



REPORT

Report Date: February 12, 2020
Contact: Taryn Scollard
Contact No.: 604.873.7789
RTS No.: 014184
VanRIMS No.: 08-2000-20
Meeting Date: March 31, 2021

[Submit comments to Council](#)

TO: Standing Committee on City Finance and Services

FROM: General Manager of Engineering Services

SUBJECT: Increasing Priority for Pedestrians in Vancouver's Winter Weather Protocol and Response

RECOMMENDATION

- A. THAT Council approve, in principle, amendments to the Street and Traffic By-law No. 2849, as generally shown in Appendix G, to support increased safety and compliance.
- B. THAT Council approve, in principle, amendments to the Ticket Offences By-law No. 9360, as generally shown in Appendix H, to align with resolution A.
- C. THAT Council instruct the Director of Legal Services to bring forward for enactment the necessary by-law amendments, as approved in resolution A and B and as generally shown in Appendix G and H, respectively.
- D. THAT Council approve the Snow and Ice Treatment Policy as generally shown in Appendix I, which outlines City of Vancouver service levels for snow and ice treatment services.

REPORT SUMMARY

This report is in response to the February 12, 2020 Motion of Council regarding "Including Pedestrians in Vancouver's Snow Protocol and Response".

To improve the conditions of sidewalks for people of all ages and abilities during winter weather events and in response to Council direction, staff recommend the following actions:

- Establishment of Winter Priority Sidewalks designation;

- Improvements to section 76 of the Street and Traffic By-law No. 2849, to support increased safety and compliance; and
- Formalization of a Snow and Ice Treatment Policy, which clearly communicates to the public the expected level of snow and ice treatment which the City will provide during winter weather conditions.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

- **November 2009:** Council adopted the recommendations outlined in the “Snow and Ice Treatment Review” report which provided a review of the current snow and ice treatment procedures on City streets and sidewalks. This included an amendment to section 76 of the Street and Traffic By-law No. 2849, to require all property owners or occupants of any parcel of property to clear snow and ice from sidewalks adjacent to that parcel no later than 10:00 a.m. every day.
- **January 2013:** Council adopted a motion regarding the “Snow Removal Plan”. Council directed staff report back on the existing snow removal plan for the City of Vancouver, identifying priority routes, allocation of existing snow removal resources and deployment on December 19th, 2012. Council also requested that staff recommend options to further increase the priority on snow clearing, sanding and salting on bus routes.
- **April 2013:** Council received information on the City’s Snow Removal Plan, priority routes, response to the weather event on December 19th, 2012 and recommended improvement to management of future snow and ice events.
- **June 2017:** Council endorsed amendments to the City’s Snow Clearing Plan to include readiness and response improvements for communication, procedures, equipment and by-law enforcement for future snow events. This included the addition of pedestrian pathways, mini parks, arterial bus stops, and corner ramps to the service level.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The Acting City Manager recommends approval of the foregoing.

REPORT

Background/Context

On February 12, 2020, Council approved a motion directing staff to identify high priority pedestrian areas and sidewalks and make recommendations on improvements for winter weather protocols and response. The complete resolutions are included in Appendix A for reference.

The City of Vancouver averages 9 snowfall days per year and 100 days where icy conditions are possible due to the temperatures going below 3°C. Working to ensure that the City’s 2,200 km sidewalk network is effectively treated for snow and ice during winter weather conditions supports increased access by all users and also aligns with the Climate Emergency Response objectives for a walkable city. To achieve this, the City is focusing on treating sidewalks on bridges, viaducts, bus stops, corner ramps, mini parks, and on pedestrian pathways prior to adjacent bike lanes; the Vancouver Park Board is focusing on treating sidewalks in parks and at

community centres; while property owners are required to clear snow and ice from all sidewalks surrounding their property by section 76 of the Street and Traffic By-law No. 2849. Appendix B illustrates the distribution of these obligations as a percentage of the overall sidewalk network length.

