TORONTO

REPORT FOR ACTION

2025 Winter Maintenance Program Review

Date: July 11, 2025

To: Executive Committee

From: City Manager

Wards: All

SUMMARY

In February 2025, the City of Toronto experienced a series of major winter storms that resulted in over 50 centimetres of snow across the city during three events spanning seven days. This was the largest snowfall accumulation for the City of Toronto since January 2022, which saw 55 cm of snowfall in a single event. The scale and impact of these back-to-back storms in 2025 impacted Toronto's snow clearing and removal operations.

As a result, City Council directed the City Manager to:

- A. Conduct a thorough review of the City's winter maintenance program, evaluate options to improve winter maintenance work and;
- B. Undertake a forensic audit of the procurement for the 2022-2029 winter snow removal contract.

To undertake this work, the City Manager engaged the services of Municipal VU Consulting Incorporated (MVU) to complete an independent review of the City's Winter Maintenance Program as well as Transportation Services' response during the February 2025 Extreme Weather Events (Attachment 1). The City Manager also directed the Internal Audit Division to undertake a risk assessment audit of the procurement for the 2022 to 2029 winter snow removal contracts (Attachment 2).

This report provides a summary of the findings from the MVU report and the Internal Audit Division's Fraud Risk Assessment.

The MVU report revealed that the City's winter maintenance processes and procedures tend to work reasonably well for routine snowfall, however they face systemic gaps that limit their effectiveness when major snow events hit. The MVU report identified several challenges related to three core issues - the City's Major Snow Event Response Plan, snow storage and snow removal.

The Internal Audit Division was engaged to perform a Fraud Risk Assessment following direction from the City Council meeting in March 2025. This Fraud Risk Assessment identified the following potential fraud risk exposures:

- 1. Tailored specifications within the request-for-proposal to favour certain vendors
- 2. Lack of transparency in scoring
- 3. Rejection of compliant bids
- 4. Significant variation in cost estimation and bid

As a result, Internal Audit recommends undertaking a follow-up Phase 2 forensic audit led by an independent third-party auditor focused on the four fraud risk areas identified above commencing in August 2025.

The City Manager will report back to Executive Committee on November 4, 2025 with a comprehensive update on the results of the third-party forensic audit.

Staff are recommending the implementation of the following immediate actions ahead of the 2025-2026 winter season:

- Removing the temporary hold period at the start of a winter event to enable winter maintenance 311 service requests to be created by the public and referred to Transportation Services Division
- Creating a dedicated year-round Winter Operations Unit within the Transportation Services Division
- Determining surge capacity equipment needs related to major snow events, including sidewalk plows and snow removal equipment
- Creating a robust Major Snow Event Plan and associated Communications Plan in consultation with the consultant, City divisions and agencies

Further work and refinement prior to the report back will involve work led by MVU and City divisions to address recommendations from the report which includes costing, feasibility studies and risk assessments associated with:

- Quality monitoring tools and procurement
- Identifying appropriate fleet resources for snow clearing
- Developing a robust City-wide led Major Snow Event Response Plan and Communications Plan
- Developing a Stand-alone Snow Removal Contract
- Developing a City Winter Towing Strategy

RECOMMENDATIONS

The City Manager recommends that:

1. City Council direct the General Manager, Transportation Services, and Executive Director, Customer Experience Division to remove the temporary service request hold period historically implemented at the start of a winter event, to enable the public to create winter maintenance service requests.

- 2. City Council direct the General Manager, Transportation Services and General Manager, Fleet Services to determine surge capacity equipment needs related to major snow events, including sidewalk plows and snow removal equipment.
- 3. City Council direct the City Manager to work with Municipal VU Consulting Incorporated in consultation with the General Manager, Transportation Services, the Executive Director, Toronto Emergency Management, the Chief Communications Officer, Strategic Public Engagement and Communications, the Chief Executive Officer, Toronto Transit Commission, the Chief of Police, Toronto Police Services and applicable divisions to finalize a robust Major Snow Event Plan and associated Communications Plan.
- 4. City Council direct the City Manager to report back to Executive Committee on November 4, 2025 on the continued work with Municipal VU Consulting Incorporated in consultation with the General Manager, Transportation Services, the General Manager, Fleet Services, the Chief Technology Officer, the Chief Procurement Officer, Purchasing and Materials Management Division as well as any other applicable divisions to refine, prioritize, conduct costing and feasibility analysis and risk assessments as outlined in Attachment 1 to this report, ahead of the 2025-2026 winter for major snow events including:
 - 1. Quality monitoring tools and procurement
 - 2. Identifying appropriate Fleet for snow clearing
 - 3. Developing a Stand-alone Snow Removal Contract
 - 4. Developing a City Towing Strategy
- 5. City Council direct the Director, Internal Audit to engage with a third-party consultant to conduct a forensic audit of the Winter Snow Maintenance contracts including:
 - 1. Tailored specifications within the request for proposal to favour certain vendors
 - 2. Lack of transparency in scoring
 - 3. Rejection of compliant bids
 - 4. Significant variation in cost estimation and bid

