

Update on Roadways Emergency Response Plan Activated December 28, 2022

ISSUE

On December 28, 2022, the Administration activated the City of Saskatoon's Roadways Emergency Response Plan for Extreme or Unusual Snow Events. This report provides an update on the implementation of this plan to January 10, 2023 and a summary of the remaining work in the plan.

BACKGROUND

City Council approved the [Roadways Emergency Response Plan for Extreme or Unusual Snow Events](#) (Roadways ERP) at its September 27, 2021 regular meeting.

The criteria for activation of the Roadways ERP are:

- Major snowfall with snow accumulation greater than 25 cm and/or combination of snow, freezing rain, and wind; and,
- Reduced mobility to the point that light vehicles cannot travel on city streets; mobility across the city is severely impacted, and the regular winter maintenance level of service applicable to typical winter snow events can not be met.

The Roadways ERP has five phases:

- Phase I includes grading of Priority 1 streets, accesses to emergency facilities, and accesses to critical City services. The target completion timeline is approximately 12 to 24 hours after the end of the snowstorm.
- Phase II includes grading of major transit routes and some Priority 2 streets. The target completion timeline is approximately 36 hours after the end of the snowstorm.
- Phase III includes grading of remaining Priority 2 and all Priority 3 streets, which includes school zones. The target completion timeline is approximately 96 hours after the end of the snowstorm.
- Phase IV includes grading of local streets in residential neighbourhoods and industrial areas and clearing of major pedestrian pathways and cycling infrastructure. The target completion timeline is approximately 10 days after the end of the snowstorm, with the goal of completing grading in residential neighbourhoods in 7 days and industrial areas in the following 3 days.
- Phase V includes a city-wide snow removal from all priority and local streets to restore parking availability and improve sight lines. The target completion timeline is approximately 8 weeks after the end of the snowstorm.

Saskatoon experienced two back-to-back snow events between December 25 and 28, 2022. These snow events resulted in 34 cm of snowfall and severely impacted mobility on many streets and sidewalks. Environment Canada ended the snowfall warning for Saskatoon on December 29, 2022. Residents with light vehicles had difficulties driving

on local streets or getting out of parking spots. This prompted the Administration to activate the Roadways ERP at the end of the day on December 28, 2022, followed by the activation of the EMO Emergency Operation Centre (EOC) and Roadways, Fleet and Support (RFS) Tactical Operations Centre (TOC) to manage the plan.

Prior to this major snowfall, Saskatoon had already received 50 to 55 cm of snow. Before activation of the Roadways ERP, there was no further space for snow to be stored on medians and boulevards along most priority streets due to a total snow accumulation of approximately 90 cm.

CURRENT STATUS

City and contractor crews have been working 24 hours a day, 7 days a week since the activation of the Roadways ERP.

Phases I to IV of the plan have been completed. All four phases were completed within the target completion timelines outlined in the plan with Phase IV completed on January 6, within nine days of the activation of the plan.

Temporary parking restrictions with a minimum 24-hour notice were used in a few neighbourhoods with narrow streets and a high concentration of on-street parking for local street grading, but any parked vehicles that remained in place were not ticketed or towed.

Some local streets were skipped during the neighborhood grading because they were narrow with a high concentration of on-street parking. Crews returned to those streets a few days later and where required, posted parking restrictions to grade them.

The goal was to grade all local streets to restore mobility as quickly as possible. The factors considered in the neighbourhood sequencing for grading were the sequencing concept in the Roadways ERP, garbage and recycle collections (to avoid grading when carts were on the streets) and addressing the hardest hit areas early (outer neighbourhoods prone to drifting and neighbourhoods with narrow streets and a high concentration of on street parking) with operational efficiencies (minimizing crew mobilization time).

Other work completed in the first four phases included removal of snow from the Senator Sid Buckwold, University, Broadway and Traffic bridges, and removal of smaller snow piles that remained in front of bus stops after completion of snow grading.

Phase V includes city-wide snow removal. Steady progress of Phase IV snow grading allowed for some Phase V snow removal to be advanced prior to completion of Phase IV. Snow was removed from all school zones by the morning of January 9, 2023, prior to resumption of classes. Snow removal was also completed by January 9 in all Business Improvement Districts and along some Priority 1 streets (e.g., 22nd Street, College Drive).

DISCUSSION/ANALYSIS

Implementation of the Roadways ERP to date has been on schedule with the first four phases completed on time, and some Phase V snow removal work advanced and completed earlier than planned.

The implementation has been supported by a comprehensive communication strategy that includes the following:

- Regular plan and progress updates on the City of Saskatoon's external website,
- Release of Public Service Announcements,
- Information sharing through posts on social media (Facebook, Twitter, Instagram),
- Media scrums and interviews,
- Radio ads,
- Email updates to City Council, BIDs, and Community Associations, and
- Responding to citizen inquiries through the City of Saskatoon's Customer Care Center.

Staffing and Equipment

The remaining Phase V work includes snow removal along priority streets and all local streets in residential neighbourhoods. This work is expected to continue until the end of February depending on productivity and new snow events.

Snow removal on priority streets will be completed primarily by City resources and equipment, using contracted trucks, with assistance from contractors who can supply industrial snow blowers. The work will be undertaken at night as less traffic and pedestrians are on the streets, resulting in safer operations and higher production rates.