Since 2009 a number of key improvements have been made to support sidewalk accessibility during winter weather events as follows:

2009/10

- Street and Traffic By-law No. 2849 was amended to include:
 - Section 76 - a requirement for property owners or tenants to clear snow and ice from sidewalks adjacent to their property by 10am every day, with an associated penalty for non-compliance of \$250 and up, with the penalty dependent upon the type of property (residential, strata, commercial) and any penalty decisions made in a court of competent jurisdiction.
 - Section 76A – provision to enable the City Engineer to authorize removal of snow and ice from a sidewalk and recovery of those expenses from the associated property owner if they fail to meet the requirement of section 76.
- Ticket Offences By-Law No. 9360 was amended to make failure to remove snow and ice from sidewalks as indicated in Street and Traffic By-law No. 2849 Section 76 punishable by a stipulated penalty of \$250.
- Snow Angels program was introduced to match volunteers with those who are unable to clear their sidewalks and are unable to obtain assistance from members of their household, friends, neighbours or professional snow removal companies.

2016/17

- Added new City treated pedestrian areas as follows:
 - Pedestrian pathways
 - Mini-parks
 - Arterial corner ramps
 - Arterial bus stops
- Increased equipment, brine, and salt resources
- Increased enforcement resourcing

2019/20

- Prioritized treatment of pedestrian pathways prior to adjacent bike routes (e.g. pedestrian pathway on False Creek portion of the seawall is treated prior to the adjacent bike route).
- Implemented crew training for treating sidewalks at intersections to maximize accessibility.

To support an improved experience for pedestrians during winter weather conditions, the City also has an annual communications plan that begins in advance of and continues throughout the winter weather season that includes:

- Winter weather alerts
- Reminders to property owners of the by-law obligations and how to be prepared
- Encouragement for friends and neighbours to provide assistance to those who may require assistance

- Links to outreach resources such as Snow Angels to assist in instances where additional help with sidewalk clearing is needed
- Reminders to minimize travel and to plan ahead to allow additional travel time
- Information on how to report by-law compliance issues through 311 or VanConnect

Financially, the City of Vancouver's Winter Weather Program has, based on the last four (4) years expenses, cost \$5.4 million per year. These expenses are made up of two components. The first is winter weather readiness, which is budgeted at \$1.8 million for 2021 and covers expenses such as equipment preparations, safe-driver training, and program administration. The second expense component is winter weather response, which covers equipment, staffing, and material expenses during a winter weather event (snow or chance of freezing). Response expenses are not budgeted and are funded from the Engineering Services operating budget when available or contingency. On average, based on the last four (4) years, annual response expenses have totalled \$3.6 million.

As shown in Appendix C, peer cities across Canada vary significantly in terms of the population, winter weather severity, and sidewalk treatment approach, and as a result there is an associated variation in the overall winter weather budget requirements. While these budgets cover overall winter weather expenses, including treating street infrastructure, cities that treat all sidewalks have an average overall winter weather budget of \$68 million, in comparison to Vancouver's average annual expenses of \$5.4 million, and all have related parking restrictions to make it easier to remove snow and ice.

Strategic Analysis

To improve sidewalk accessibility for people of all ages and abilities during winter weather events staff analysed current service levels, treatment approaches and resourcing, compared that to peer cities, and recommend the following actions:

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

The rationale for each action is detailed below.

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 D) and will provide a framework for increased enforcement and compliance.

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

During a snow and ice event, the Vancouver Park Board 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.

Improvements to the Street and Traffic By-law

Currently the Engineering Department 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 adjacent property owner as set out in section 76 of the Street and Traffic By-law.

Over the last 3 snow seasons, the Engineering Department on average completed 1,370 inspections, received 770 complaints via 311, delivered 970 reminder warning notices, and issued 223 penalties either by way of a municipal ticket information, a by-law violation notice, or by a judge in a court of competent jurisdiction. Appendix F 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 recommend the following by-law related improvements:

- a) Prioritize response to compliance complaints on Winter Priority Sidewalks.
- b) Amend the Street and Traffic By-law No. 2849 to create a new offence, similar to other cities, for failing to remove the ice and snow within a 24 hour period from the initial offence with a minimum penalty of \$750. The initial offence referenced would be made known to the property owner through issuance of a Street and Traffic By-law No. 2849 Section 76 minimum \$250 penalty as a preceding action. See Appendix G for the detailed by-law proposal.
- c) Amend the Ticket Offences By-law No. 9360 to make the new offence punishable by a stipulated penalty of \$750. The initial offence referenced would be made known to the property owner through issuance of a Ticket Offences By-law No. 9360 \$250 penalty as a preceding action. See Appendix F for the detailed by-law proposal. This is an alternate mechanism to issue a penalty for failing to meet the provisions of the new offence. Only one penalty mechanism can be used per offence.
- d) Update communication strategy to include additional information as follows:
 - i. Information on existing and new penalty amounts and clarification that the amounts are dependent upon the type of property (residential, strata, commercial) and any penalty decisions made in a court of competent jurisdiction; and

