

From: "Johnston, Sadhu" <Sadhu.Johnston@vancouver.ca>

To: "Direct to Mayor and Council - DL"

CC: "City Manager's Correspondence Group - DL"

"LaClaire, Lon" <lon.laclaire@vancouver.ca>

"Scollard, Taryn" <taryn.scollard@vancouver.ca>

Date: 8/24/2020 3:14:38 PM

Subject: Memo - Including Pedestrians in Vancouver's Snow Protocol and Response - RTS 13733

Attachments: Council Memo - Including Pedestrians in Vancouvers Snow Response.pdf

Dear Mayor and Council,

Please see the attached memo from Taryn Scollard. A short summary of the memo is as follows:

In response to February 12, 2020 Motion of Council regarding Including Pedestrians in Vancouver's Snow Protocol and Response. Ensuring the City's 2,200 km sidewalk network is effectively cleared of snow and ice during winter weather events supports increased utilization by all users, it also aligns with the Climate Emergency Response objectives for a walkable city as well as a safe and convenient active transportation network. To improve snow and ice clearing, staff are recommending:

- Establishment of Winter Priority Sidewalks designation based on providing equitable access to essential services during a snow and ice event.
- Improvements to Street and Traffic By-law No. 2849 Section 76 to support improved safety and compliance.
- Formalization of a Snow and Ice Treatment Policy to improve the communications of service levels to the public and enhance the clarity of the City's obligations during a snow and ice event.

If you have any questions, please feel free to contact Lon LaClaire at 604.873.7336 / [Lon.LaClaire@vancouver.ca](mailto:Lon.LaClaire@vancouver.ca) or Taryn Scollard at 604-873-7789 / [taryn.scollard@vancouver.ca](mailto:taryn.scollard@vancouver.ca).

Best,  
Sadhu

**Sadhu Aufochs Johnston** | City Manager  
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Pronouns: he, him, his



*The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the Musqueam, Squamish, and Tseil-Waututh peoples.*

## CONFIDENTIAL

## MEMORANDUM

August 21, 2020

TO: Mayor and Council

CC: Sadhu Johnston, City Manager  
Paul Mochrie, Deputy City Manager  
Karen Levitt, Deputy City Manager  
Lynda Graves, Administration Services Manager, City Manager's Office  
Rena Kendall-Craden, Civic Engagement and Communications Director  
Rosemary Hagiwara, Acting City Clerk  
Anita Zaenker, Chief of Staff, Mayor's Office  
Neil Monckton, Chief of Staff, Mayor's Office  
Alvin Singh, Communications Director, Mayor's Office

FROM: Taryn Scollard  
Streets Director, Engineering Services

SUBJECT: RTS 13733 -- Including Pedestrians in Vancouver Snow Protocol and Response

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This memo is in response to the February 12, 2020 Motion of Council regarding "Including Pedestrians in Vancouver's Snow Protocol and Response". On February 12, 2020 Council approved a motion directing staff to identify high priority pedestrian areas and sidewalks and make recommendations on incorporating these areas and sidewalks into the City's snow readiness and response strategy. The complete motion is included in Appendix A for reference.

Ensuring the City's 2,200 km sidewalk network is effectively cleared of snow and ice during winter weather events supports increased utilization by all users, it also aligns with the Climate Emergency Response objectives for a walkable city. To achieve this, the work is divided with the City focusing on treating sidewalks on bridges, viaducts, bus stops, corner ramps, mini parks, and on pedestrian pathways adjacent to bike lanes, while property owners are required to clear snow and ice from all sidewalks surrounding their property as per Street and Traffic By-law No. 2849 Section 76. To support compliance, the City also does an annual communications program reminding property owners of the by-law obligations and providing outreach resources such as Snow Angels to assist with clearing if needed.

To improve snow and ice clearing and in response to Council direction, staff have identified several actions which will be brought back to Council for decision as required:

- A. Establishment of Winter Priority Sidewalks designation;
- B. Improvements to Street and Traffic By-law No. 2849 Section 76 to support increased safety and compliance; and
- C. Formalization of a Snow and Ice Treatment Policy.

