian Bridges	-	-	Yes	58 (Roads)
Park Bridges	-	-	Yes	128
LRT Bridges	--	--	Yes - select locations	22
LRT Stations	--	--	Yes - select sidewalks	47
Bus Zones	--	--	Yes	6,144
Stairs/Steps	--	--	Yes	2,947

Data obtained from The City's ArcGIS. \*WRS – Waste and Recycling Services business unit

**Table 10: Infrastructure Right-of-Way**

## Additional Information

Please visit The City's Snow and Ice Control webpage at [Calgary.ca/snow](http://Calgary.ca/snow) for more information on the Seven Day Snow Plan, SNIC clearing updates and Snow Route parking bans.



# We work 24/7 to keep you moving

## When it snows, we have a plan

Once a snowfall ends, the Council-approved seven-day snow plan comes into effect city-wide.

The plan sets out which roads, sidewalks, bikeways and pathways our crews will clear, to what extent, and on which day. While it's still snowing, and before the plan is activated, crews are out on major roads plowing snow to prevent build-up and applying anti-icing material.

**Over 16,000 lane kilometres**



**Did you know?** This would be equivalent to driving back and forth between Calgary and Edmonton 54 times.

Average annual snowfall in Calgary is 130 cm.

## Keeping our sidewalks and pathways clear

Property owners are required to clear adjacent sidewalks within 24 hours of snowfall ending, or risk being fined up to \$750.



**Did you know?** There are over 5,500 kilometres of sidewalks in Calgary. The City is responsible for clearing 11% of these sidewalks.

## Day 1



OF SEVEN-DAY PLAN

**Completed within 24 hrs.**

**4,048 lane km**

(25% of all roads)

**477 km** of pathways

**617 km** of sidewalks

## Major roads are Priority 1

City Crews work during snowfall and 24 hours after snowfall ends, plowing and removing snow on Priority 1 routes.

- Major roads plowed to bare pavement include: Crowchild Trail, Memorial Drive and Macleod Trail
- Downtown
- Pedestrian overpasses
- LRT platforms
- Downtown cycle tracks
- Designated sections of pathways and sidewalks along City-owned properties

## Equipment/staff for a typical snowfall:

- 100–120 pieces of heavy equipment working daily
- 1,000–1,200 total hours
- 330 staff working 24/7 through the winter



**20,000 vehicles per day**

**Did you know?** Deerfoot Trail and Stoney Trail are maintained by the province.

## Day 2



OF SEVEN-DAY PLAN

**Completed within 48 hrs.**

**3,211 lane km**

(20% of roads)

## Priority 2 roads include bus routes

After 24 hours, Priority 2 roads are plowed.

- Intersections and crosswalks controlled by traffic lights
- Emergency routes (e.g. hospitals and fire stations)
- Bus routes and roads with on-street bike lanes
- Includes roads such as Kensington Road and Acadia Drive.

**Did you know?** Priority 2 routes are snow routes, and may be subject to a parking ban.



**5,000–19,999 vehicles per day**

## Snow Route Parking Ban:

during a ban, parking is temporarily restricted on designated snow routes for up to 72 hours.



## Day 3-7



OF SEVEN-DAY PLAN

**Priority 3 & 4 routes:**

**9,083 lane km**

(55% of roads)

## Feeder, collector and residential streets

After 48 hours, Priority 3 plowing includes:

- Feeder/collector routes
- Turn lanes and on/off ramps
- Windrows at busy crosswalks and wheelchair curb ramps
- Playground zones
- Designated hills

After 72 hours, Priority 4 clearing includes:

- Designated residential streets
- Bus pads

## Responsible clearing

The City follows a Council-approved Seven-Day snow plan, to maintain a safe network while being budget conscious. Our snow plan does not include:

- Plowing residential roads down to bare pavement
- Snow removal from residential areas
- Clearing back lanes, alleyways



## What we lay down

Keeping our roads clear and safe takes a lot of material. In 2020 we used:

- **Nearly 69,000 tonnes** of salt
- **Almost 21,500 tonnes** of pickle (salt/gravel mix)
- **Almost 170,000 litres** of anti-icing agents

**Did you know?** Most of the gravel material we lay down is picked up during The City's Street Sweeping program in the spring.



## What it costs when it snows

**\$1.2 million** is the cost to clear Calgary's roads

**\$85,000–\$100,000** is the cost to clear Calgary's sidewalks

**\$25,000–\$35,000** is the cost to clear Calgary's pathways



**\$7** is the average monthly household cost for snow clearing on your property tax.