- ii. Instructions for property owners on key accessibility considerations when clearing snow and ice from intersection corner ramps.

Snow and Ice Treatment Policy

The City's Snow and Ice Treatment Operations Manual details the operational procedures used for snow and ice treatment on City-owned public roads, highways, bridges and sidewalks. The criteria for prioritizing snow and ice treatment of these 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 and; are currently documented in the Snow and Ice Treatment Operations Manual and referenced as policy, although not yet formally documented in a Council adopted 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 recommend Council formally adopting the Snow and Ice Treatment Policy as shown in Appendix I. This policy is foundational to the City's existing Snow and Ice Treatment Operations. It is also consistent with the City's current operations and formally sets out the scope, priorities, and levels of service for snow and ice treatment on City-owned assets that are already followed by City staff. As shown in Appendix C, formalized corporate snow and ice treatment policies are common among peer municipalities across Canada.

The Snow and Ice Treatment Policy also ensures that treatments can be accomplished within the City's budgetary and resource constraints based on the infrastructure and use characteristics. The intent of the policy is to ensure that during winter weather conditions the street system is maintained under the policy to:

- Facilitate the operation of essential service vehicles (transit, emergency services, City essential services);
- Provide street users with a reasonable travel surface; and
- Maintain travelling surfaces within the City so as to minimize economic loss to the community.

The policy indicates that treatments are initiated as soon as our forecast predicts snow or icy conditions in the next 24 hour period that will not self resolve in that time. The treatments are initiated based on priority level, with treatments beginning at lower priority locations after they have been initiated at higher priority locations. The maximum response times to have an area treated, as shown in Table 1 below, are dependent upon the priority level of the location and if snow or icy treatments were necessary. Location priorities are defined in the Snow and Ice Treatment Operations Manual.

Table 1. Maximum Response Times

Priority	Maximum Response Time	
	From end of Snowfall Event	Icy Conditions
1	12 hours	As resources and weather conditions allow.
2	72 hours	
3	15 days	

The City Engineer may order a departure from the policy in unusual or unexpected circumstances.

Public/Civic Agency Input

Staff shared recommendations with stakeholders in January and February 2021 through virtual meetings. The stakeholders included the Seniors' Advisory Committee, the Accessible City Sub-Committee of the Persons with Disabilities Advisory Committee, the Transportation Advisory Committee, and Business Improvement Associations across the City.

Generally comments from the stakeholders fell into the following themes:

General Themes – Support

- **Equity Considered:** We heard that the Winter Priority Sidewalk areas selected include key areas that are important from an equity perspective.
- **On-Street Parking Maintained:** Supportive of recommendations that enable on-street parking to be maintained as parking is important to people with disabilities, seniors, and businesses.
- **Supportive of By-law Clearing Time being Maintained:** Support for keeping the time for clearing snow and ice at 10:00 am because making it earlier would make it more challenging for seniors, persons with disabilities, and Snow Angels volunteers. Businesses also indicated that they prefer keeping the time at 10:00 am to better align with business opening times, thus increasing compliance and reducing the potential for financial penalty.
- **Additional Penalty Supports Improved Compliance** - We heard that having a penalty may improve outcomes for property owners that are repeatedly non-compliant. A key area of concern for compliance was properties under development.
- **Sidewalk Clearing Instructions for Property Owners at Street Crossings:** We heard that additional communications on how to clear corner ramps at intersections would be beneficial to ensuring accessibility for those with mobility challenges.