## **A. Winter Priority Sidewalks Designation**

In response to Council direction, the following criteria has been drafted to designate a block of sidewalk as a 'Winter Priority Sidewalk' (WPS) based on providing equitable access to essential services during a snow and ice event:

- All sidewalks within 100 m of a hospital
- Arterial sidewalks within 400 m of a SkyTrain or Canada Line station
- Arterial sidewalks within 200 m of a Rapid Bus stop
- All sidewalks within 100 m of a Community Centre

The application of these criteria would designate 255 km of sidewalk assets as a priority during winter weather conditions (Appendix B) and will provide a framework for increased enforcement and compliance. To finalize these criteria, staff will complete engagement with the Council appointed Seniors' Advisory Committee and the Persons with Disabilities Advisory Committee; both of which have been delayed due to COVID-19.

It is recommended that 'Winter Priority Sidewalks' (WPS) continue to be maintained by residents and businesses at this time and not be incorporated into the city's snow/ice treatment plans for the following reasons:

- Introducing mechanized clearing of sidewalks would be challenging on many City sidewalks due to insufficient sidewalk width resulting from obstructions such as utility poles, parking meters, bike racks etc. Additionally, the mechanized equipment increases the weight on the sidewalks, which are not currently rated for this loading and increases the creation and severity of hazards and defects, which impacts the accessibility for all users at all times of a year. Appendix C provides historical data on sidewalk hazards and defects found in the annual sidewalk inspection program over the last 10 years and indicates that on average, staff are identifying and repairing an additional 326 hazards and defects per year.
- Peer cities have not recommended doing mechanized clearing on sidewalks that are directly adjacent to a parking lane or the street, which is the case for many Vancouver sidewalks, due to the limitations on where the removed snow/ice can be located and potential vehicle damage from equipment, snow, and ice.
- For this work to be done by city crews, a one-time capital investment (~\$3.5M) as well as an increase to the annual snow and readiness operating budget (~\$0.6M) would be required to increase this service level. These increases would fund additional equipment, training and salt expenses. A similar increase to the operating budget would still be required if the work was to be contracted out, similar to Real Estate and Facilities Management (REFM) model.
- Mechanised clearing of the sidewalks requires a minimum depth of snow (~ 2.5cm/1 inch) in order to be effective and reduce damage the sidewalks or the machines.

- A change in sidewalk designation and therefore obligation could create complexity and introduce challenges in clearly communicating the bylaw and responsibilities. This could lead to reduced compliance due to the lack of clarity on responsibilities and increases the City's liability due to the service expansion.
- The current snow and ice clearing bylaw requires daily clearing of all sidewalks, which is an improved response time compared to Engineering's current service level response which is initiated following the end of a snow storm.

During a snow and ice event, the Vancouver Board of Parks and Recreation currently treats 82 km of sidewalks and pedestrian areas in parks and at community centres using 16 pieces of mechanized equipment. This equipment is similar to the eight utility-type vehicles Engineering uses. Opportunities to share equipment are assessed on an ongoing basis and currently equipment is fully allocated to support existing service level commitments within each organization.

## **B. Improvements to Street and Traffic By-law**

Currently the City treats snow and ice accumulations on 87 km of sidewalks which is made up of pedestrian pathways, bridges and viaducts, corner ramps, bus stops and mini parks. The remaining 2,113 km of sidewalks, including any sidewalks designated as the Winter Priority Sidewalks, are the obligation of the property owner as defined in Street and Traffic By-law No. 2849 Section 76.

Over the last 3 snow seasons, the City on average received 770 complaints via 311, issued 970 enforcement notices, and prosecuted 190 files related to the sidewalk clearing bylaw. Appendix D provides historical information on by-law compliance.

