



March 28, 2022

An accessible snow plan for transit riders

RE: IE28.11 – January 16 and 17, 2022 Major Snow Event, Post-Operational Report

Dear Mayor John Tory and Councillors on the Infrastructure and Environment Committee,

TTCriders is a membership-based transit advocacy organization. The snowstorm of January 16-17, 2022 created significant service disruptions and accessibility impacts for transit users in Toronto. Transit users were left stranded for hours during the storm, and TTC streetcar, bus, and Wheel-Trans stops remained inaccessible for days and weeks after the storm.

This letter summarizes transit user experiences, highlights how other transit agencies address winter conditions, and shares suggestions from riders to mitigate future snow storms, including:

- **Toronto's service standards for snow removal should be updated to include clear standards and timelines for snow removal at bus, streetcar, and Wheel-Trans stops.** TTC stops must be cleared so there is an accessible and adequately wide path cleared to and from the street. Buses must be able to kneel to the curb at the plowed area so that people using mobility devices, strollers, or grocery carts can board buses.
- **The TTC should create emergency and communications plans** that recognize not all riders use Twitter or have smart phone access. Audio and visual announcements are needed to guarantee that riders receive urgent information in an accessible format.
- **Wheel-Trans should change any "Family of Services" trips to full "door-to-door" trips to guarantee Wheel-Trans users' safety during extreme weather events** and until TTC stops are fully accessible and cleared of snow and ice.
- **The TTC should adopt best practices from other cities with snowy conditions.** For example, a number of Canadian transit agencies install either winter tires or use "tire socks" for additional traction in snowy weather, while TransLink replaces articulated buses with regular buses during severe conditions because they are more agile.

Impact of snowstorm of January 16-17, 2022 on transit users

During the snowstorm event, riders were left stranded at TTC stops and stations, sometimes for hours, without service or adequate communication. Amalgamated Transit Union Local 113 reported that calls from trapped operators were left unanswered, and that transit users and operators on 540 vehicles were left stranded on roads for 8 to 10 hours.¹

¹ ATU 113 press release:

<https://wemovetoronto.ca/media-centre/releases/atu-local-113-calls-for-ttc-service-plan-to-better-manage-winter-weather/>

“There was no announcement about buses not going into the station at Finch, I waited for 30 minutes until buses came in because I didn’t know what was happening.” - Transit user

“Buses were not going directly into Kennedy Station & there were people waiting for buses and there was a lack of communication.” - Transit user



Photo via @XjusticeXpeace on Twitter.²

Access to TTC stops in the weeks after snowstorm

Transit users were unable to access the TTC for days and weeks after the January 16-17, 2022 storm due to inadequate snow clearance at TTC stops. This created dangerous conditions for transit users who walked and waited on the street or climbed over snowbanks,³ while other riders were unable to access transit whatsoever.

“Toronto’s horrific SNOW CLEARANCE RESPONSE resulted in blocked sidewalks, intersections and bus stops. Workers who rely on transit in my neighborhood had to walk on the street.” - Scarborough resident



Images courtesy of 42 Voices via Twitter on January 24, 2022.⁴

² <https://twitter.com/XjusticeXpeace/status/1483116600958013450/photo/1>

³ https://twitter.com/42_voices/status/1485700400514797581

⁴ https://twitter.com/42_voices/status/1485697099748495365;
https://twitter.com/42_voices/status/1485696711385362440/photo/1



Images courtesy of Justin Bernard via Twitter on January 22, 2022.⁵



Images courtesy of 42 Voices via Twitter on January 30, 2022.⁶

⁵ <https://twitter.com/JayBeeGooner/status/1484912067127787523>

⁶ https://twitter.com/42_voices/status/1487906419210915856

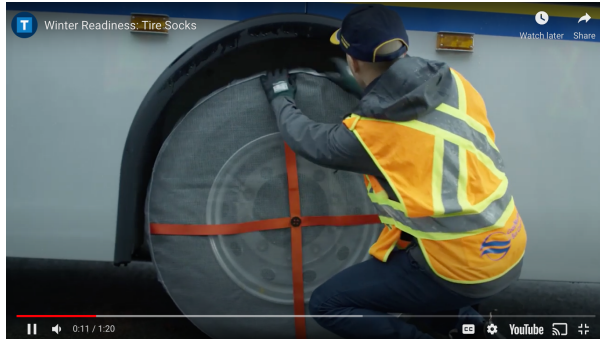


Images courtesy of Mykal McKenzie via email.