General Themes – Against

- **Winter Priority Sidewalk Areas are Too Small:** We heard that it would be desirable to have additional Winter Priority Sidewalk Areas on all bus routes, as opposed to just arterial bus routes, and additionally around schools. Expansion or alterations will be assessed based on program success, resourcing and capacity in future winter weather seasons.
- **Concerns Insufficient Support Options Proposed:** Stakeholders expressed that it would be desirable to have additional options, other than Snow Angels, available for people who are challenged to do clearing themselves, including options provided as a service by the City of Vancouver. The City is continuing its Snow Angels program as the main resource linking those who require assistance with no-cost volunteer support options. There is an option for problem properties/repeated offenders, to have the city perform the work and charge back the property owner. At this time due to resourcing constraints, the City is not looking to expand that service.
- **Additional Expenses are not Tenable during the Pandemic:** Stakeholders want to avoid any additional expenses given the financial pressures of the pandemic. This was addressed by requesting approval for recommended improvements for the 2021/2022 winter weather season.

Financial

There are no financial implications.

Legal

The proposed by-law changes are authorized by the Vancouver Charter.

CONCLUSION

Designating Winter Priority Sidewalks, updating the Street and Traffic By-law, and formalizing a Snow and Ice Treatment Policy as laid out above will help prioritize the treatment of snow and ice on sidewalks, and increase accessibility for all users during a winter weather event.

* * * * *

Resolutions from February 12, 2020, Motion 7 – Including Pedestrians in Vancouver’s Snow Protocol and Response

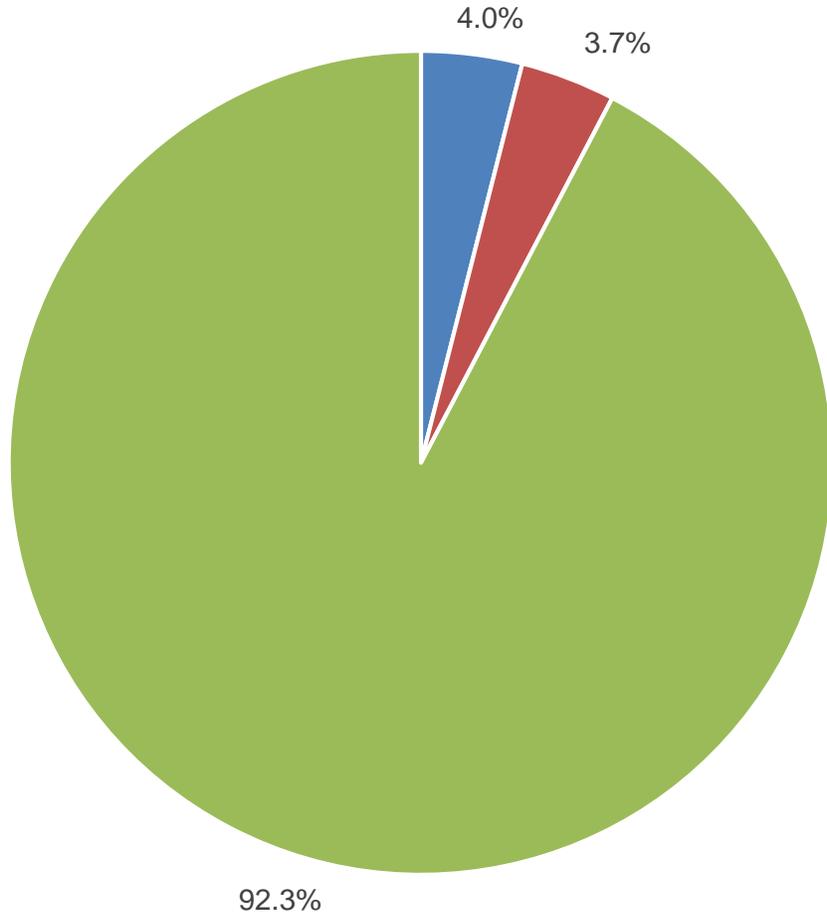
THEREFORE BE IT RESOLVED

- 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>

* * * * *

Sidewalk Treatment Obligations for 2,200 km Sidewalk Network



- City of Vancouver – Engineering Services
 - Bridges and viaducts
 - Arterial bus stops
 - Arterial corner ramps
 - Mini-parks
 - Pedestrian pathways adjacent to priority bike routes
- Board of Parks and Recreation
 - Parks
 - Community Centres
 - Pedestrian pathways adjacent to bike routes
- Property Owners or Tenants
 - As per Street and Traffic By-law No. 2849 Section 76, communicated annually
 - Snow Angels