In order to enhance safety and improve snow and ice removal from all sidewalks, including Winter Priority Sidewalks, staff will recommend and come back to Council for approval:

- a) Amendments to the Street and Traffic By-law to:
  - i. Require owners or occupiers of adjoining property to remove snow and ice from the adjoining sidewalk by 9:00 am instead of 10:00 am each day for increased user safety.
  - ii. Increase the stipulated penalty for any ticket issued to a person who fails to remove the ice and snow in accordance with the By-law from \$250 to \$300.
  - iii. Create a new offence, similar to other cities, of failing to remove the ice and snow within a 24 hour period from the initial offence, and make the new offence punishable by a stipulated penalty of \$750.
- b) Communication strategy for the aforementioned changes to property owners including outreach assistance options with community associations and the City's Snow Angels program, and general messaging about neighbours helping each other when needed.

## **C. Snow and Ice Treatment Policy**

The City's Snow and Ice Treatment Operations Manual documents the internal approach used for snow and ice treatment on City-owned public roads, highways, bridges and sidewalks. Appendix E outlines the scope of the responsibility, priority, clearing method, and response time

for each sidewalk asset type. The criteria for prioritizing treating these sidewalk routes is based on safety risk, utilization, linkages with other modes in the transportation network (with a prioritization on access to transit and biking routes), and capacity of equipment and staff. These elements were endorsed by Council in 2017; however, they are not formally documented in the corporate policy.

To support improved communications of service levels to the public and enhance the clarity of the City's obligations during a snow and ice event, staff recommended establishing a Snow and Ice Treatment policy. This policy would be complementary to the existing Snow and Ice Treatment Operations Manual and would define the scope, priorities, and levels of service for snow and ice treatment on City-owned assets.

The above improvements to designate Winter Priority Sidewalks, update the snow and ice clearing by-law, and formalize a Snow and Ice Treatment Policy support prioritizing the clearing of snow and ice from sidewalks to increase the accessibility for all users during a winter weather event. Based on the actions above, staff will prepare by-law updates and the policy for Council update in fall 2020.

If you have any questions or would like more information, please contact Taryn Scollard, Director of Streets.

A handwritten signature in black ink that reads "Scollard". The signature is fluid and cursive, with the first letter 'S' being particularly large and stylized.

Taryn Scollard, P.Eng., MBA  
Streets Director, Engineering Services

604.873.7789 | [taryn.scollard@vancouver.ca](mailto:taryn.scollard@vancouver.ca)