FINANCIAL IMPACT

There are no immediate financial implications arising from recommendations in this report. Reviews are being completed within existing operating budgets for the City Manager's Office and Transportation Services. Any funding required to deliver operational improvements or capital investments recommended in the November 4, 2025 report back to Executive Committee will be brought forward to Council through the 2026 Budget process.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact statement.

DECISION HISTORY

At its meeting on March 26 and 27, 2025, City Council considered EX21.1 - Review of Toronto's Winter Maintenance Program that was adopted with amendments by the Executive Committee on March 19, 2025. Council adopted the report with further amendments and directed the City Manager to report back to the Executive Committee on the work outlined in parts 1 to 5 of Council's decision. The direction of City Council for item IE21.1 can be found at: https://secure.toronto.ca/council/agenda-item.do?item=2025.EX21.1

COMMENTS

Background

During the February 2025 major snow event, City staff and contractors' crews worked around the clock to remove substantial snow piles from city streets during and after the event. Toronto officially launched a 24/7 snow removal operation on February 19, 2025, focusing on clearing priority routes, main roads (especially those serving transit routes, hospitals and emergency services), key sidewalks and bikeways, and areas with limited snow storage. This intensive operation was expected to take up to three weeks to complete, reflecting the sheer scale of the challenge. This amounted to clearing snow from 362 km of roads, 288 km of sidewalks, 42 km of bike lanes, and 44 km of bridge decks during the post-storm cleanup.

The storms, which accumulated over half a metre of snow on Toronto, caused significant disruption city-wide. Many local roads and sidewalks remained unplowed or uncleared for days after the snowfall, leading to difficult and unsafe conditions for pedestrians and drivers alike. Residents, particularly seniors, people with disabilities, and those using strollers or mobility devices, reported being unable to leave their homes or travel safely due to impassable sidewalks and curb snowbanks. Public transit was also affected, as snow build-up around bus stops and streetcar tracks impeded TTC operations. The City's 311 system was inundated: over 25,000 winter-related 311 service requests were logged from February 8 to March 13, 2025, a volume surpassing the January 2022 storm.

A. Municipal VU Consulting Inc. 2025 Winter Storm Response and Winter Maintenance Program Review Report

An independent consulting firm, Municipal VU Consulting Inc. (MVU), was retained to provide expert analysis and support to the City Manager in conducting this review. Municipal VU Consulting specializes in municipal operations and engineering reviews and was selected for its expertise in public works service delivery and experience working with Canadian municipalities.

Scope & Methodology

Municipal VU applied a custom Mixed Methods approach, which is an evidence-based methodology used during discovery and diagnosis phases to work through complex municipal challenges. It integrates quantitative data with qualitative insights through an iterative and comprehensive cross-verification process. Analysis included:

- Internal and public documents and videos
- Operational data
- Engagement of City Staff, Council, the Chair of the TTC and Toronto Accessibility Advisory Committee (TAAC) for perspectives and user experience
- Demographical analysis with sectoral benchmarking against cities like Montreal

Findings

The February 2025 storms revealed both the dedication of City crews and significant shortcomings in sidewalk clearing, communications, and readiness for more extreme weather. While major roads were kept functional, pedestrian accessibility and local street service fell far below public expectations.

Successes:

Success Category	Summary of Findings
Priority Road Clearing	Arterial roads and expressways were generally cleared within 24 hours of snowfall, maintaining emergency and transit access.
Declaration of a Major Snowstorm Condition	Enacted on February 12, it facilitated parking bans and enabled more efficient snow clearing on key corridors.
24/7 Snow Removal	A massive round-the-clock operation led to the removal of snow. The focus on high-priority zones helped mitigate more severe impacts.
Monitoring and Coordination Tools	Use of GPS and work management systems improved situational awareness. Emergency Operations Centre coordination was stronger than during the January 2022 storm.