* * * * *

Peer City Comparison of Winter Weather Response Programs

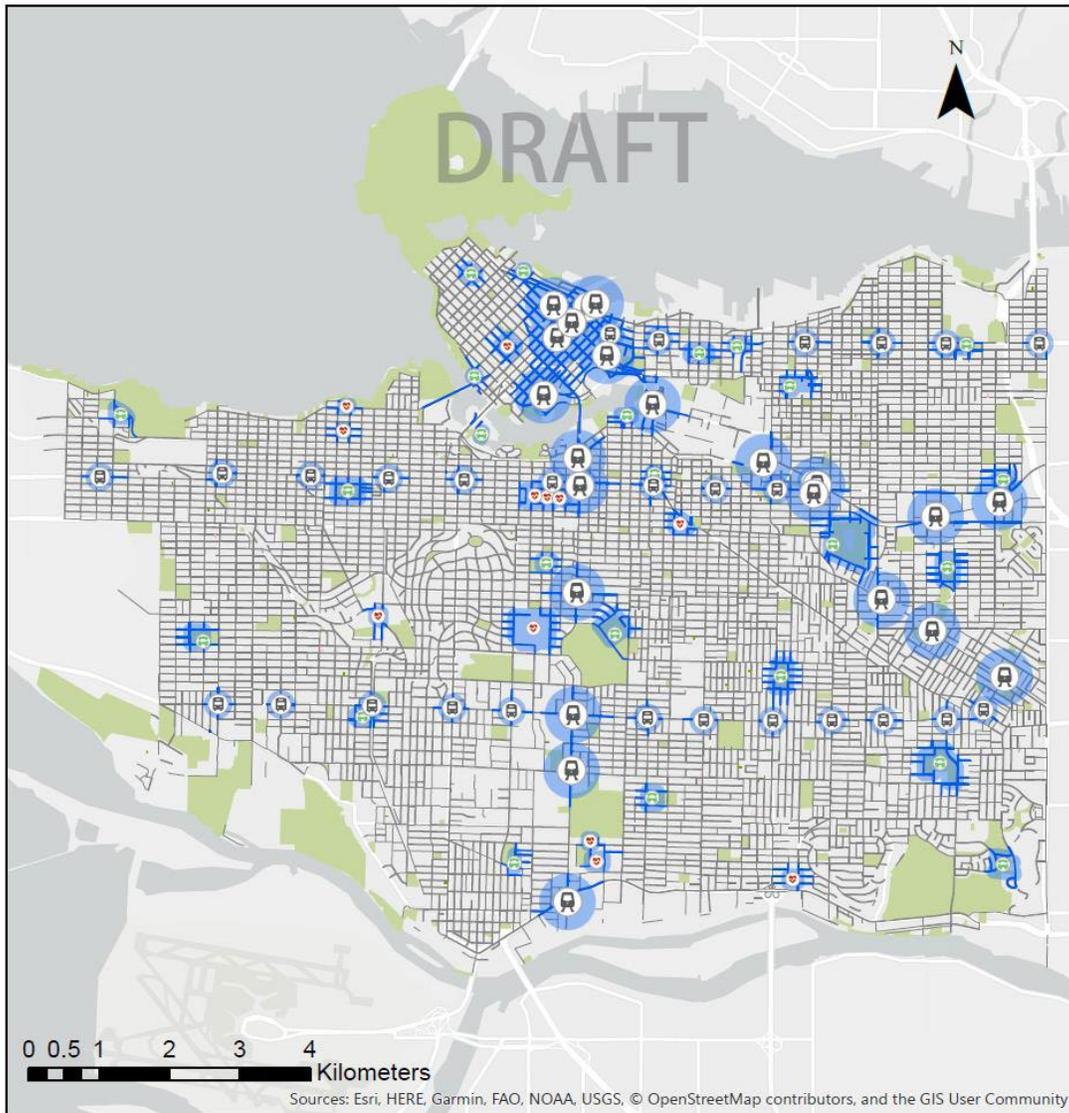
City	Population	Annual Winter Weather Budget (millions)	City Treated Sidewalks	Snow/Ice Clearing By-Law	Fine	Winter Parking Restrictions	Snow Policy
Toronto	2,731,571	\$90.0	Partial	Within 12 hours	\$135 public, \$570 private	Yes	Yes
Montreal	1,705,000	\$166.4	All	N/A	N/A	Yes	Yes
Calgary	1,285,711	\$40.4	Partial	Within 24 hours	\$250, \$500, \$750, plus \$150 minimum to clear	Yes	Yes
Edmonton	972,223	\$60.0	Partial	Yes	\$100 plus clean up, \$250 pushing to roadway	Yes	Yes
Ottawa	883,390	\$68.4	All	N/A	N/A	Yes	Yes
Winnipeg	705,244	\$30-40	All	N/A	N/A	Yes	Yes
Vancouver*	631,000	\$1.8, \$5.4	Partial	Before 10am	\$250 minimum	No	No**
Surrey	518,467	\$3.7	Partial	Before 10am	\$50 residential \$75 business	No	Yes
Halifax	431,479	\$20-\$25	All	N/A	N/A	Yes	Yes
Richmond	210,288	\$1.1	Partial	Before 10am	\$75	No	Yes
Kelowna	132,084	\$2.0	Partial	Within 24 hours	\$50	No	Yes