To ensure sufficient capacity for residential snow removal, as per the Roadways ERP, the Administration used a competitive public procurement process for additional contractor assistance. This process was initiated immediately upon activation of the Roadways ERP. It typically takes a minimum of 2 to 3 weeks for a public procurement process of this magnitude to be completed. This contractor assistance is required to execute the snow removal on local streets in residential neighbourhoods. The plan is to deploy up to 20 contractor and 2 City crews with each crew consisting of 8 to 10 pieces of equipment such as skid steers, loaders, graders, snow hauling trucks and, as required, a pilot vehicle for traffic control.

Process for Local Streets Snow Removal Sequencing

In accordance with the Roadways ERP, the city will be split into 'pie' piece segments. Once additional contracted resources are procured, crews will start at both the center and outside of each segment and work towards each other through the segment until all snow from that segment is removed.

This method reduces equipment and crew mobilization time, addresses the outlying areas of the city most susceptible to hazards such as drifting snow, while also addressing the impacts of snow piles in narrower streets with a high concentration of

on-street parking in core neighbourhoods. The method also allows crews to continuously work their way through a segment of the city and saves significant crew time required for remobilizing and moving to different parts of the city. The work will be undertaken during the day as fewer cars are typically utilizing on-street parking and to prevent nighttime noise disruption to residents.

City crews will be assigned to begin snow removal in a few core neighbourhoods starting the week of January 9, 2023. Contractor crews will be available to start snow removal on local streets the week of January 16, 2023.

A map illustrating the sequence for neighbourhood snow removal within each segment is provided at saskatoon.ca/snow. This sequence will be used to guide snow removal operations as the work progresses, and weekly schedules will be provided based on projected and actual progress. The schedules will indicate the week that residents in the listed neighbourhoods can anticipate snow removal to start in their area.

Parking Restrictions

Temporary parking restrictions will be used during snow removal operations to allow room for equipment to remove snow piles. Signage will be posted a minimum of 24 hours in advance of the planned work to allow residents to plan for relocation of their vehicles. Parking restrictions are in place for generally one day but up to a few days to allow for peak productivity of snow removal crews and earlier completion of the work.

Allowing parking restrictions to be in place for more than one day prevents situations where the contractor has completed the planned work and has remaining capacity to work that day but does not have locations to go to because parking restrictions are not posted. Parking restrictions for local streets are only applicable from 7 a.m. to 7 p.m. so residents can park on streets overnight. Residents are permitted to return to parking prior to any parking restriction signage being removed once the snow removal has been completed.

Snow Piles Removal Criteria

To reduce the overall cost of snow removal, snow piles on local roadways that are not impacting drivability or on-street parking in front of houses, such as snow located on boulevards and medians, along vacant lots or parks, and along the flankage of lots (i.e., sides) may remain in place for the duration of the winter. Any snow piles or ridges purposefully left in place will be trimmed to avoid encroachment into driving lanes, crosswalks, or sidewalks. Snow piles left in place will also be trimmed back 5 m from corners and alley entrances.

FINANCIAL IMPLICATIONS

The City's Operating Budget provides for the day-to-day expenses that keep the City's operations running to provide civic services and programs residents rely on. The budget is built to maintain services at the service levels City Council sets and approves.

The City's 2022 Operating Budget included \$14.6 million for snow and ice management expenditures to achieve a variety of [service levels set and approved by City Council](#). The City's 2023 Operating Budget for snow and ice management is \$15.4 million. The approved service level for local streets in residential neighbourhoods is to grade snow in case of severe rutting or when the snowpack prior to snow melt is at least 15 cm (6 inches). The City's 2022 and 2023 Operating Budgets do not currently include funding for a city-wide snow grading and removal program.

The projected cost for the implementation of the Roadways ERP is estimated to be up to \$20 million dollars. The costs will be included in the City's Operating Budget results for 2022 and 2023, with the vast majority of expenses being incurred in 2023.

A companion report providing options for a funding strategy for the Roadways ERP implementation is being presented at the January 17, 2023 Governance and Priorities Committee meeting.

OTHER IMPLICATIONS

Due to a significant amount of snow hauled to the snow management facility at the Civic Operation Centre (COC), a temporary snow dump site on the north side of the existing COC site has been opened. This additional site was used after the November 2020 snowstorm to keep up with the volume of trucks accessing the site and large volume of snow being hauled in. The additional capacity is required to accommodate current snow dumping demand and address safety on site.

This operational requirement is included in the Roadways ERP. The plan states that an additional temporary snow management facility will be opened to break up the large truck volumes so trucks will be able to unload faster, and to avoid congestion which would increase the likelihood of safety incidents.

Additional signs were installed last fall at all three snow management facilities intended to reduce noise concerns due to tailgate slamming. Residents in the neighbourhoods in the proximity of the snow management facilities may be impacted by the noise from the machinery used for pushing snow and heavy use of the sites.

The Administration will continue to use its communication channels and build awareness around impacts of tailgate slamming on the residents in the nearby residential areas, and the need for snow haulers to avoid any unnecessary tailgate slamming. To complement this effort, City representatives will attend the sites to hand out a pamphlet with "no tailgate slamming" messages to snow haulers in person at the snow management facilities.

NEXT STEPS

Unless otherwise directed, the Administration will continue with the implementation of Phase V of the Roadways ERP, which includes snow removal along priority streets and local streets in residential neighbourhoods.

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Report Approval

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