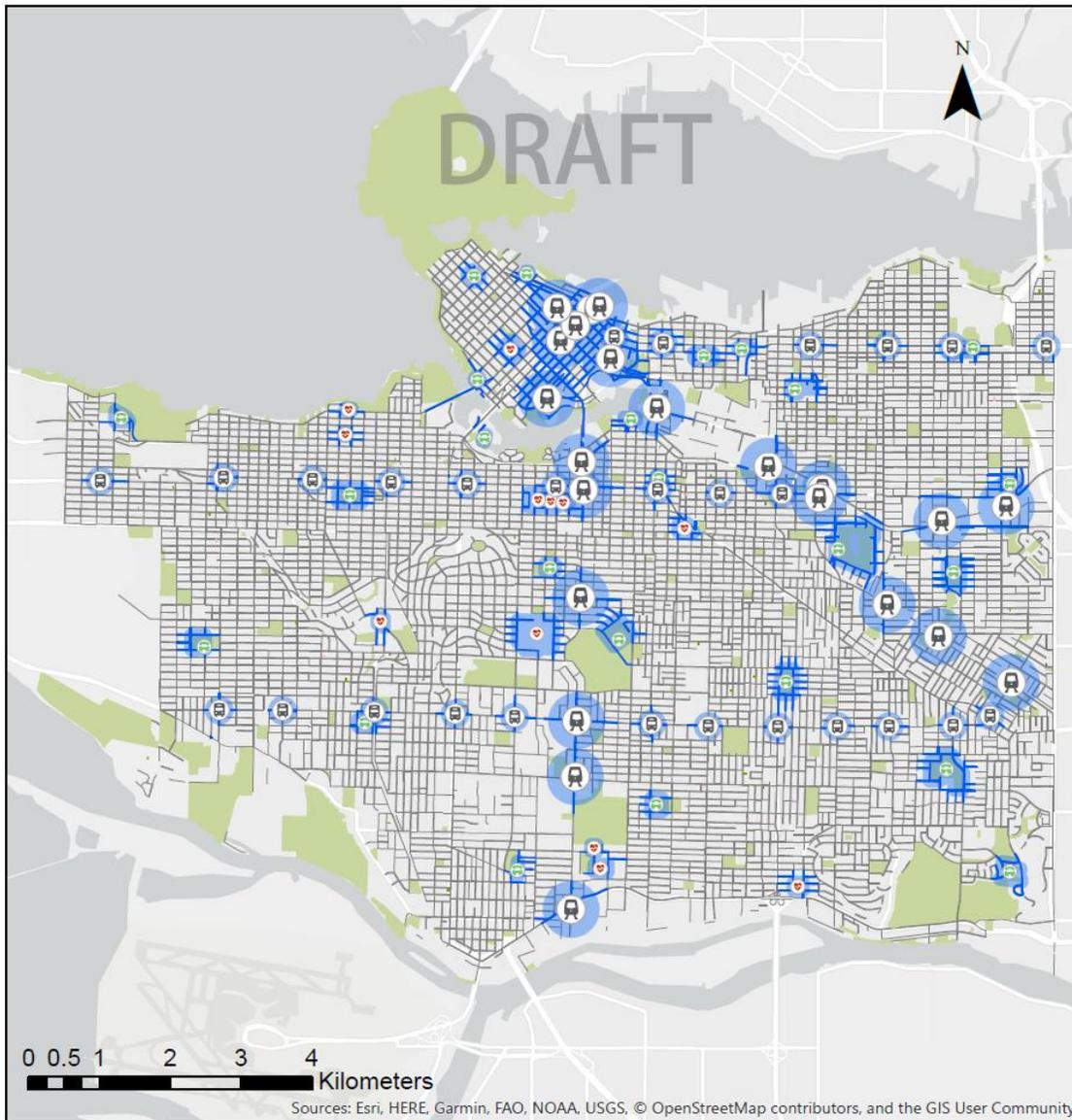
APPENDIX A – RESOLUTIONS FROM FEBRUARY 12, 2020 MOTION 7 - INCLUDING  
PEDESTRIANS IN VANCOUVER'S SNOW PROTOCOL AND RESPONSE

THEREFORE BE IT RESOLVED

- A. THAT Council direct staff to identify High Priority Pedestrian Areas and Sidewalks in the city and report back by May, 2020 with information and recommendations for incorporating these areas and sidewalks into the City's Snow Protocol and Response Strategy, in accordance with the topmost priority accorded to walking in the City's hierarchy of transportation modes, the City's Complete Streets Strategy, Equity goals, and Climate Emergency Response actions and objectives.
- B. THAT Council direct staff to include information in the report back outlining the City's responsibilities and obligations with respect to identified High Priority Pedestrian Areas and Sidewalks, along with the respective responsibilities and obligations of adjacent private property owners and/or their representative agencies (such as BIAs and other jurisdictions such as TransLink).
- C. THAT Council direct staff to consult with the Vancouver Board of Parks and Recreation with respect to equipment and strategies employed by the Park Board for clearing snow and ice from walkways and pathways under their jurisdiction and to include this information in the report back to Council, including information relating to operational efficiencies that could potentially be achieved by partnering with the Park Board to clear snow and ice from appropriate High Priority Pedestrian Areas and Sidewalks.
- D. THAT Council direct staff to investigate, and include in the report back information relating to opportunities to enhance the City's snow and ice removal equipment fleet through the acquisition of snow removal equipment specifically designed or retrofitted for clearing sidewalks and high priority pedestrian areas of the city in an efficient and cost-effective manner, including equipment that could serve the dual function of clearing pedestrian pathways and bike lanes. Further that consideration be given to acquiring this equipment under the City's current 2020 budget or upcoming 2021 budget in order for the equipment to be available in time for any snow events during the 2020/2021 winter season.