*2021 Readiness and Equipment Budget, Annual Total Readiness and Response Expenses based on 4-year history.

**This means that the City does not currently have a Council adopted snow policy in place. The City currently follows the draft policy which is set out in the Engineering Services Snow and Ice Treatment Operations Manual.

* * * * *

Map of Winter Priority Sidewalks



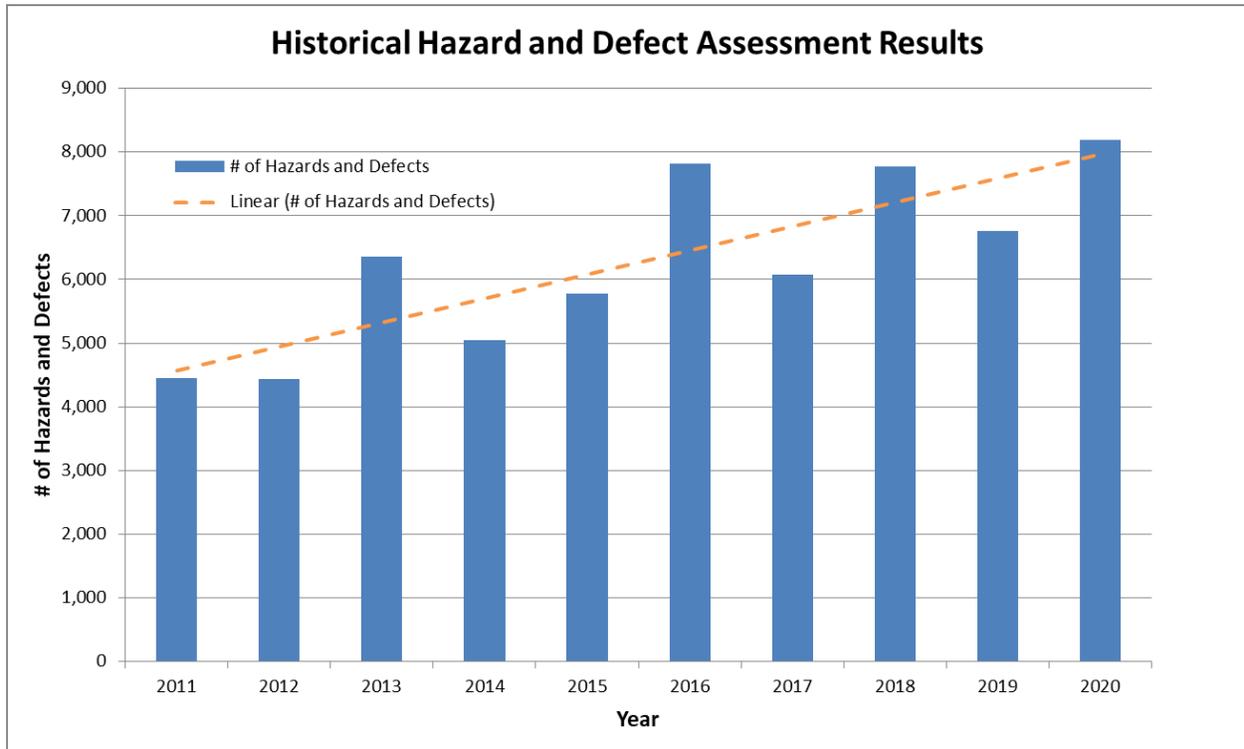
- All Sidewalks
- Skytrain Stations
- Rapid Bus Stops
- Hospitals
- Community Centres
- Winter Priority Sidewalks