Challenges:

Challenges Category	Summary of Findings
Sidewalk Clearing Gaps	Many sidewalks remained impassable for days, and key issues included: Limited snow storage on narrow rights-of-way. Unreliable equipment (machines frequently broke down or underperformed). Reporting discrepancies: Systems showed route completion even when sidewalks were reburied or missed. Accessibility challenges, especially for curb ramps and pedestrian crossings.
Local Street Delays	Residential roads often went uncleared for extended periods, causing safety issues and public frustration. Communications via 311 and PlowTO were inconsistent.
Contract Limitations	Contracts are structured for salting and clearing, but not for large-scale snow removal, which must be triggered and billed separately. Single contractors are assigned large districts, reducing flexibility. There is a lack of built-in fleet availability, which delayed snow hauling operations.
Communication Gaps	Public messaging was inconsistent with delayed responses through 311. There was confusion among residents about what to report and when, and vulnerable residents lacked clear channels for urgent help.
Preparedness Deficits	The City lacked surge capacity in staffing and equipment. Delayed equipment rentals and reactive decision slowed response. No formal contingency contracts or cross-training were in place for rapid redeployment.

Core Issues

The February 2025 winter storm response revealed that the City's winter maintenance processes and procedures tend to work reasonably well for routine snowfall, however they face systemic gaps that limit their effectiveness when major snow events hit. The gaps are interconnected, cutting across policy, operations, contracts, technology, and communication, and should be addressed to build a more resilient, agile, accountable program.

Core Issue	Summary of Findings
1. Three Major Events and Limited Urban Snow Storage	Significant back-to-back snowfalls overwhelmed already constrained urban snow storage, especially in dense downtown and inner-suburban areas. The City had to toggle between plowing and full-scale removal without enough lead time, resulting in narrowed lanes, blocked sidewalks, and reduced accessibility.
2. Major Snow Event Response Plan Lacked Details	While the Multi-Stakeholder Emergency Response Plan outlined broad strategies, it lacked detailed, pre-defined snow removal maps, priority haul routes, and staging zones necessary for rapid response during severe events. The absence of granular operational guidance led to fragmented removal efforts and delayed decision-making.
3. Reporting Tools Ineffective at Tracking Results	AVL and GPS tools logged vehicle movements but did not verify whether conditions on the ground met service standards. This disconnect created misaligned public messaging, delays in crew redeployment, and limited ability to hold contractors accountable for results.
4. Gaps in Contract Design for Extreme Events	The City's large-scale, performance-based winter maintenance contracts did not include stand- by clauses or surge capacity provisions for major snow removal operations. Contractors lacked flexibility and clear directives for city-wide resource allocation during extreme events.
5. Snow Removal Not Clearly Defined or Resourced	Snow removal was not treated as an integral part of winter operations. The City lacked clear service levels, triggers, and standby contracts for removal, which led to delays and inconsistent results in neighbourhoods severely affected by snow accumulation.
6. Communication Gaps and Misaligned Expectations	Public messaging during the storm did not reflect on-the- ground realities. Optimistic updates based on incomplete AVL data created discrepancies. Residents, Councillors, and staff lacked clear and timely information about snow removal timelines and operational constraints

Recommendations for Immediate Implementation

To improve readiness for the 2025-2026 winter season, the following six primary recommendations are provided for immediate action:

Detailed Major Snow Event Response Plan:

The City should finalize and operationalize a detailed, scalable response plan with escalation triggers, mapped routes, and defined roles. The plan should specify neighbourhood-level removal beats, staging areas, snow dump sites, haul routes,

decision thresholds, and task checklists aligned with Emergency Operations Centre protocols.

Communications Plan:

The City should implement a modernized, tiered communication approach that distinguishes emergency storm updates from routine messages, based on clear, consistent, distinct protocols for public updates, Council briefings, contractor reporting, and internal scripting.

Stand-Alone Snow Removal Contracts:

The City should procure dedicated, unit-based snow removal contracts that guarantee standby equipment and rapid deployment capacity. These contracts must be integrated with the City's response plan so that removal beats, staging, and logistics are already pre-mapped, and crews and equipment can be promptly activated.

Quality Monitoring and Reporting Tools:

Real-time condition verification should supplement GPS data with patroller photoreports and standardized ratings to confirm service quality. Field patrollers should be equipped with photo-enabled applications to verify actual surface conditions on all road segments travelled, and submit standardized, geo-tagged reports, seamlessly linked to AVL data and contractor logs within a centralized dashboard to improve operational oversight.

Towing Capacity:

Standby towing contracts should be secured for activation during major events, paired directly with snow crews to clear blocked curb lanes. Temporary off-street parking should also be arranged to encourage compliance and reduce the volume of parked vehicles that obstruct operations.

Year-Round Winter Operations Unit:

A permanent Winter Operations Planning Unit should coordinate all aspects of winter readiness year-round, including plan development, mapping, training, contract oversight, and inter-divisional drills. The unit could be established within current resources through restructuring rather than additional headcount.

B. Internal Audit Division Fraud Risk Assessment for Winter Maintenance Procurement

In June 2023, the Auditor General completed a review of the procurement and award of the 2022 – 2029 winter maintenance contracts. This review was initiated due in part to concerns raised by unsuccessful suppliers and complaints submitted to the AG's Fraud and Waste Hotline. Several recommendations were made to address risks in the procurement process.