<https://council.vancouver.ca/20200212/documents/pspc7.pdf>

## APPENDIX B – MAP OF WINTER PRIORITY SIDEWALKS

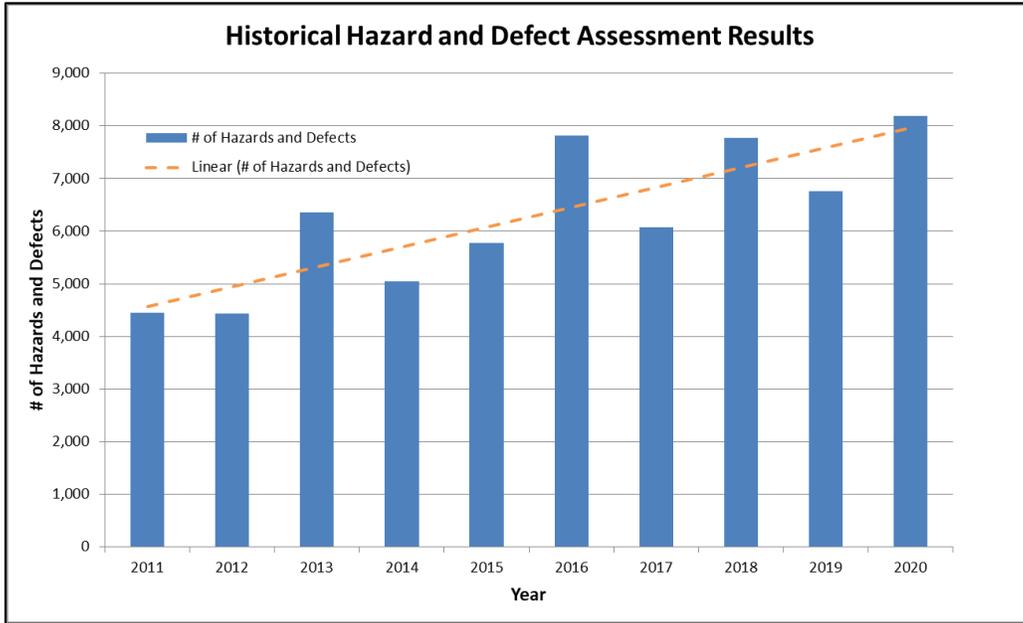


- All Sidewalks
- 🚊 Skytrain Stations
- 🚌 Rapid Bus Stops
- 🏥 Hospitals
- 🏠 Community Centres
- Winter Priority Sidewalks

The City of Vancouver has established the following criteria to designate a sidewalk as a Winter Priority Sidewalk based on providing equitable access to essential services maintained during a snow and ice event:

- All sidewalks within 100 m of a Hospital
- Arterial Sidewalks within 400 m of a SkyTrain or CanadaLine station
- Arterial sidewalks within 200 m of a Rapid Bus stop
- All sidewalks within 100 m of a Community Centre

APPENDIX C – SIDEWALK HAZARD AND DEFECT ASSESSMENT HISTORY



APPENDIX D – STREET AND TRAFFIC BY-LAW NO. 2849 SECTION 76 COMPLIANCE HISTORY

Item	2017/18	2018/19	2019/20	3-Year Average
Inspections	1,000	1,700	1,400	1,367
311 Complaints	800	700	800	767
Enforcement Notices Issued	500	1,400	1,000	967
Files Prosecuted	108	204	257	190

APPENDIX E – INTERNAL SIDEWALK SNOW CLEARING RESPONSIBILITIES

Sidewalk Asset Type	Pedestrian Pathways	Bridges, Viaducts	Corner Ramps	Bus Stops	Mini Parks
Total Length (km)	36.1	13.5	47.4	9.4	0.6
Clearing Method	Utility Vehicle	Utility Vehicle/ Manual	Backhoe/ Manual	Backhoe/ Manual	Utility Vehicle/ Manual
Maximum Response Time from end of Snowfall*	Priority 1 - 12 hrs Priority 2 - 48 hrs Priority 3 - 7 days	12 hours	7 days	7 days	7 days

\* As indicated in RTS No.: 11878 Engineering Snow Event Response and Readiness: Response to 2016-2017 Snow Season and Readiness Improvements for Future Snow Events.