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 Sky Train or Canada Line station
- Arterial sidewalks within 200 m of a Rapid Bus stop
- All sidewalks within 100 m of a Community Centre

* * * * *

Sidewalk Hazard and Defect Assessment History



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

- Introducing mechanized clearing of sidewalks would be challenging on many City sidewalks for consistent snow and ice treatment 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 therefore increases the creation and severity of hazards and defects, which impacts the accessibility for all users at all times of a year. Appendix E 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 mechanized clearing of 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.
- Mechanized 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 snow and ice clearing obligations could create complexity and introduce challenges in clearly communicating the Street and Traffic By-law and its responsibilities. This could lead to reduced compliance due to the lack of clarity on responsibilities, and increase the City's exposure to liability claims due to the service expansion.
- The current snow and ice clearing by-law requires daily morning clearing of all sidewalks, which is an improved response time compared to Engineering's current service level.

* * * * *

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
Reminder/Warning Notices Issued	500	1,400	1,000	967
Penalties Issued	108	204	356	223

* * * * *

City of Vancouver Snow and Ice Treatment Policy

Effective Date:

Generally

1. The City of Vancouver (the “City”) conducts Snow and Ice Treatment Operations annually on the Street System. This policy is necessary to clearly establish the priorities of Snow and Ice Treatment Operations and to set out when the City will initiate and continue such operations.
2. Effective Snow and Ice Treatment Operations are necessary to allow the City to function under typical winter weather conditions and to provide winter mobility on City infrastructure.
3. This policy has been created so that Snow and Ice Treatment Operations can be accomplished within the City’s budgetary constraints for such operations combined with other factors including the availability of City personnel, the availability of equipment, traffic volume, road classification, road geometrics, terrain, bus routes and emergency services routes.
4. The intent of this policy is to maintain the Street System in such a manner so as to:
 - a) facilitate the operation of public transit vehicles as well as emergency vehicles providing fire, police, and emergency medical services;
 - b) provide the prudent motorist, cyclist, and pedestrian with a reasonable travel surface during periods of snow accumulation and/or Icy Conditions; and
 - c) maintain travelling surfaces within the City so as to minimize economic loss to the community.
5. This is not a bare pavement policy. The City does not guarantee that any part of the Street System will be free from snow and/or ice, prior to, during, or after Snow and Ice Treatment Operations have been initiated or completed.

Terms Referenced in Policy:

“**City Engineer**” means City Engineer or designate.

“**Frost**” means a thin covering of ice crystals or particles which forms on a surface from moisture in the air.

“**Icy Conditions**” means a solid covering of frozen water in patches, sheets or stretches, and does not include Frost.

“**Manual**” means the City’s Snow and Ice Treatment Operations Manual, as amended from time to time.

“Travel Area” means the portion of a street, improved, designed or intended for motor vehicle or bicycle use.

“Snow Fall Event” means the period of time during which snowfall or snow precipitation is continuous, intermittent, showery, or flurry-like, ending when there is no snowfall or snow precipitation for one hour.

“Snow and Ice Treatment Operations” means one or more of the following: salting, sanding, ploughing, snow-blowing, manual clearing, brining, and/or other activities deemed to be appropriate in the circumstances by the City Engineer.

“Street System” means City-owned public roads, highways, bridges, viaducts, lanes and sidewalks, and any other ways normally open to the use of the public, but does not include private rights-of-way on private property.

Priority Ratings:

6. Snow and Ice Treatment Operations will only be conducted at the following priority locations according to the priority ratings set out below:

“First Priority Locations” consist of the areas and/or routes identified, listed and/or described as such in the Manual.