Images of 95 bus stop courtesy of Nithursan Elamuhilan via Twitter.

How do transit agencies in other Canadian cities handle snow?



Images of “tire socks” installed on TransLink buses.

- TransLink replaces their 60 ft articulated buses with 40 ft buses which are more agile in the snow. All buses use all season tires. Selected routes (i.e. Burnaby Mountain North Shore and some Vancouver routes) use tire socks to provide more traction. Push trucks are used to get buses up steep hills.⁷
- Calgary Transit uses all season tires on all their buses. They have snow detours in place for routes that are known to have problematic areas.⁸
- Edmonton Transit Service uses all season tires on most of their buses. They use winter tires on their articulated buses.⁹
- Winnipeg Transit uses all season tires. They install tire socks on buses to provide more traction.¹⁰
- Société de transport de Montréal (STM) buses are fitted with new tires on the front wheels and traction tires on the back wheels on November 15th every year. Maintenance will add deeper threads on the traction tires to provide enhanced traction on snow and ice.¹¹

⁷ TransLink references:

<https://www.translink.ca/news/2021/december/translink%20activates%20annual%20winter%20weather%20plan%20to%20keep%20customers%20moving>;
<https://buzzer.translink.ca/2020/01/your-questions-answered-about-snowy-weather-preparations/>

⁸ Calgary Transit references:

<https://www.calgary.ca/transportation/roads/road-maintenance/snow-and-ice-control/sn-ic-sanding-plowing-priorities.html>;
<https://www.tirereview.com/snow-tires-won-t-benefit-buses-calgary-transit/>;
<https://globalnews.ca/news/4550209/calgary-bus-tire-traction/>

⁹ Edmonton Transit reference:

https://www.edmonton.ca/transportation/on_your_streets/neighbourhood-roads-winter

¹⁰ Winnipeg Transit reference: <https://winnipeg.ca/publicworks/snow/snow-clearing-policy.stm>

¹¹ STM references: <https://www.stm.info/en/info/advice/using-public-transit-winter>;

<https://montreal.ctvnews.ca/slips-and-slides-normal-stm-buses-don-t-have-winter-tires-1.3721029>;
<https://ca.style.yahoo.com/buses-montreal-use-homemade-recipe-winterize-tires-194030408.html>

- Halifax Transit uses all season tires on all their buses. They have snow detours in place for routes with problematic areas.¹²

What are the TTC's and City of Toronto's current service standards?

Toronto clears snow from sidewalk and transit stops after 8cm of snow in November and April, and after 2cms of snow between December to March.¹³ Yet there seems to be a lack of clear service standards to ensure access between sidewalk and road so that transit users can board vehicles.

The City of Toronto's website states that "bus stops and transit shelters will generally be plowed within 48 hours after a snowstorm."¹⁴ The City of Toronto's "Winter Maintenance Levels of Service 2015 – 2022" notes that "windrows at bus stops and crosswalks [are] opened after ploughing,"¹⁵ which means that after the initial round of ploughing within 48 hours, bus stops may be cleared of windrows (heaped up snow created by the initial ploughing). (See chart on following page).

There appear to be no clear service standards for all bus, streetcar, and Wheel-Trans stops to have street access within a clear timeframe. The TTC's Service Standards¹⁶ (2017) do not make reference to snow plowing and bus or streetcar access.

The TTC does activate severe weather plans in advance of storms, including deploying additional buses, temporarily replacing the Scarborough RT with buses, "storing subway training in tunnels along main lines, treating streetcars and overhead wires with antifreeze (with a backup plan to replace the 512 St. Clair streetcar with buses) and readying private tow trucks along with the TTC's snow clearing equipment, among other measures."¹⁷

Rider proposals for accessible transit snow plan

The snowstorm highlighted the need for a resilient transit network with "redundancies" (e.g. a network with multiple routes and interchanges, so that when some routes are not usable you can take nearby routes). We urge you to take the following actions to ensure that the TTC remains accessible to all:

¹² Halifax Transit references:

<https://www.halifax.ca/transportation/halifax-transit/service-disruptions/snow-plan>;

<https://vancouver.sun.com/news/local-news/winter-bus-services-share-problems-across-canada>

¹³ https://www.toronto.ca/wp-content/uploads/2019/12/93fc-TS_Snow-Table-3_Sidewalks_2019_2022.pdf

¹⁴ <https://www.toronto.ca/services-payments/streets-parking-transportation/road-maintenance/winter-maintenance/levels-of-snow-clearing-service/>

¹⁵ <https://www.toronto.ca/legdocs/mmis/2019/ie/bgrd/backgroundfile-138552.pdf>

¹⁶ https://ttc-cdn.azureedge.net/-/media/Project/TTC/DevProto/Documents/Home/About-the-TTC/Project-s-Landing-Page/Transit-Planning/TTC_Service_Standards.pdf?rev=be660330001244f1ae3fd427796a29d4

¹⁷ <https://www.thestar.com/news/gta/2022/02/02/ttc-closes-scarborough-line-3-as-toronto-braces-for-yet-another-storm.html>

- **Toronto’s service standards for snow removal should be updated to include clear standards and timelines for snow removal at bus, streetcar, and Wheel-Trans stops.** TTC stops must be cleared so there is an accessible and adequately wide path cleared to and from the street. Buses must be able to kneel to the curb at the plowed area so that people using mobility devices, strollers, or grocery carts can board buses.
- **The TTC should create emergency and communications plans** that recognize not all riders use Twitter or have smart phone access. Audio and visual announcements are needed to guarantee that riders receive urgent information in an accessible format.
- **Wheel-Trans should change any “Family of Services” trips to full “door-to-door” trips to guarantee Wheel-Trans users’ safety during extreme weather events and until TTC stops are fully accessible and cleared of snow and ice.** Wheel-Trans users who are taking a Family of Services trip may get dropped off at an “Access Hub” and could become stranded in extreme weather or be unable to board vehicles.
- **The TTC should adopt best practices from other cities with snowy conditions.** For example, a number of Canadian transit agencies install either winter tires or use “tire socks” for additional traction in snowy weather, while TransLink replaces articulated buses with regular buses during severe conditions because they are more agile.
- Consider creating Neighbourhood TTC Stop clearing crews, trained and certified by the City of Toronto, preferably targeting residents who live in the neighborhood.

SIDEWALK AND TRANSIT SNOW CLEARING LEVEL OF SERVICE TABLE 2015 - 2022									
ROAD CLASSIFICATION	SNOW ACCUMULATION REQUIRED TO COMMENCE OPERATIONS			TIME TO COMPLETE SIDEWALK CLEARING OPERATIONS AFTER THE END OF SNOWFALL(5)				MATERIAL USED(8)	TARGET APPLICATION RATE
	November & April(1)	December & March(2)	January & February(3)	STORM TYPE 1 30 - 40 per year (up to 5cm)(4)	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 (arterial roads, school zones, transit areas, accessibility locations) – where mechanical clearing is possible only	8cms	2cms	2cms	1 round(6)	2 rounds	3 rounds	4 rounds	Salt/Sand mixture appropriate to conditions	100kg / linear km
Low volume pedestrian routes (collector roads, local roads)	8cms	8cms	8cms	1 round(7)	1 round(7)	1 round(7)	1 round(7)	Salt/Sand mixture appropriate to conditions	100kg / linear km
Transit stops & crosswalk pads (Windrows at bus stops and crosswalks opened after ploughing)	8cms	2cms	2cms	1 round(7)	1 round(7)	1 round(7)	1 round(7)	Salt/Sand mixture appropriate to conditions	n/a
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) Amount of snow accumulation required to commence operations is reduced due to fewer freeze/thaw cycles (4) Not every storm Type 1 will require a mobilization. (5) Time to complete operations is dependent on total snow accumulation (6) One round takes approximately 15 hrs to complete. Multiple rounds are separated by at least an 8hr break due to legislative requirements. (7) One round takes approximately 48hrs to complete. (8) T&EY does not use sand to prevent tracking into storefronts				(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					

Approved by Council: December 16, 2013

City of Toronto’s “Sidewalk and Transit Snow Clearing Level of Service Table 2015 – 2022”