

Major Snow Event Post-Operational Report

Presentation to the Toronto Accessibility & Advisory Committee

February 22, 2022

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City Council Meeting of February 2, 2022

Recommendations

- 1a)** Attend the February 22, 2022 meeting of the Toronto Accessibility Advisory Committee and to consult with members before finalizing the Major Snow Event Post-Operational Report to ensure Toronto remains an accessible city for all, including people with disabilities
- 1b)** review the current levels of winter service, snow and ice clearing for all public spaces including sidewalks and pathways connected to Toronto Transit Commission routes, schools, parks, areas, community centres, bike lanes, cycle tracks, Toronto Transit Commission stops, transit routes etc., and to ensure that the City can meet its obligations in the Accessibility for Ontarians with Disabilities Act; and
- 1c)** work with Strategic Communications to establish a plan to communicate more effectively and if relevant geographically with Toronto residents to establish realistic expectations after a major snowfall.

Major Storm Event of January 16-17, 2022 Overview

Environment Canada issued Winter Storm Watch on January 14, 2022

55cm snow accumulated by the end of the storm on January 17, 2022

5cm/hour was falling at peak of storm

Snowfall for January 2022 was higher than the past 20 years



Major Storm Event of January 16-17, 2022 Overview

Operations activation (road salting, road plowing, sidewalk and bike lane clearing) started Jan 16-Jan 17

Major Snow Condition declared by Mayor on Jan. 17, 2022

Snow removal operations began Jan. 19, 2022 overnight on DVP and FGGE

Snow removal prioritized for safe access to emergency services vehicles and major transit routes, school zones, all transit stops, Seniors and Disabilities program with local roads remaining passable.



Unique challenges of heavy snowfall

Heavy and disruptive snowfall, such as the approximately 55 cm we received on January 17, pose more challenges for crews than a typical winter storm:

- Higher wear and tear on equipment requires additional maintenance for an active fleet.
- Traditional equipment and practices become less effective and different equipment must be deployed into action.
- Manual clearing progresses at a slower pace in extreme cold as staff take steps to prevent injury.
- Clearing of and around street furniture (such as benches, transit shelters and litter bins) is often manual so that it is not damaged by heavy equipment.
- Narrow areas (such as bike lanes) must be cleared carefully to avoid equipment and infrastructure damages.
- Crews that do snow removal also do snow clearing. When it snows and clearing is required during a removal operation, the snow removal crew temporarily stops removing snow to begin snow clearing.
- Multiple rounds of clearing is required on many occasions as snow is moved from between the right of way and from private contractors clearing private properties.
- Storage capacity for such a high volume of snow is limited and makes it more challenging to clear as wide of a path.

Communications

- Comprehensive public education/communication campaigns over the last 3 years including mailers, multi-media, transit shelter advertisements and social media
- Winter storm communications since Jan. 17 include:
 - 17 media bulletins
 - 11 councillor bulletins
 - 6 news releases
 - 6 media advisories
 - PlowTO

Review of Storm Types

- Existing storm types include:
 - Storm Type 1 5cm
 - Storm Type 2 5-15cm
 - Storm Type 3 15-25cm
 - Storm Type 4 over 25cm
- New storm types to include thresholds for storms over 35cm and over 50cm



Sidewalk Levels of Service

ROAD CLASSIFICATION	SNOW ACCUMULATION REQUIRED TO COMMENCE OPERATIONS		TIME TO COMPLETE SIDEWALK CLEARING OPERATIONS AFTER THE END OF SNOWFALL(4)			
	November & April(1)	December to March(2)	STORM TYPE 1 30 - 40 per year (up to 5cm)(3)	STORM TYPE 2 3 - 6 per year (5 - 15cm)	STORM TYPE 3 Once 2/3 years (15 - 25cm)	STORM TYPE 4 Once/10years (over 25cm)
High volume pedestrian routes(7) Low volume pedestrian routes(8)	8cms	2cms	1 round(5)	2 rounds	3 rounds	4 rounds
Transit stops & crosswalk pads	8cms	2cms	1 round(6)	1 round(6)	1 round(6)	1 round(6)
Notes:				Criteria For Service(Approved through Public Works & Infrastructure Committee Item PW20.10 on January 27 & 28, 2009):		
(1) Shoulder season level of service - all times to complete sidewalk clearing operations are doubled due to absence of contracted forces. (2) Standard level of service. (3) Not every storm Type 1 will require a mobilization. (4) Time to complete operations is dependent on total snow accumulation. (5) One round takes approximately 13 hrs to complete. Multiple rounds are separated by at least an 8hr break due to legislative requirements. (6) One round takes approximately 48 hrs to complete. (7) Arterial road, school zones, transit areas and accessibility locations - only where mechanical clearing is possible. (8) Collector and local roads – only where mechanical clearing is possible.				(1) Street must be greater than 8m in width. (2) Sidewalk must be greater than 1.5m in width. (3) Sidewalk is not immediately adjacent to the street. (4) Parking is not immediately adjacent to the sidewalk. (5) No obstructions such as utility poles, planters, retaining walls, immediately adjacent to or within the sidewalk that would create significant potential for damage or an operating safety concern for the equipment operator or public. (6) Consideration to be given to whether the mechanical clearing could be done in a contiguous area.		

AODA Requirement Assessment

- HDR concluded that the City is in compliance with AODA requirements as AODA does not require municipalities to clear all sidewalks nor does it specify minimum clear width
- AODA does mandate that municipalities have multi-year accessibility plans that specify policies and procedures regarding maintenance of public infrastructures and spaces



AODA Requirement Assessment

Ongoing City activities promoting accessibility include:

1. Clearing all sidewalks at 2cm of snow accumulation where mechanically possible
2. Council-adopted expanded sidewalk clearing program enabled clearing an additional 1300 km of sidewalks (Total 91% of the City, remaining 9% cleared manually)



Next Steps

- Ongoing engagement with the accessibility community, internal & external stakeholders in developing a comprehensive city-wide response to extreme winter events
- Developing a new service level for extreme winter events
- Consulting with the winter maintenance industry smoothly transitioning contractors from typical storms to extreme storms
- Communications needs and protocols with 311, Strategic Communications, Plow TO