“Second Priority Locations” consist of the areas and/or routes identified, listed and/or described as such in the Manual.

“Third Priority Locations” consist of the areas and/or routes identified, listed and/or described as such in the Manual.

“Excluded Locations” consist of the areas and/or routes not identified listed and/or described in the Manual as First Priority Locations, Second Priority Locations or Third Priority Locations.

Initiation:

7. The City will, as specified under the heading “Priority Ratings”, initiate Snow and Ice Treatment Operations within 24 hours after the weather forecasting agency described in the Manual predicts that, within this 24-hour period, there will be:
 - a) accumulations of snow on the Travel Area on City-owned public roads, highways, bridges or viaducts, and these accumulations will not self-resolve within the same 24-hour period; and/or
 - b) Icy Conditions on the Travel Area on City-owned public roads, highways, bridges or viaducts, and these conditions will not self-resolve within the same 24-hour period.
8. The City will first initiate Snow and Ice Treatment Operations at First Priority Locations:

- a) In circumstances where accumulations of snow have been forecasted in accordance with this policy, the City will treat all First Priority Locations with Snow and Ice Treatment Operations within 12 hours from the end of a Snow Fall Event. Any new Snow Fall Event occurring during such 12-hour period restarts the 12-hour period for completion of Snow and Ice Treatment Operations.
 - b) In circumstances where Icy Conditions have been forecasted in accordance with this policy, the City will treat all First Priority Locations with Snow and Ice Treatment Operations as resources and weather conditions allow.
9. The City will initiate Snow and Ice Treatment Operations at Second Priority Locations at any time after Snow and Ice Treatment Operations have been initiated at First Priority Locations:
- a) In circumstances where accumulations of snow have been forecasted in accordance with this policy, the City will treat all Second Priority Locations with Snow and Ice Treatment Operations within 72 hours from the end of a Snow Fall Event. Any new Snow Fall Event occurring during such 72-hour period restarts the 72-hour period for completion of Snow and Ice Treatment Operations.
 - b) In circumstances where Icy Conditions have been forecasted in accordance with this policy, the City will treat all Second Priority Locations with Snow and Ice Treatment Operations as resources and weather conditions allow.
10. The City may, as resources and weather conditions allow, initiate Snow and Ice Treatment Operations at Third Priority Locations, at any time after Snow and Ice Treatment Operations have been initiated at all First Priority Locations and all Second Priority Locations:
- a) In circumstances where accumulations of snow have been forecasted in accordance with this policy, the City will treat all Third Priority Locations with Snow and Ice Treatment Operations within 15 days from the end of a Snow Fall Event. Any new Snow Fall Event occurring during such 15-day period restarts the 15-day period for completion of Snow and Ice Treatment Operations.
 - b) In circumstances where Icy Conditions have been forecasted in accordance with this policy, the City will treat all Third Priority Locations with Snow and Ice Treatment Operations as resources and weather conditions allow.
11. The City will not undertake Snow and Ice Treatment Operations at Excluded Locations.

Limitation of Service:

12. When carrying out the Snow and Ice Treatment Operations set out in this policy, the City will not:
- a) place additional signs warning of impaired sight distances, reduced visibility, road blocks, or one-lane conditions; and/or
 - b) place additional signs warning that any part of the Street System maybe slippery or otherwise hazardous;

- c) except for those parts of the Street System identified in the Manual as those requiring closure.

Procedures:

13. The procedures necessary to implement this policy are set out in the Manual.

Departure from Policy:

14. The City acknowledges that conditions may be so unusual or unexpected that departure from this policy may be required. In such circumstances, the City Engineer may order a departure from this policy.

15. The order to depart from this policy may include, but is not limited to:

- a) temporarily changing the priorities set out in this policy;
- b) temporarily changing the initiation time set out in this policy;
- c) temporarily suspending part or all Snow and Ice Treatment Operations;
- d) temporarily barricading any part of the Street System; and/or
- e) temporarily conducting Snow and Ice Treatment Operations at any one or more Excluded Locations.

16. In circumstances where an order to depart from this policy is made, the City will begin acting on such an order within 48 hours.

17. This policy supersedes all previous written and unwritten policies of the City regarding Snow and Ice Treatment Operations.

* * * * *