Subsequently, at the March 2025 City Council meeting, concerns were raised about the increased cost of awarded contracts compared to internal estimates. As a result, in June 2025, Internal Audit was engaged to perform a Fraud Risk Assessment. Fraud refers to any intentional act or omission designed to deceive or mislead, resulting in an unfair advantage, financial loss, or breach of public trust.

Fraud Risk Assessment Scope & Methodology

The Fraud Risk Assessment was Phase 1 of a two phased approach. The purpose of this assessment was to provide advice to City leadership on whether certain aspects of the procurement process had a potential exposure to fraud and required further investigation or review by an independent third-party auditor.

The fraud risk factors reviewed as part of the assessment were tailored specifically to procurement risk areas, based on research, as well as the specific details of the winter maintenance procurement and contract award. The fraud risk factors encompassed risk areas within procurement planning, evaluation and cost estimates. Each fraud risk factor was assessed individually to determine whether there was potential for fraud exposure.

The information reviewed to complete this assessment included:

- The Auditor General's 2023 findings and recommendations
- Procurement planning and strategy documentation
- Cost estimates and assumptions
- Bid solicitation, evaluation, and associated rationale, including contract award documentation

The fraud risk assessment focused on identifying potential fraud risk exposures based on the information reviewed, including business decisions made by City staff during the planning and awarding of the procurement.

The results were discussed with management to help inform the decision on whether a Phase 2 forensic audit should be undertaken in any of the fraud risk areas identified.

Fraud Risk Assessment Findings

This Fraud Risk Assessment covered multiple fraud risk factors. For most of the fraud risk factors that were part of Internal Audit's assessment, no further action is recommended because there was very low risk exposure to fraud.

While the overall potential for fraud across all fraud risk areas was assessed as low, the Fraud Risk Assessment did identify some potential fraud exposures in the following areas:

- 1. Tailored specifications within the request for proposal to favour certain vendors
- 2. Lack of transparency in scoring
- 3. Rejection of compliant bids, and
- 4. Significant variation in cost estimation and bid

Based on the assessment, further evidence would be required to conclude whether there was any fraud or wrongdoing in any of the above risk areas. A forensic audit would provide greater assurance of any misconduct that may have occurred.

Next Steps

The priority is to implement immediate improvements identified in the Winter Maintenance Program Review Report ahead of the 2025-2026 winter season. There needs to be a shift from a divisional response to a City-wide response as outlined in the report which includes strategic sequencing of snow removal during major storms events and incident management.

The City Manager will lead the implementation of this work with the services of MVU and consultation with various City divisions. Transportation Services Annual Winter Maintenance requests and directives requiring report back will be fully addressed as part of the implementation actions associated with this report.

A. Municipal VU Consulting Inc. 2025 Winter Storm Response and Winter Maintenance Program Review Report:

Immediate actions which will be implemented as a next step includes:

- Removing the temporary hold period at the start of a winter event to enable winter maintenance 311 service requests to be created by the public and referred to Transportation Services Division
- Creating a dedicated year-round Winter Operations Unit within the Transportation Services Division
- Determining surge capacity equipment needs related to major snow events, including sidewalk plows and snow removal equipment
- Creating a robust Major Snow Event Plan and associated Communications Plan in consultation with the consultant, City divisions and agencies

Further work and refinement prior to the City Manager's report back for November 4, 2025 Executive Committee will involve work led by MVU and City divisions to address recommendations from the report which includes costing, feasibility studies and risk assessments associated with:

- Quality monitoring tools and procurement
- Identifying appropriate fleet resources for snow clearing
- Developing a robust City-wide led Major Snow Event Response Plan and Communications Plan
- Developing a Stand-alone Snow Removal Contract
- Developing a City Winter Towing Strategy

A practical implementation plan is forthcoming and will detail timelines, lead responsibilities, resource requirements, and performance measures to guide delivery and support Council decision-making.

B. Internal Audit Fraud Risk Assessment:

In consultation with Senior Leadership, Internal Audit advises that Phase 2 proceed with a forensic audit led by an independent third-party auditor focused on the four fraud risk areas identified above. This work will commence in August 2025.

CONTACT

Will Johnston, P. Eng
Deputy City Manager, Infrastructure Services
416-338-6181, will.johnston@toronto.ca

SIGNATURE

Paul Johnson City Manager

ATTACHMENTS

Attachment 1: 2025 Winter Storm Response and Winter Maintenance Program Review Attachment 2: Winter Maintenance Procurement: Phase 1 - Fraud Risk Assessment